

Attachment 6-C

D. E. R.

- SAFETY-KLEEN CORP.
24th and 54th -

OCT 23 1992

- Closure and Contingency PLAN
for Transfer Station Attach. 6-C -

SOUTHWEST DISTRICT
TAMPA

**SAFETY-KLEEN CORP.
5309 24th AVENUE SOUTH
TAMPA, FLORIDA**

FLD980847271

Prepared for:

Safety-Kleen Corp.
777 Big Timber Road
Elgin, Illinois 60123

Prepared by:

Environmental Resources Management-South, Inc.
9501 Princess Palm Avenue, Suite 100
Tampa, Florida 33619
(813) 622-8727



ATTACHMENT II.K.1

CLOSURE PLAN



ATTACHMENT II.K.1

CLOSURE PLAN

CLOSURE INTRODUCTION

The Safety-Kleen Corp. has constructed each service and accumulation center with the intent that each will be a long-term facility for the distribution of Safety-Kleen products. No onsite disposal activity occurs at any plant and, hence, no disposal capacity will be exhausted that will necessitate closure of a facility. Based on current business and facility conditions, this facility is expected to remain in operation until the year of 2025.

In the event that some presently unforeseen circumstance(s) would result in the discontinuance of operations and permanent closure or sale of the facility, the following closure plan is designed to identify the steps necessary to completely close the facility at any point during its intended life, and should be used for tanks, drum storage area, and equipment.

It is intended that all closures will be complete and final with removal of waste and decontamination of the facility and associated equipment, in order to eliminate need for maintenance after closure and chance of escape of hazardous waste constituents into the environment.

Procedures described in this closure plan are also applicable to cleaning up of spills and repairing/decontamination of facility or equipment.



FACILITY DATA

1. Waste Management Facility Descriptions

a. Aboveground Storage Tanks

A 15,000-gallon steel tank, 10'6" diameter x 23'3" high, for used mineral spirits storage.

- b. **Drum Storage Areas:** The service center has a 40' x 30' area with 6" wide by 4" high continuous curbing and three collector trenches. The maximum volume of product and waste stored is 5,197 gallons. The wastes consist of dry cleaner wastes, spent immersion cleaner (IC609 and IC699), and/or antifreeze.

The accumulation center has two areas. One is an 60' x 45' area with 6" wide by 4" high concrete curbing, collection trenches, and a sump. It has a capacity to hold 44,367 gallons of product and waste. Various halogenated and nonhalogenated solvents will be stored in this area including dry cleaner wastes, spent immersion cleaner (IC609 and IC699), nonflammable industrial solvents, and/or antifreeze. The flammable storage area has the capacity for 12,749 gallons of flammable product or waste. The area measures 45' x 45' with 6" wide by 4" high concrete curbing, collection trenches and a sump. Paint wastes, flammable industrial solvents, tank and dumpster mud will be housed in this area.

- c. **Solvent Return/Fill Shelter:** The solvent center/fill shelter is a 50' x 80' structure between the service and accumulation centers. It contains three dumpsters which facilitate the flow of solvent to the tank. These dumpsters are not intended for storage but can hold a maximum of 1,512 gallons.



- d. Transfer Areas: Truck to truck and tanker truck to tanker truck transfer of hazardous waste including permitted waste streams, FRS, and spent ethylene glycol on any manmade surface at the facility.

2. Maximum Inventory of Wastes

- a. Used Mineral Spirits: 15,000 gallons;
- b. Drummed Waste: 49,564 gallons nonflammable and 12,749 gallons flammable

This amount includes any combination of 5-gallon pails, 5-gallon drums, 16-gallon drums, split 30 (also known as 20-gallon drums) 30-gallon drums, 55-gallon drums, and/or 85-gallon overpack drums.

- c. Dumpsters: 1,512 gallons.

CLOSURE PROCEDURE

Drum Storage Areas

- The drum storage area contains drums of used immersion cleaner, mineral spirits, dumpster mud, and dry cleaning wastes.
- At closure, all drums will be removed and transported to the recycle center with proper packaging, labeling, and manifesting where the contents in the drums will be reclaimed and the drums will be cleaned for reuse.
- The concrete floor and spill containment areas will be cleaned with detergent solution and the rinsate will be analyzed for mineral spirits, volatile organic compounds, lead, and cadmium, using SW-846 methods, to determine the effectiveness of decontamination. The area will continue to be washed and rinsed



until levels are below MCLs, or if MCLs are not available, PQLs as specified in Appendix IX of 40 CFR 264.

- If the wash water or other wastes generated in the closure process are determined to be hazardous, they will be disposed of properly as a hazardous waste; otherwise, the material will be disposed of as an industrial waste. It should be noted that wash water and rinsate will not be allowed to drain to the waterway. It is anticipated that approximately 350 gallons of rinsate will require RCRA disposal.
- The equipment used to clean this area includes mops, pails, scrub brushes, a wet/dry vacuum, and drums. The mops, pails, and scrub brushes will be drummed and disposed of as hazardous waste. The wet/dry vacuum hose will be washed with a detergent solution to decontaminate it. The drums will be used to store the wastewater.

Solvent Return/Fill Shelter Area

- This area is used to return the used mineral spirits to the storage tank.
- Closure of the solvent return receptacles (wet dumpster) will be made prior to the cleaning and removal of the storage tank.
- At closure, the sludge in the dumpsters ("dumpster mud") will be cleaned out and drummed, labeled, and manifested for proper disposal at permitted facilities.
- The dumpsters and the dock area will be cleaned with detergent solution and the rinsate analyzed for mineral spirits, volatile organic compounds, lead, and cadmium to determine the effectiveness of the decontamination. The area will continue to be washed and rinsed until levels are below detectable MCLs, or PQLs if MCLs are not available.



- The rinsing fluids will be discharged through the appurtenant piping system into the storage tank, which will be subjected to a separate closure procedure as described herein.
- The cleansed dumpster and dock structure will be reused by Safety-Kleen, or scrapped.
- The cleanup equipment and solutions disposal are the same as those listed earlier.

Transfer Areas

The transfer areas will be closed as a part of the drum storage area, solvent, return/fill shelter, or tank area, as appropriate.

PHASE I--OPEN THE TANK

- Access to aboveground tanks is obtained by removing manways.
- Prior to opening the tanks, the personnel should have full-face respiratory protection and protective clothing. Once the tanks have been opened they will be provided with positive ventilation. The tanks will then be inspected to determine the approximate quantity and physical conditions of the remaining material.

PHASE II--REMOVING WASTE AND CLEANING TANK

- Before removing the waste from the tank, all piping and appurtenant equipment will be flushed first with clean mineral spirits followed by detergent solution.
- The method to remove the waste material from the tanks will depend on the physical properties and quantities of that material. Prior to any person entering the tank, an effort will be made to remove as much liquid and sludge as possible.

- Subsequent to vacuuming the majority of the material from the tanks, it may be necessary to use a high pressure wash system using clean solvent and detergent solution to rinse residual material from the walls and bottom of the tanks. The evacuated material and the rinse solution will be returned to the recycle center for reclamation. The quantity of wash fluid used will be kept to a minimum in order to limit the amount of unnecessary material. The final rinsate will be analyzed for mineral spirits, volatile organic compounds, lead, and cadmium, using SW-846, to determine the effectiveness of decontamination. The tank will continue to be washed and rinsed until levels are below MCLs, or PQLs if MCLs are not available. Rinsate will be removed using a vacuum tanker truck and will be disposed of as hazardous waste. It is anticipated that approximately 2,000 gallons of rinsate will require RCRA disposal.
- Storage tanks are considered confined spaces, i.e., spaces open or closed having a limited means of egress in which poisonous gases or flammable vapors might accumulate or an oxygen deficiency might occur.
- Confined space entry requires special operating procedures:
 - ▶ Tanks are to be washed, neutralized and/or purged (where flammable atmosphere is present) prior to being entered.
 - ▶ Supply valves must be closed and "tagged" and bleeder valves left open, or supply piping should be disconnected.
 - ▶ Pumps or motors normally activated by automatic controls shall be operated manually to be sure they have been disconnected. Instrument power switches should be tagged "OFF."



- ▶ On tanks where flammable vapors may be present, all sources of ignition must be removed.
- ▶ All tanks must be tested for flammable vapors, toxic gases or oxygen deficiency, in that order, as applicable. The results of such tests should be displayed on the job site.
 - In all tank entering situations, an Oxygen Deficiency Test shall be performed prior to tank entry.
 - Under circumstances where "hot work" (welding, burning, grinding, etc.) is to be performed in or on the vessel, a test for combustible gases shall be taken. This is referred to as a "flash test."
 - In most circumstances, flash tests and oxygen deficiency tests will be performed by the supervisor of the area in which the work is being performed.
 - Under any conditions where a possibility (no matter how remote) of toxic vapors being present in the tank to be entered exits, the supervisor will arrange to have the air tested.
- ▶ A set of wristlets or a rescue harness and sufficient rope must be present at the job site to effect a rescue. Any other rescue equipment considered necessary must also be on the job site.
- ▶ Workers should wear a rescue harness if entering a tank with a large enough opening to easily effect a rescue. In tanks with small openings, only wristlets may be used. However, in cases where there are agitator shafts, drums, or



other hazards in which the man's life-line would be entangled and the supervisor in charge feels that wearing the life-line may entrap a man and increase the hazard, the wearing of a harness or wristlets may be eliminated.

- ▶ A constant source of fresh air must be provided to ensure a complete change of air every few minutes. In cases of short-term entry for inspection or removal of objects, an air mask is recommended. In cases of long-term entry (generally for repair) the use of an air mover should be considered.
- ▶ When a ladder is required to enter a tank, the ladder must be secured and not removed while anyone is in the vessel. In cases where a rigid ladder could become an obstacle, a chain ladder may be used.
- ▶ Adequate illumination must be provided.
 - A flashlight or other battery operated light must also be available to provide illumination for a safe exit in the event of an electrical power failure.
 - In any tank used to store flammable liquids, explosion-proof lighting must be used.
- ▶ All electrical equipment to be used inside the tank must be in good repair and grounded.
- ▶ Others working in the immediate area shall be informed of the work being done and they shall inform the watcher or supervisor immediately of any unusual occurrence which may make it necessary to evacuate the tank.



- The "buddy" (standby observer) system:
 - ▶ Men working inside a confined space must be under the constant observation of a fully-instructed standby observer.
 - ▶ Before anyone enters the tank, the standby observer will be instructed by the person in charge of the entry that:
 - An entry authorization must be obtained from the person in charge by anyone entering the tank.
 - A rescue harness or wristlets must be on the job.
 - The standby observer must know the location of the nearest telephone (with emergency numbers posted); safety eyewash/shower; fire extinguisher; and oxygen inhalator.
 - For all "hot work" inside a tank, the standby observer must be instructed how to shut down welding/burning equipment.
 - As long as personnel are inside the vessel, the standby observer must remain in continuous contact with the worker. HE IS NOT TO LEAVE THE JOB SITE EXCEPT TO REPORT AN EMERGENCY.
 - UNDER NO CIRCUMSTANCES SHOULD THE STANDBY OBSERVER ENTER THE VESSEL. If the worker(s) in the tank becomes ill or injured, the watcher is to put in effect the emergency plan described in the attached Standard Operating Procedure.



- The standby observer still DOES NOT ENTER THE TANK until help is available.
 - After being instructed in his responsibilities, the standby observer will sign an instruction form indicating his understanding.
- Welding and burning within a tank:
- ▶ All welding and burning equipment must be provided with a shutoff device under the control of the standby observer, and the standby observer must know how to shut off the equipment if it becomes necessary.
 - ▶ Welding and burning equipment will only be taken into a tank immediately prior to its use and must be removed from the tank immediately after the job is finished.
 - ▶ For all "hot work" inside a tank, a properly executed flame permit, if needed, must be displayed at the job site.
 - ▶ Standard welding and burning safety precautions will always be followed.

PHASE III--REMOVE TANK

- Disconnect and cap all appurtenant piping.
- Disconnect and decontaminate all appurtenant pumping equipment.
- The vessels shall be removed and reused by Safety-Kleen or cut up and sold as scrap.



- The surface soil beneath the fill pipes and beneath each tank will be sampled and analyzed for volatile organic compounds, mineral spirits, lead, and cadmium.
- Contaminated soil, if it exists, shall be removed and properly disposed of. An additional work plan to determine the extent of contamination and remediation procedures will be submitted in this case.
- The secondary containment system will be disassembled. The construction materials will be tested with TCLP (pertinent constituents only). If the construction materials are classified as non-hazardous using TCLP, then they will be disposed of as a solid waste in a sanitary landfill. In the event the construction materials are identified as hazardous using TCLP, then the construction materials will be disposed of as a hazardous waste in accordance with RCRA regulations.

PHASE IV--BACKFILLING AND REGRADING

- Backfill any excavation with previously excavated material with proper compaction.
- Add additional backfill with proper compaction if necessary. The material must be clean and easily compacted in place.
- Regrade the site to proper topography.
- Remove and dispose of nonusable debris.

FACILITY CLOSURE SCHEDULE AND CERTIFICATION

- Safety-Kleen may amend the closure plan at any time during the active life of the facility. The active life of the facility is that period during which wastes are periodically received. Safety-Kleen shall amend the plan any time changes in operating plans or facility design affect the closure plan or whenever a change



occurs in the expected year of closure of the facility. The plan must be amended within 60 days of the changes.

- Within 90 days of receiving the final volume of hazardous wastes, or 90 days after approval of the closure plan, if that is later, Safety-Kleen shall remove from the site all hazardous wastes in accordance with the approved closure plan. The Regional Administrator may approve a longer period if Safety-Kleen demonstrates that:

The activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete; or

The following requirements are met:

- ▶ The facility has the capacity to receive additional wastes;
 - ▶ There is a reasonable likelihood that a person other than Safety-Kleen will recommence operation of the site;
 - ▶ Closure of the facility would be incompatible with continued operation of the site; and
 - ▶ Safety-Kleen has taken and will continue to take all steps to prevent threats to human health and the environment.
- Safety-Kleen shall complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of wastes or 180 days after approval of the closure plan, whichever is later.

- When closure is completed, all facility equipment and structures shall have been properly disposed of, or decontaminated by removing all hazardous waste and residues.
- When closure is completed, Safety-Kleen shall submit to the certification by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.



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ATTACHMENT II.A.4(b)
CONTINGENCY PLAN AND EMERGENCY PROCEDURES
FOR DAILY BUSINESS OPERATIONS



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EMERGENCY PHONE NUMBERS

Emergency Coordinators

Primary: James A. Davis
 1632 Southwind Drive
 Brandon, FL 33511
 Home: (813) 996-6829
 Office: (813) 621-5457
 Beeper: (813) 878-8417

Alternate 1: William Munier
 13110 Apt. F
 Thomasvill Drive
 Tampa, FL 33617
 Office: (813) 626-1203
 Beeper: (813) 980-8001

Emergency Notification Phone Numbers

Safety-Kleen Environmental Department
 Telephone (708) 888-4660 (24-hour number)

National Response Center
 Telephone (800) 424-8802

Southwest Florida District of the FDER, 3804 Coconut Palm Drive
 Tampa, Florida 33619-8318 (813) 744-6100

Emergency Team to be Notified

Tampa Fire Department
 715 S. 58th Street
 Tampa, FL 33619
 (813) 681-9927 or 911

O.H. Materials Company
 P.O. Box 551
 Findlay, OH 45840
 (800) 537-9540
 (Primary Cleanup Contractor)

Tampa Police Department
 1710 N. Tampa Street
 Tampa, FL 33602
 (813) 223-1112

Ryckman's Emergency Action and
 Consulting Team
 P.O. Box 27310
 St. Louis, MO 63141
 (800) 325-1398
 (Secondary Cleanup Contractor)

Humana Hospital-Brandon
 119 Oakfield Drive
 Brandon, FL 33511
 (813) 681-5551



ATTACHMENT II.A.4(b)**CONTINGENCY PLAN AND EMERGENCY PROCEDURES
FOR DAILY BUSINESS OPERATIONS****GENERAL FACILITY INFORMATION****Purpose**

The contingency plan and emergency procedures are designed to ensure that Safety-Kleen is prepared to address emergency situations rapidly and in a manner to prevent or minimize hazards to human health or the environment from fire, explosion, or any unplanned sudden or non-sudden release of hazardous material constituents to the air, soil, surface water, or ground water at the facility.

The provisions of the contingency plan are to be carried out immediately if there is a fire, explosion, or release of hazardous materials occurs that could threaten human health or the environment. All contingency plan responses must conform with the procedures contained in this plan.

General Description of Activities

The business activities conducted at the Tampa Service Center relate to the leasing and servicing of Safety-Kleen Parts Cleaning Equipment, including the provisions of a solvent leasing service for the customers. Clean solvents are distributed from, and the used solvents are returned to, the service center, where separate storage tanks are utilized for the storage of clean and used mineral spirits (solvent) and where warehouse space is designated for the storage of drums of both clean and used immersion cleaner, mineral spirits, industrial solvent, antifreeze, paint waste, and dry cleaning wastes (chlorinated solvent). Safety-Kleen uses a drum color scheme as a part of its waste management system. An 85-gallon overpack drum is used for the management of drums whose integrity has been compromised.

The mineral spirits are transported in covered, 5-, 16- and 30-gallon drums between the service center and customers. Upon returning to the service center, the used mineral spirits are transferred from the drums into a wet dumpster (solvent return receptacle) in which coarse solids in the mineral spirits are retained. Used mineral spirits from the wet dumpster flow into a 15,000-gallon aboveground tank for storage. Used mineral spirits solvent is picked up periodically by a bulk tank truck from the recycle facility which at the same time delivers clean mineral spirits. The sludge in the wet dumpster is periodically cleaned out, drummed, and temporarily stored in the drum storage area for later shipment to the recycle facility for reclamation.

The immersion cleaner remains in 16-gallon covered drums at all times during transportation and storage. The solvent is not transferred to another container while being used by the customers or while in storage at the service center. Dry cleaning wastes are picked up at commercial dry cleaning establishments in 16-, split 30 (also known as 20-gallon), and 30-gallon drums and stored temporarily at the service center. The drums are picked up periodically for recycling at the recycle facility.

Dry cleaning wastes consist of spent filter cartridges, powder residue from diatomaceous or other powder filter systems, and still bottoms. The still bottoms and powder residue are packaged on the customer's premises in 16-, split 30 (also known as 20-gallon), and 30-gallon drums with lock rings.

The antifreeze waste is approximately one-third water and two-thirds antifreeze (ethylene glycol) and contaminants. The waste is collected and stored in 30-gallon steel drums. Tank truck to tank truck transfer of ethylene glycol may also be conducted.

Paint wastes consist of various lacquer thinners and paints. The waste is collected in 5-gallon pails and in 16-gallon drums at the customer's place of business and the containers are then palletized and stored in the drum storage area of the warehouse.



The industrial solvents are packaged in polyethene or steel drums which are not opened until they reach the recycle center. Containers are palletized whenever possible (four 55-gallon; 12 split 30 (also known as 20-gallon); five 30-gallon; eight 16-gallon; or sixteen 5-gallon drums or 16 boxes per pallet) to facilitate shipping and storage. Pallets may be stacked up to six feet high, or two high (whichever is higher), while in storage and during transport. This will prevent the containers from contacting any standing liquid while they are in storage.

The waste products exhibit essentially the same biological, physical, and chemical properties as the fresh product. Used products are basically fresh products with impurities of dirt and metals. The MSDSs provided in Appendix A represent the biological, physical, and chemical properties of the fresh and used products.

Figures II.A.4(b)-1 and II.A.4(b)-2 show the basic site and floor plans, particularly, the locations of waste management facilities, emergency equipment, and facility storage.

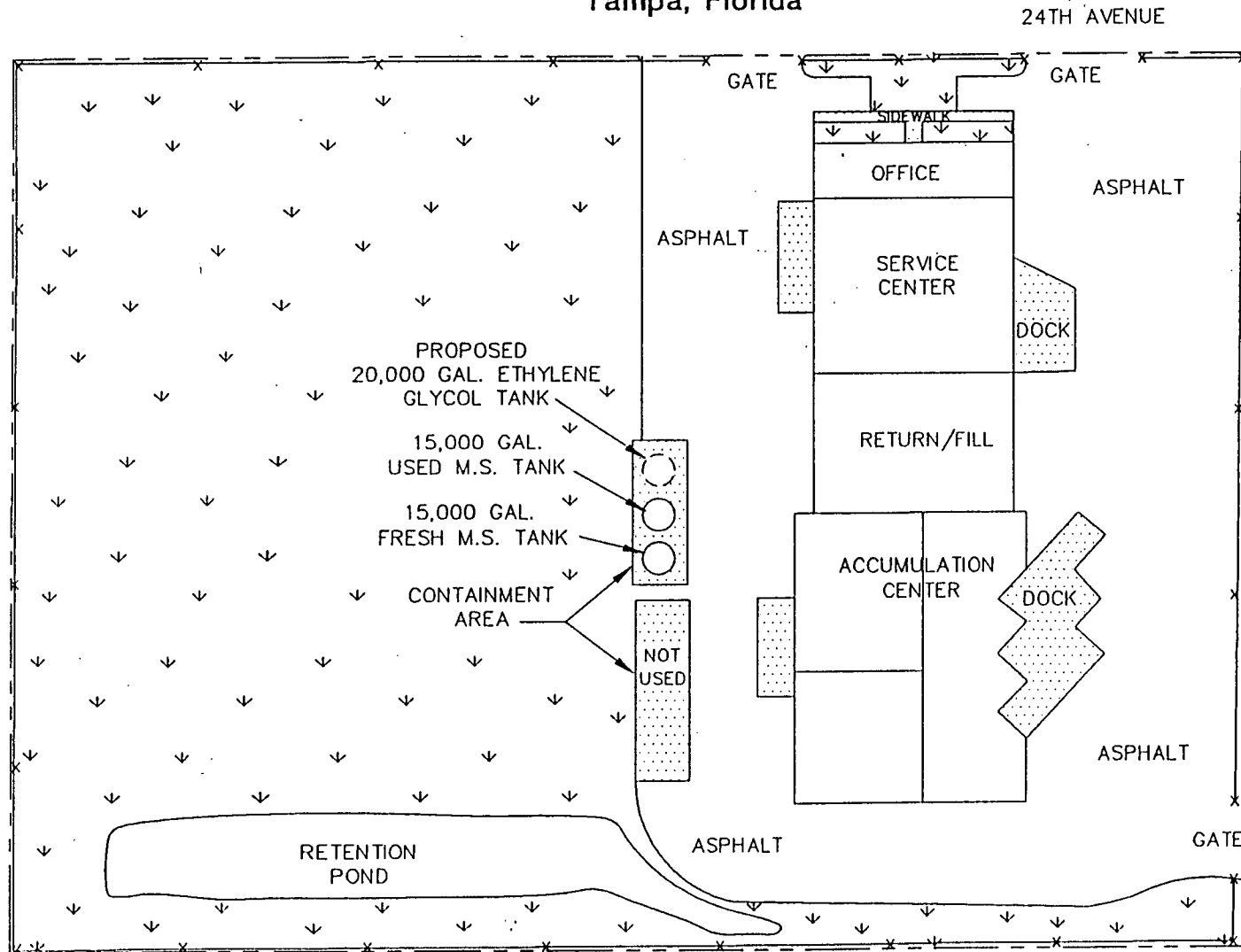
EMERGENCY NOTIFICATION

Emergency Coordinator

The Branch Manager or his designate is the emergency coordinator. Table II.A.4(b)-1 includes the names, home addresses, and both office and home phones of the primary emergency coordinator and his alternates. At least one employee is either present on the facility premises or on call with responsibility for coordinating all emergency response measures at all times. This primary emergency coordinator and alternate emergency coordinator are thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of materials handled, the location of all records within the facility, and the facility layout. In addition, these coordinators have the authority to commit the resources needed to carry out the contingency plan.



Figure II.A.4(b)-1
Site Layout Map
Safety-Kleen Corp. Facility
Tampa, Florida



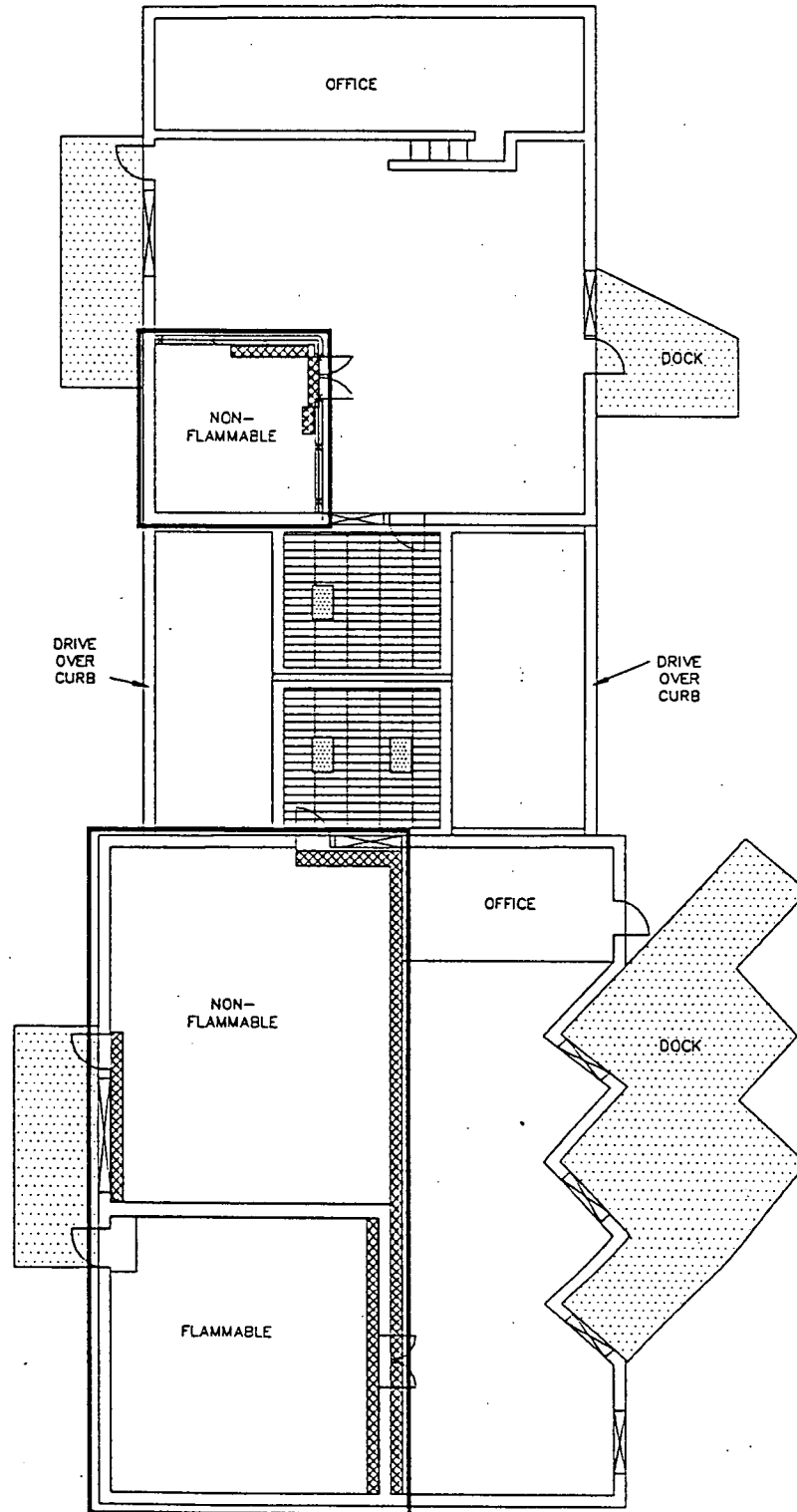
LEGEND

- PROPERTY BOUNDARY
- x-x- FENCE
- ↓ ↓ GRASS
- CONCRETE
- M.S. MINERAL SPIRITS



0 60
FEET

Figure II.A.4(b)-2
 Container Storage Locations
 Safety-Kleen Corp. Facility
 Tampa, Florida



0 30
 FEET

LEGEND

- DUMPSTER
- GRATED AREA
- HAZARDOUS WASTE CONTAINER STORAGE AREA
- ROLL-UP DOOR
- TRENCH

**TABLE II.A.4(b)-1
EMERGENCY NOTIFICATION**

Emergency Coordinators

Primary: James A. Davis
1632 Southwind Drive
Brandon, FL 33511
Home: (813) 996-6829
Office: (813) 621-5457
Beeper: (813) 878-8417

Alternate 1: William Munier
13110 Apt. F
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Emergency Team to be Notified

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Tampa, FL 33619
(813) 681-9927 or 911

O.H. Materials Company
P.O. Box 551
Findlay, OH 45840
(800) 537-9540
(Primary Cleanup Contractor)

Tampa Police Department
1710 N. Tampa Street
Tampa, FL 33602
(813) 223-1112

Ryckman's Emergency Action and
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P.O. Box 27310
St. Louis, MO 63141
(800) 325-1398
(Secondary Cleanup Contractor)

Humana Hospital-Brandon
119 Oakfield Drive
Brandon, FL 33511
(813) 681-5551



EMERGENCY RESPONSE AGENCIES AND TEAM MEMBERS

The agencies and response team members to be notified whenever an imminent or actual emergency occurs are presented in Table II.A.4(b)-1. A Telephone Notification Log is shown in Table II.A.4(b)-2.

ACTIONS OF THE EMERGENCY COORDINATOR

Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his or her designee when the emergency coordinator is on call) must immediately:

- a. Activate internal or communication systems to notify all facility personnel. The relatively small size of this Service Center makes direct verbal communication the most expedient form of emergency notification. The emergency coordinator may also elect to proceed to the front of the building and repeatedly sound a car horn to notify building occupants of an emergency. A head count will be performed by the emergency coordinator.
- b. Notify appropriate state or local agencies with designated response roles if their help is needed.
- c. Summon the primary emergency coordinator, if he is absent.

Whenever a release, fire, or explosion occurs, the emergency coordinator must immediately identify the character, exact source, amount, and area extent of any released materials. Because of the limited types of chemicals in storage, the identification processes can easily be performed visually.

Procedure for Assessing Possible Hazard to the Environment and Human Health:

Table II.A.4(b)-2
SAFETY-KLEEN CORP.
Field Spill Report Form

Report all spills to the Safety-Kleen Environment, Health and Safety Dept. immediately.

1. Facility Number _____ Facility Location _____

2. Date of spill _____ Time _____ a.m./p.m.

3. Report from: _____ Title _____

4. Location of spill: _____

5. Material spilled: _____ Quantity _____

6. Any injuries or property damage? Yes or No If yes, explain. _____

7. Cause of spill? (Explain in detail.) _____

8. Describe the scene in detail (including nearby surface water or sewer and distance, type of surface spilled on, was spill contained). _____

9. Describe clean-up action taken in detail. How much material was not recovered? _____

10. Person involved in incident. _____

11. Vehicle # _____ Company _____

12. Accident resulted from activities involving (circle all that apply):
SK Fleet Branch Personnel Outside Carrier Customer Other

13. List any emergency agencies at scene. _____

14. Are there homes or businesses nearby? Yes or No Distance? _____

15. Notification: S-K Environment Dept. Nat'l Response Center State
1-800-669-5740 1-800-424-8802 1- - -
1-312-888-4660 (24 hr.)*

Date/time: _____

Contact name: _____

Comments rec'd: _____

Report Number: _____

16. Action taken to prevent recurrence. _____

Use back of form if additional space is needed for any item.

17. Signature _____

After completing this form, file copy 1 in the Spill Incident File at the branch, and send copy 2 to the SK Environment, Health and Safety Department in Elgin and copy 3 to the Regional Environmental Engineer.

*NOTE: After 11/11/89 telephone number will be (708) 888-4660

- a. After identification of the character, source, amount, and extent of a release, fire, or explosion, the emergency coordinator must decide whether the situation can be contained or cleaned up by plant personnel and equipment.
- b. If a fire or explosion is determined uncontrollable by plant personnel or threatening neighboring establishments or population, assistance from a local emergency response agency shall be summoned immediately and an evacuation order be requested.
- c. In case of a release outside of the containment area that is deemed immediately uncontrollable or unrecoverable, the local emergency response agency and/or specialty cleanup contractor shall be called in.
- d. After termination of a fire or explosion, containment and preliminary cleanup of a spill, evaluate whether residues in the form of gas or liquid have become airborne, seeped into ground water, and/or flowed into surface water bodies.
- e. Expert assistance should be requested to determine whether the escaped materials are potentially harmful and whether the receiving medium ultimately will be a populated area, public water supply source, a private well, or an environmentally sensitive area.
- f. Additional steps shall then be taken to mitigate the potential impact on the environment and human health, in accordance with expert recommendations.

If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health, or the environment outside the facility, the coordinator must report those findings, as follows:

- a. If the assessment indicates that evacuation of local areas may be advisable, the coordinator must immediately notify appropriate authorities. The coordinator must be available to help appropriate officials decide whether local areas should be evacuated.
- b. The coordinator must immediately notify the Southwest Florida District of the FDER, (813) 623-5561, and the National Response Center (800) 424-8802, by telephone.

The report must include:

- (1) Name and telephone number of notifier;
- (2) Name and address of facility;
- (3) Time and type of incident (e.g., release, fire);
- (4) Name and quantity of material(s) involved, to the extent known;
- (5) The extent of injuries, if any; and
- (6) The possible hazards to human health, or the environment outside the facility.

Immediate assistance in assessing and responding to an emergency is obtained by the emergency coordinator by calling the 24-hour emergency number of the Safety-Kleen Corporation Environmental, Health and Safety Department ((708) 888-4660).

During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

The emergency coordinator must ensure that, in the affected area(s) of the facility:

- a. No waste that may be incompatible with the released material is treated or stored until cleanup procedures are completed; and
- b. All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

The owner or operator must notify the appropriate state and local authorities that the facility is in compliance with the requirements of the preceding paragraph, before operations are resumed in the affected area(s) of the facility.

The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the owner must submit a written report on the incident to the Southwest Florida District of the FDER, 4520 Oak Fair Boulevard, Tampa, Florida 33610 (813) 623-5561. The report must include:

- a. Name, address, and telephone number of the owner or operator;
- b. Name, address, and telephone number of the facility;

TABLE II.A.5-1
ACCEPTANCE CRITERIA FOR
INDUSTRIAL SOLVENTS

1. Solvents suitable for recycling will include mineral spirits, methylene chloride, 1,1,1-trichloroethane, trichloroethylene, and perchloroethylene, or mixtures of these solvents. Freon TF (1,1,2-trichloroethane-1,2,2-trifluoroethene) and TMC (a mixture of Freon and methylene chloride) will be acceptable for recycling but must be authorized.
2. A minimum of 50% yield of usable solvent is necessary. Yield is to be calculated as a percentage of the total sample received. Chemical breakdown of distillate should also be reported since this affects whether the distillate can be suitably incorporated into the Safety-Kleen product line.
3. The distillate cannot contain more than 5% by volume of aromatic solvents (toluene + xylene).
4. The distillate cannot contain more than 1% oxygenated solvents. (This excludes the inhibitor packages which should be reported as inhibitors).
5. Freon contamination is limited to 1% by volume for chlorinated feedstocks. Materials containing methylene chloride and Freon should be noted as producing TMC.
6. The raw material cannot contain more than 50% water (free + emulsified). Solids content should not exceed 5% (by centrifuge) by volume.
7. Materials with more than 5% solid bottoms are not acceptable feedstocks for normal feed.
8. Materials which pose potential safety hazards are not acceptable, i.e. low flash point (less than 100°F), high toxicity, and those that pose explosive hazards during processing.
9. Materials which contain herbicides, pesticides, PCBs, and PBBs are not suitable feedstocks due to the potential for contamination of the processing equipment and facility.
10. Materials which contain more than 1% unknown are to be referred to Jim Breece or Clark Rose for a decision on further analysis or rejection, depending upon quantity.



TABLE II.A.5-1 (Continued)

**ACCEPTANCE CRITERIA FOR
INDUSTRIAL SOLVENTS**

11. All samples analyses which are approved by the lab will be forwarded to Jim Breece or Clark Rose for their acceptance prior to authorizing the generator to ship material to a recycle center.
12. All sample analyses that are rejected by the lab will be forwarded to Industrial Solvents and Operations to resolve whether or not the material can be accepted under a special processing and pricing arrangement.



- c. Date, time, and type of incident (e.g., fire, explosion);
- d. Name and quantity of material(s) involved;
- e. The extent of injuries, if any;
- f. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- g. Estimated quantity and disposition of recovered material that resulted from the incident.

POTENTIAL SPILL SOURCES

The following is a list of activities that have the potential for a small scale (less than 30 gallons of waste) pollution incident.

- a. Moving of drums.

Every time a drum is moved, the possibility exists that it could tip over or be dropped. To minimize the possibility of spillage of solvent under those conditions, all drum lids must be secured before the drum is moved.

- b. Delivery truck drum transfers.

- (1) Individual delivery drums contain from five to 30 gallons of waste, a quantity which can be contained by oil sorbent clay or pads, if accidentally spilled.

- (2) Each vehicle is equipped with a hoist and hand cart for ease of moving clean solvent off the truck and into the customer's shop and returning the dirty solvent to the truck.
- (3) Clamp type lids are on drums during movement to prevent a spill.
- (4) Each truck should contain a shovel and a quantity of sorbent material to contain a minor spill.
- (5) The cargo should be secured in the route vehicle before transit.

Spills Inside Buildings

In the event of a spill indoors, the doors and windows should be opened to improve the ventilation in the confined area. Following the instructions of the Material Safety Data Sheet (MSDS), the worker would enter the area wearing rubber gloves, boots, and respirator and mop up the liquid and return it to dirty storage. The cleanup is completed only when the workers have cleaned themselves and the emergency equipment with soap and water.

Spills on Concrete Pads

Concrete pads in loading and unloading areas are, in most cases, equipped with emergency containment. Under most spill conditions, product can be totally contained on the concrete surface and in the catchment system. Upon containment, arrangements must be immediately undertaken to recover the material. Any soil that may be involved must be removed and treated as a hazardous waste.

Tank Spills or Leakage

Aboveground tanks are underlain by a concrete slab and surrounded by a 36-inch concrete dike to contain any spilled or leaked solvent. The containment system has been

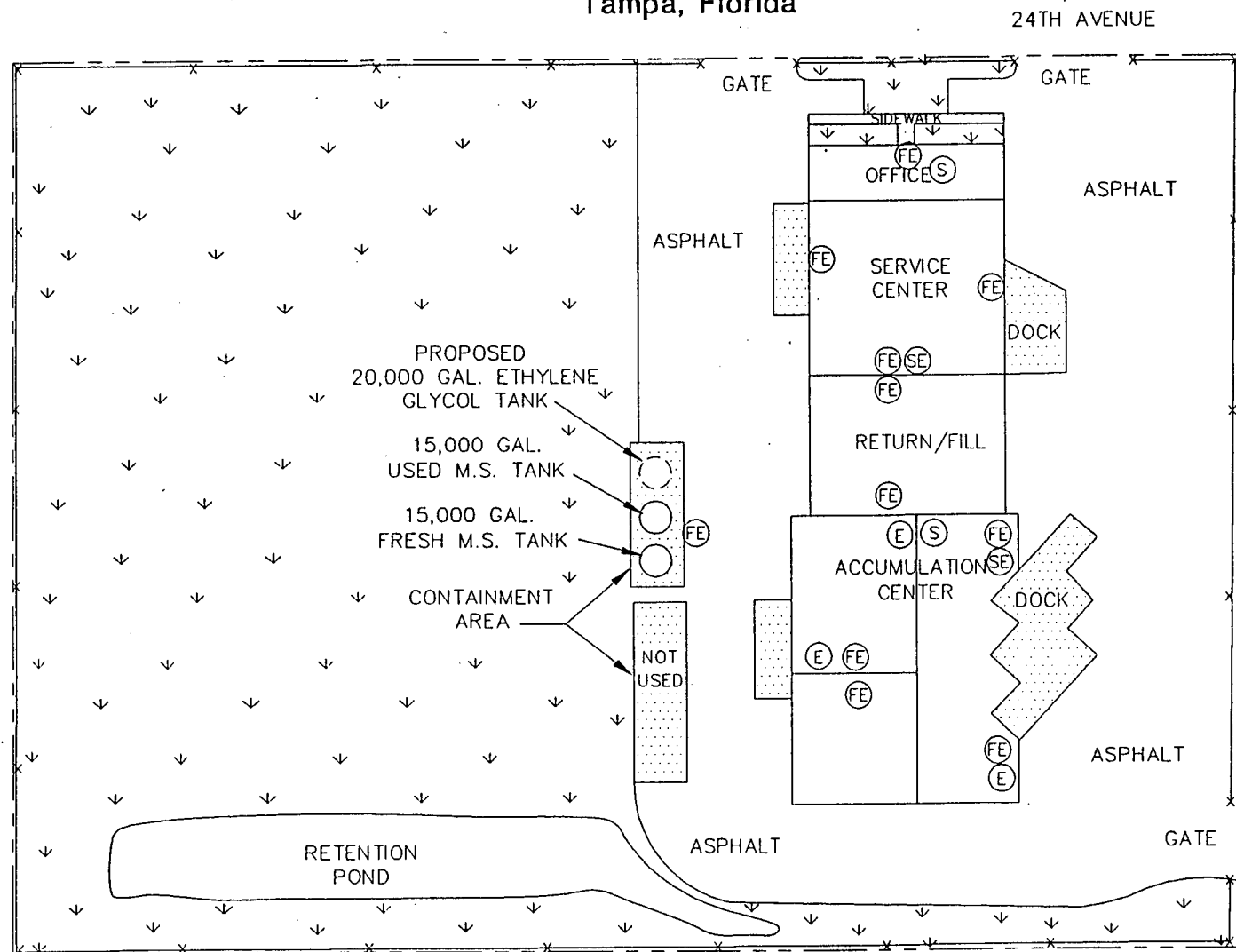
sized in accordance with the regulations, and the product will be totally contained under most spill conditions. Should a spill occur, arrangements must be immediately undertaken to recover the material. In the event of leakage, tank repair or replacement will be initiated. Any soil that may be involved must be removed and treated as hazardous waste.

Spill Control Procedures

If a harmful discharge occurs:

- a. Stop the discharge, if possible, by immediately transferring the liquid to a good drum.
- b. Retain, contain, or slow the flow of the material, if possible, by diking with sorbent pad or dirt. Appropriate personal protective equipment should be worn. Pump and mop up the liquid from the floor into a good drum, and return the drum to storage and then later to the recycle center for reclamation/disposal. The area and equipment that comes in contact with the spill must be decontaminated with soap and water. All residues resulting from containment and decontamination should be collected for proper disposal at a Safety-Kleen recycle center.
- c. If the material escapes the containment efforts, immediately call the cleanup contractor with response time less than two hours (Table II.A.4(b)-1). Record the date, time, and name of person taking the message. Call the primary emergency coordinator, if he is absent.
- d. Immediately recover spilled solvent to reduce property and environmental damage using the safety equipment stored onsite for such situations (Figure II.A.4(b)-3) and Table II.A.4(b)-3 or call in emergency response contractors (Table II.A.4(b)-1). Start recovery operations immediately.

Figure II.A.4(b)-3
Location of Emergency Equipment
Safety-Kleen Corp. Facility
Tampa, Florida



LEGEND

	PROPERTY BOUNDARY		FIRE EXTINGUISHER
	FENCE		SPILL EQUIPMENT
	GRASS		EYEWASH
	CONCRETE		SHOWER
	M.S. MINERAL SPIRITS		



TABLE II.A.4(b)-3
EMERGENCY RESPONSE EQUIPMENT

Description	Type/Capacity	Location	Quantity
Fire Extinguisher	ABC (300 lb)	A/C Warehouse	1
Fire Extinguisher	ABC (10 lb)	Warehouses	10
Fire Extinguisher	Halon	Office A/C	1
Eyewash	Fountain	Warehouses	5
First-Aid		Locker Rooms	2
Telephones	Standard	Manager's Office	Min. 2
Telephones	Standard	Secretary's Desk	Min. 1
Telephones	Standard	Warehouses	Min. 1
Gloves	Rubber	Emergency Equip. Area	Min. 1/employee
Boots (optional)	Rubber	Emergency Equip. Area	Min. 1/employee
Protective Clothing	Apron	Emergency Equip. Area	1/Employee
Eye Protection	Goggles/Safety Glasses	Emergency Equip. Area	Min. 1/employee
Sorbent Material	Oil Absorbing	Emergency Equip. Area	Min. 1 bale
Shovel	Standard	Emergency Equip. Area	Min. 1
Mop and Bucket	Standard	Emergency Equip. Area	Min. 1
Respirator	Air Purifying	Emergency Equip. Area	2
Pump	Hand-held, Electric	Emergency Equip. Area	Min. 1
Wet/Dry Vacuum	Portable, Electric	Emergency Equip. Area	1



After recovery of spilled solvent, wash all contaminated impervious surfaces and equipment with soap and water. The residue of spill- or fire-contaminated soils and waste waters must be removed and disposed of at a Safety-Kleen recycle center. In addition, the recovered solvent will be sent to a Safety-Kleen recycle center for reclamation.

- e. Report any incident as soon as possible to Safety-Kleen Corporate Environmental Department on the 24-hour telephone line: (708) 888-4660. If the Environmental Department does not respond within 30 minutes, call the National Response Center (telephone: (800) 424-8802) and Southwest Florida District of the FDER, 4520 Oak Fair Boulevard, Tampa, Florida 33610 (813) 623-5561.
- f. The person reporting a spill should be prepared to give his name, position, company name, address, and telephone number. The person reporting also should give the nature of the material spilled (e.g., immersion cleaner, etc.) and, if possible, some estimate of the amount, and whether it is near a stream or could enter a stream by flowing through ditches or storm sewers.

If assistance is needed, the emergency coordinator should describe the containment status and specify any additional equipment needed. When reporting a spill, record the date and time of the call and the name of the person answering the call at the above number.

Spill prevention plans are reviewed with facility personnel every year, and records of the training are kept at the facility.

Every spill must be recorded on the attached form with the revision of the contingency plan to prevent similar spills in the future. A copy of this report is sent to the Corporate Environment Health and Safety Department.



Reports of emergency incidents will be transmitted to the Secretary of the FDER or his designee within 15 days of occurrence. This report shall include:

- a. Name, address, and telephone number of the owner of operator;
- b. Name, address, and telephone number of the facility;
- c. Date, time, and type of incident (e.g., fire, explosion);
- d. Name and quantity of materials involved;
- e. The extent of injuries, if any;
- f. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- g. Estimated quantity and disposition of recovered material that resulted from the incident.

DECONTAMINATION

Once the spilled material has been cleaned-up, the spill area and equipment used during the spill clean-up must be decontaminated and/or disposed.

Concrete surfaces/containment areas:

- Concrete surfaces/containment areas will be cleaned with a detergent solution and then rinsed with hot water. The rinsate will be collected via wet vacuums and placed in drums. Visual inspection will be used to determine the success of the decontamination procedure.

- The intent of the surface decontamination is to prevent current or future releases of materials to the environment. It is believed that a vigorous cleaning with detergent is sufficient to prevent releases to the environment during normal operations. Potential for hazards from residual materials to future occupants of the facility are addressed in the Closure Plans for the facility and the decontamination procedures incorporated therein.

Equipment

The equipment used to clean the area includes mops, pails, scrub brushes, and a wet/dry vacuum. Equipment which is considered reusable (i.e., pails, wet/vac, hoses) will be washed with detergent and the wash water and rinsate collected. All non-reusable equipment and/or equipment which is not capable of being decontaminated will be drummed and disposed of as hazardous waste.

Wash Water and Rinsate

If the rinsate or other wastes generated in the clean-up process is determined to be hazardous, it will be properly disposed of as a hazardous waste; otherwise, the material will be disposed of as an industrial waste. It should be noted that wash water and rinsate will not be allowed to drain to the waterway.

EMERGENCY RESPONSE EQUIPMENT AND COMMUNICATION

Due to the small size of the facility, routine communication is accomplished by voice communication. Telephones are used in case of a spill or fire emergency to summon assistance. Emergency numbers are posted by each phone in the office. Included with these phone numbers is the 24-hour spill number for the Corporate Environmental Department at the corporate office in Elgin, Illinois. Figure II.A.4(b)-3 provides locations of telephones, fire extinguisher, the first-aid kit, and the emergency eyewash. Other emergency response equipment (Table II.A.4(b)-3) is kept in three places. In the

Service Center, emergency response equipment is kept inside the door leading to the fill/return shelter. In the Accumulation Center, emergency response equipment is kept adjacent to the south wall of the Accumulation Center office and between the two northernmost docks located on the eastern side of the Accumulation Center building. This equipment includes mops and buckets, soap, shovels, and spill sorbent pads. Rubber gloves, boots, pumps, and a wet/dry vacuum cleaner are stored in an emergency supply area near the drum storage area. Descriptions and uses of the equipment are provided in Table II.A.4(b)-4. Adequate aisle space is provided in the drum storage area for movement in an emergency situation. At the present time, the facility does not have an active fire sprinkler system. Plans are in place to provide the facility with fire water. Until these plans come to fruition, the facility will rely on the water carried by the fire department for fire fighting purposes.

The equipment available at the facility for emergency situations is adequate for most cases. Large or serious emergency situations will be remediated by local emergency response teams or special emergency response or cleanup contractors. The facility is constructed and operated in accordance with National Fire Protection Association (NFPA) standards and applicable local ordinances. Applicable health and safety standards also are observed at the service center. A recent air quality survey conducted by an independent industrial hygienist at the Los Angeles service center has shown that air quality at a typical service center is within Threshold Limit Values (TLV) as specified by OSHA and local air pollution control criteria; no respirator or special protection unit is deemed mandatory.

FIRE CONTROL PROCEDURES

Call the Fire Department.



TABLE II.A.4(b)-4

DESCRIPTION AND USES OF EMERGENCY EQUIPMENT

Item	Location	Use/Description
Gloves	Locker Room/ Emergency Equipment Area	The rubber or plastisol gloves sold by Safety-Kleen are to be used when handling the solvents.
Safety Glasses or Face Mask	Locker Room/ Emergency Equipment Area	Whichever the worker prefers is to be worn when loading or unloading solvent.
Plastic Aprons	Locker Room/ Emergency Equipment Area	For situations where a solvent may get on the worker's clothing.
Eyewash Stand	Centrally for smaller centers	The workers should operated the stand and become familiar with its operation.
Showers	Locker Room	
Fire Extinguisher	Points where solvent is transferred	An ABC extinguisher is a universal system used on paper, wood, and electrical, as well as solvent fires. The extinguishers must be full and carry an inspection tag. The accepted extinguisher is available as S-K Part No. 4009.
Absorbent Material	Loading/Unloading Area and Warehouse	An adequate supply will be on hand to handle small spills. S-K Part No. 8890 A 50-pound bag of sorbent clay will also be kept in the warehouse to remediate and prevent the spread of large spills.
Air Purifying Respirator	Locker Room/ Emergency Equipment Area	To be worn by any person entering an area or performing work where potentially harmful fumes are present or suspected to be present but are not considered to be immediately dangerous to life and health.



TABLE II.A.4(b)-4 - Continued

DESCRIPTION AND USES OF EMERGENCY EQUIPMENT

Item	Location	Use/Description
Portable Pumps Wet/Dry Vacuum	Warehouse	For use in picking up liquid spills in the drum containment area, or other paved areas, and to transfer materials associated with a spill.
Recovery Drums	Warehouse	Emergency storage of spilled product, cleaning fluids, or other materials associated with a spill.
Plastic	Warehouse	To be used for containment of decontamination zones.
Duct Tape	Warehouse	Taping of protective clothing, containment plastic, and other miscellaneous uses.
First-Aid Supplies	Locker Room	Minor first-aid needs and health problems.
Shovels and Mops	Warehouse	To be used to collect spills and spill residue.
Communication Equipment	Throughout the Facility	Six telephones with paging/loudspeaker systems are available in the office and warehouse for internal and external communications.
Decontamination Equipment	Warehouse	Two brushes, a box of detergent and cloth rags are available for decontamination of clean-up equipment.



- a. Immersion cleaner (which is a mixture of chlorinated solvents and water) and dry cleaning wastes are initially not flammable, but produce toxic gases and hydrochloric acid at elevated temperatures (about 1200° F).

Center aisles are available in drum storage areas to permit fire department personnel to pass with fire fighting equipment.

Act quickly with the fire extinguisher to put out the fire before it spreads.

Call the Police Department and local hospital (Table II.A.4(b)-1) when injury occurs, and/or the order of on-lookers and traffic is to be maintained.

AVAILABILITY AND REVISION OF THE CONTINGENCY PLAN

This plan and all revisions to the plan are kept at the facility and regularly updated throughout the operating life of the facility.

Copies of this document are provided to local authorities and organizations listed under the Preparedness and Prevention Plan, which may be called upon to provide emergency services.

This plan and all revisions to the plan are made readily available to employees working at the facility.

This plan is reviewed and updated, if necessary, whenever:

- a. The facility license is modified to allow new process wastes to be stored or treated, or applicable regulations are revised;
- b. The list or location of emergency equipment changes;

- c. The facility changes in its design, construction, operation maintenance, or other circumstances in a way that:
 - (1) Materially increase the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or
 - (2) Changes in response necessary in an emergency.
- d. The names, addresses, or phone numbers of emergency coordinators change;
- e. The employee assigned to each emergency task changes, or
- f. The plan fails when implemented in an emergency.

ARRANGEMENTS WITH LOCAL AUTHORITIES

Arrangements have been made to familiarize the Police Department, Fire Department, and local emergency response teams with the layout of the facility, properties of hazardous materials handled (Material Safety Data Sheets) at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes.

Potential primary and secondary spill control contractors as well as sorbent suppliers are identified in the Contingency Plan and Emergency Procedures.

Arrangements have been made to familiarize the local hospital with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which would result from fires, explosions, or releases at the facility.

Appendix B includes copies of letters which have been transmitted to local authorities for emergency response in the event of an incident where public health or environment is threatened.

EVACUATION PLAN

In an uncontrolled emergency, all persons are to be evacuated from the area by means of a verbal cry and assemble across from the entrance drive to the facility. Assure that all personnel are accounted for and out of the area. The emergency coordinator may elect to use a car horn as a means of emergency notification. A head count will be performed by the emergency coordinator.

The Fire Department must be notified at the time of evacuation either from a safe onsite building or neighboring facilities.

Clearly marked exits exist in warehouse and office area.

APPENDIX A

**MATERIAL SAFETY DATA SHEETS FOR
KNOWN HAZARDOUS CONSTITUENTS**



SAFETY-KLEEN 105 PARTS WASHING SOLVENT
MATERIAL SAFETY DATA SHEET

SECTION I -- PRODUCT INFORMATION

Safety-Kleen Corporation - 777 Big Timber Road - Elgin, IL 60123
For Product/Sales Information Call 708/697-8460

EMERGENCY TELEPHONE

These numbers are for emergency use only. If you desire non-emergency information about this product, please call the telephone number listed above.

MEDICAL:

800/942-5969 or 312/942-5969
RUSH POISON CONTROL CENTER
CHICAGO, ILLINOIS (24 HOURS)

TRANSPORTATION:

800/424-9300
CHEMTREC

IDENTITY (TRADE NAME): SAFETY-KLEEN 105 PARTS WASHING SOLVENT
SYNONYMS: PETROLEUM DISTILLATES, PETROLEUM NAPHTHA,
MINERAL SPIRITS, STODDARD SOLVENT
SK PART NUMBER: 6617
FAMILY/CHEMICAL NAME: HYDROCARBON SOLVENT
PRODUCT USAGE: SOLVENT FOR CLEANING AND DEGREASING PARTS

SECTION II -- HAZARDOUS COMPONENTS

NAME	SYNONYM	%	CAS NO.	OSHA PEL (ppm)	ACGIH TLV (ppm)
Parts Washer Solvent (consists predominantly of C9-C13 hydrocarbon)	Mineral Spirits	(Typical % by Wt.)			
C9-C13 Saturated Hydrocarbon		85	64741-41-9	100 (Stoddard Solvents)	100 (Stoddard Solvents)
*Toluene		0.5	108-88-3	100 150 STEL	100 150 STEL
*Xylene		1.0	1330-20-7	100 150 STEL	100 150 STEL
*Ethyl Benzene		0.5	100-41-4	100 Skin 125 STEL	100 125 STEL
C3+ Aromatics		12.0	Mixture	N/E	N/E
Chlorinated Solvents		(Max 1% by Wt.)			
*1,1,1 Trichloroethane		<0.5	71-55-6	350 450 STEL	350 450 STEL
*Tetrachloroethylene		<0.5	127-18-4	25	50 200 STEL

N/E = Not Established

* See Section X - Other Regulatory Information

SECTION III -- PHYSICAL DATA

PHYSICAL STATE,
APPEARANCE AND ODOR: Combustible liquid - clear, green, with characteristic hydrocarbon odor.
BOILING POINT: 300° - 429° F

PERCENT VOLATILE: 99.9%
VAPOR DENSITY: 4.9 (Air = 1)
VAPOR PRESSURE: 2 mm of Hg at 68° F
SOLUBILITY IN WATER: Negligible
pH: Not Applicable
SPECIFIC GRAVITY: 0.77 to 0.80
MOLECULAR WEIGHT: Approximately 142
VOLATILE ORGANIC COMPOUNDS: 795 g/L

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 105° F (SETA)
AUTOIGNITION TEMPERATURE: 473° F
CONDITIONS OF FLAMMABILITY: Materials must be moderately heated before ignition can occur.
FLAMMABLE LIMITS IN AIR - LOWER: 0.7% **UPPER:** 6.0%
EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical, water (mist only).
FIRE FIGHTING PROCEDURES -- SPECIAL: NFPA 704 Rating 2-2-0

Keep storage tanks cool with water spray. Use self-contained breathing apparatus (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Decomposition and combustion products may be toxic. Heated tanks may rupture, explode or be thrown into the air. Vapors are heavier than air and may travel great distances to ignition source and flashback.

HAZARDOUS COMBUSTION PRODUCTS:

Thermal decomposition and burning may produce carbon monoxide.

SECTION V -- REACTIVITY DATA

STABILITY: Normally stable even under fire exposure conditions and is not reactive with water. Normal firefighting procedures may be used.
INCOMPATIBILITY (CONDITIONS TO AVOID): Strong oxidizing agents (e.g. chlorine, peroxides, strong acids).
HAZARDOUS POLYMERIZATION: Not known to occur under normal conditions.
HAZARDOUS DECOMPOSITION PRODUCTS: Normally none; however, incomplete burning may yield carbon monoxide.

SECTION VI -- HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Skin and eye contact; inhalation.

HEALTH HAZARD DATA/SIGNS AND SYMPTOMS OF EXPOSURE:

ACUTE: Skin: Prolonged or repeated contact tends to remove skin oils, possibly leading to irritation and dermatitis.
No significant skin absorption hazard.

Eyes: Contact may cause slight to moderate irritation. High vapor concentrations (> 500 ppm) are irritating to the eyes.

Inhalation: High concentrations of vapor or mist may be irritating to the respiratory tract, cause headaches, dizziness, nausea, impaired coordination, anesthesia and may have other central nervous system effects.

Ingestion: Low order of acute oral toxicity. May cause irritation of the throat, nausea, vomiting and symptoms of central nervous system depression. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

CHRONIC: Prolonged and/or repeated contact may cause drying and cracking of the skin or dermatitis.

OTHER POTENTIAL HEALTH HAZARDS:

The impurities that may be present are not expected to add significantly to the effects of exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Individuals with pre-existing central nervous system dysfunction may have increased susceptibility to the effects of exposure. Contact with skin may aggravate pre-existing dermatitis.

CARCINOGENICITY: Tetrachloroethylene is listed by IARC and NTP as a suspected carcinogen. Studies indicate that Ethyl Benzene and 1,1,1 Trichloroethane are experimental teratogens.

SECTION VII -- EMERGENCY AND FIRST AID PROCEDURES

- EYES:** For direct contact, flush eyes with water for 15 minutes lifting upper and lower lids occasionally. Consult physician if irritation or pain persists. If irritation or redness from exposure to vapors or mists develop, move victim away from exposure into fresh air.
- SKIN:** Remove contaminated clothing. Wash skin twice with soap and water. If irritation develops and persists, consult a physician.
- INGESTION:** If conscious, dilute with 4 to 8 ounces of water and seek immediate medical attention. DO NOT induce vomiting.
- INHALATION:** Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if respiration has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

SECTION VIII -- PRECAUTIONS FOR SAFE USE AND HANDLING

SPILL

PROCEDURES: Remove all ignition sources. Ventilate area and avoid breathing vapors. For large spills, isolate area and deny entry. If possible, contain as a liquid for possible re-refining. Absorb onto sand or other absorbent material. Shovel into closable container for disposal. Wear protective equipment specified below. Contain away from surface waters and sewers.

WASTE DISPOSAL METHODS:

Dispose in accordance with Federal, State, and local regulations. Contact Safety-Kleen regarding recycling.

HANDLING PRECAUTIONS:

Avoid contact with eyes, skin or clothing. Use in well ventilated area and avoid breathing vapors or mists. Keep away from heat, sparks and open flames.

SHIPPING AND STORING

PRECAUTIONS: Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Keep container tightly closed when not in use and during transport.

**PERSONAL
HYGIENE:**

Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products. Launder contaminated clothing and clean protective equipment before reuse.

SECTION IX - CONTROL MEASURES

VENTILATION: Provide local exhaust or general dilution ventilation as determined necessary to maintain concentrations of vapors or mists below applicable exposure limits. Where explosive mixtures may be present, systems safe for such locations should be used.

**PROTECTIVE
GLOVES:** Use nitrile or neoprene gloves to prevent contact with skin.

**EYE
PROTECTION:** Where there is likelihood of spill or splash, wear chemical goggles or faceshield. Contact lenses should not be worn.

**RESPIRATORY
PROTECTION:** Use NIOSH-approved respiratory protective equipment when concentration of vapors or mists exceeds applicable exposure limit. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (for organic vapor with mist prefilter). A self-contained breathing apparatus (SCBA) is required for large spills and emergencies. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 - Respiratory Protection.

**OTHER PROTECTIVE
EQUIPMENT:** Wear solvent-resistant boots, apron or other protective clothing where spills and splashes are possible. A source of clean water should be available in work areas for flushing the eyes and skin.

SECTION X -- OTHER REGULATORY INFORMATION

DOT PROPER SHIPPING NAME: Petroleum Naphtha

DOT CLASS: Combustible Liquid

DOT NUMBER: UN 1255

SARA TITLE III: Product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section II of this Material Safety Data Sheet.

Product poses the following physical and/or health hazard(s) as defined in 40 CFR 370.3 (Sections 311, 312 of SARA Title III):

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard
Fire Hazard

SECTION XI - PREPARATION INFORMATION

PREPARED BY: SK Product Review Committee **FORM NO.** 900-14-001

ORIGINAL ISSUE DATE: July 20, 1989 **REVISED:** March 12, 1990 **SUPERSEDES:** July 20, 1989

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kem assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet applies to the material as supplied to the user.

IMMERSION CLEANER/CARBURETOR AND COLD PARTS CLEANER 609

MATERIAL SAFETY DATA SHEET

SECTION I -- PRODUCT INFORMATION

Safety-Kleen Corporation - 777 Big Timber Road - Elgin, IL 60123
For Product/Sales Information Call 708/697-8460

EMERGENCY TELEPHONE

These numbers are for emergency use only. If you desire non-emergency information about this product, please call the telephone number listed above.

MEDICAL:

800/942-5969 or 312/942-5969
RUSH POISON CONTROL CENTER
CHICAGO, ILLINOIS (24 HOURS)

TRANSPORTATION:

800/424-9300
CHEMTREC

IDENTITY (TRADE NAME):

IMMERSION CLEANER/CARBURETOR AND COLD PARTS CLEANER 609

SK PART NUMBER:

609, 6631, 50

FAMILY/CHEMICAL NAME:

N/A

PRODUCT USAGE:

REMOVING CARBON RESIDUE FROM PARTS

SECTION II -- HAZARDOUS COMPONENTS

NAME	SYNONYM	%	CAS NO.	OSHA PEL (ppm)	ACGIH TLV (ppm)
*Cresylic Acid	Mixed Cresols	11.9	1319-77-3	5 (Skin)	5 (Skin)
Petroleum Sulfonate Contains: Hexylene Glycol Diethylene Glycol	Surfactant Blend	7.4			
			107-41-5 111-46-6	25(C) N/E	25(C) N/E
*Methylene Chloride	Dichloromethane	31.7	75-09-2	500 1000(C)	50
Di-chlorobenzenes: *(o-dichlorobenzene) *(p-dichlorobenzene) *(m-dichlorobenzene)	ODCB	10.5 10.5 10.5	95-50-1 106-46-7 541-73-1	50(C) 75 110 STEL N/E	50(C) 75 110 STEL N/E
Complex Amines Contains: Propargyl Alcohol *Isopropyl Alcohol	Rust Inhibitor	0.4			
			107-19-7 67-63-0	1 (Skin) 400 500 STEL	1 (Skin) 400 500 STEL
Triethanolamine	TEA	0.4	102-71-6	N/E	N/E
Water		16.8	7732-18-5	N/E	N/E

* See Section X - Other Regulatory Information

N/E = Not Established

(C) = Ceiling Concentration

SECTION III -- PHYSICAL DATA

PHYSICAL STATE, APPEARANCE AND ODOR:

Liquid - clear, dark amber, with aromatic odor. Two distinct layers comprise the product; top layer water, lower layer solvent.

BOILING POINT:

102° - 395° F

EVAPORATION RATE: 1.0 (Water = 1)
PERCENT VOLATILE: Majority
VAPOR DENSITY: Same as Water
VAPOR PRESSURE: Same as Water
SOLUBILITY IN WATER: Completely miscible in all proportions.
pH: 9-10 in water phase
SPECIFIC GRAVITY: 1.19 (Water = 1.0)
MOLECULAR WEIGHT: Use molecular weights of individual components.
VOLATILE ORGANIC COMPOUNDS: 750 g/L

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Non-Flammable
AUTOIGNITION TEMPERATURE: Not Known
CONDITIONS OF FLAMMABILITY: Non-Flammable
FLAMMABLE LIMITS IN AIR - LOWER: Non-Flammable **UPPER:** Non-Flammable
EXTINGUISHING MEDIA: None Special
FIRE FIGHTING PROCEDURES - SPECIAL: None; product is non-flammable. NFPA 704 Rating 3-2-0
UNUSUAL FIRE AND EXPLOSION HAZARDS:

Although product is non-flammable, flames, welding arcs or other high temperature sources can cause decomposition. This decomposition can yield corrosive and toxic gases, vapors mists or fumes. Use a self-contained breathing apparatus (SCBA).

HAZARDOUS COMBUSTION PRODUCTS:

Although product is non-flammable, flames, welding arcs or other high temperature sources can cause decomposition. This decomposition can yield corrosive and toxic gases, vapors, mists or fumes (e.g. hydrogen chloride, phosgene, carbon monoxide, etc.)

SECTION V -- REACTIVITY DATA

STABILITY: Normally stable.
INCOMPATIBILITY: (CONDITIONS TO AVOID) Strong oxidizing agents (e.g. chlorine, peroxides, strong acids)
HAZARDOUS POLYMERIZATION: Not known to occur under normal conditions.
HAZARDOUS DECOMPOSITION PRODUCTS: Normally none; however, flames and welding arcs can produce corrosive and toxic gases, vapors and fumes (e.g. hydrogen chloride, phosgene, carbon monoxide).

SECTION VI -- HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Inhalation, skin and eye contact, skin absorption.

HEALTH HAZARD DATA/SIGNS AND SYMPTOMS OF EXPOSURE:

ACUTE: *Skin:* Corrosive to living tissue and is rapidly absorbed through the skin causing systemic poisoning. Contact with unprotected skin can cause discoloration, irritation, blistering and slow healing chemical burns. Partial anesthetic properties may mask affects.

Eyes: Contact with liquid may cause severe chemical burns and produce permanent damage.

Inhalation: May result in severe respiratory irritation; gastrointestinal distress (nausea, vomiting), central nervous system depression (headache, drowsiness, dizziness, confusion) and tingling or numbness of the extremities. Severe exposures may lead to respiratory failure, coma and death.

Ingestion: May produce burning pain in the mouth and stomach, severe abdominal pain with nausea, vomiting, slow respiration and irregular pulse, and dark blue skin discoloration. Symptoms similar to those for inhalation also may occur.

CHRONIC: Exposure to high concentrations may lead to damage to the liver, kidneys and lungs. Contact with skin may cause dermatitis, gastrointestinal disorders and produce symptoms similar to those for inhalation.

OTHER POTENTIAL HEALTH HAZARDS:

Metabolism of methylene chloride may elevate carboxyhemoglobin levels.

MEDICAL CONDITIONS

AGGRAVATED BY

EXPOSURE: Individuals with pre-existing liver, kidney, lung or cardiovascular dysfunction may have increased susceptibility to the effects of exposure. Contact with skin may aggravate pre-existing dermatitis.

CARCINOGENICITY: Methylene chloride is listed by NTP and IARC as a suspected carcinogen. P-dichlorobenzene is listed by IARC as a suspected carcinogen.

SECTION VII -- EMERGENCY AND FIRST AID PROCEDURES

YES: For direct contact, flush eyes with clean water for 15 minutes lifting upper and lower lids occasionally. Consult physician if irritation persists. If irritation or redness from exposure to vapors or mists develop, move victim away from exposure and into fresh air.

SKIN: Remove contaminated clothing. Wash skin twice with soap and water. If irritation develops and persists, consult a physician.

INGESTION: Aspiration hazard. If conscious, dilute with 4 to 8 ounces of water and seek immediate medical attention. DO NOT induce vomiting.

INHALATION: Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if respiration has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

SECTION VIII -- PRECAUTIONS FOR SAFE USE AND HANDLING

SPILL

PROCEDURES: Ventilate area and avoid breathing vapors. Absorb spill with oil absorbent or soda ash. Catch and collect for recovery as soon as possible. Shovel into closable container for disposal. Wear protective equipment specified below. Contain away from surface waters and sewers.

WASTE DISPOSAL

METHODS: Dispose in accordance with Federal, State and local regulations. Contact Safety-Kleen regarding recycling.

HANDLING

PRECAUTIONS: Keep away from heat, sparks and open flames. Use adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapors.

**SHIPPING AND
STORING
PRECAUTIONS:**

Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Keep container tightly closed when not in use and during transport.

**PERSONAL
HYGIENE:**

Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products.

SECTION IX - CONTROL MEASURES

VENTILATION:

Provide local exhaust or general dilution ventilation, as determined necessary, to maintain concentrations of vapors below applicable exposure limits.

PROTECTIVE GLOVES:

Wear Viton gloves to prevent skin contact.

EYE PROTECTION:

Where there is a likelihood of contact with the face and/or eyes, wear a faceshield and chemical goggles. Contact lenses should not be worn.

**RESPIRATORY
PROTECTION:**

Use NIOSH-approved respiratory protective equipment when concentration of vapors exceeds applicable exposure limit. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges or canisters (for organic vapors). A self-contained breathing apparatus (SCBA) is required for large spills and emergencies. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 - Respiratory Protection.

**OTHER PROTECTIVE
EQUIPMENT:**

A source of clean water should be available in the work area for flushing eyes and skin. Wear solvent-resistant boots, apron or other protective clothing where spills or splashes are possible.

SECTION X -- OTHER REGULATORY INFORMATION

**DOT PROPER
SHIPPING NAME:**

Compound, Cleaning Liquid

DOT CLASS:

Corrosive Liquid

DOT ID NUMBER:

NA1760

SARA TITLE III:

Product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section II of this Material Safety Data Sheet.

Product poses the following physical and/or health hazard(s) as defined in 40 CFR 370.3 (Sections 311, 312 of SARA Title III):

- Immediate (Acute) Health Hazard
- Delayed (Chronic) Health Hazard

SECTION XI -- PREPARATION INFORMATION

PREPARED BY:

SK Product Review Committee

FORM NO. 900-14-002

ORIGINAL ISSUE DATE: July 20, 1989

REVISED: December 1, 1989

SUPERSEDES: July 20, 1989

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet applies to the material as supplied to the user.

SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER 699

MATERIAL SAFETY DATA SHEET

SECTION I -- PRODUCT INFORMATION

Safety-Kleen Corporation - 777 Big Timber Road - Elgin, IL 60123
For Product/Sales Information Call 708/697-8460

EMERGENCY TELEPHONE

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MEDICAL:

800/942-5969 or 312/942-5969
RUSH POISON CONTROL CENTER
CHICAGO, ILLINOIS (24 HOURS)

TRANSPORTATION:

800/424-9300
CHEMTREC

IDENTITY (TRADE NAME):

SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER 699

EPA PART NUMBER:

6861, 699

FAMILY/CHEMICAL NAME:

N/A

PRODUCT USAGE:

REMOVING CARBON RESIDUE FROM PARTS

SECTION II -- HAZARDOUS COMPONENTS

	SYNONYM	TYPICAL % BY WT.	CAS NO.	OSHA PEL (ppm)	ACGIH TLV (ppm)
Aromatic 150	Heavy Aromatic Naphtha Cleaning Solvent, 140 (60) Class		64742-94-5	100 (Exxon)	100 (Exxon)
	*(May contain up to 5% Naphthalene)		91-20-3	10 15 STEL	10 15 STEL
N-Methyl-2-Pyrrolidone	NMP		872-50-4	100 (BASF)	100 (BASF)
Dipropylene Glycol Methyl Ether	Dipropylene Glycol Monomethyl Ether		34590-94-3	100 150 STEL	100 150 STEL
Monoethanolamine	Ethanolamine		141-43-5	3 6 STEL	3 6 STEL
Oleic Acid	Red Oil		112-80-1	N/E	N/E
Water			7732-18-5	—	—

** (Total chlorinated solvents)

1.0 (Max)

N/E = Not Established

* See Section X - Other Regulatory Information

** May contain methylene chloride and/or tetrachloroethylene in concentrations > 0.1%

SECTION III -- PHYSICAL DATA

PHYSICAL STATE,
APPEARANCE AND ODOR:

Clear, reddish brown liquid with hydrocarbon odor.

BOILING RANGE:

210° - 439° F

MELTING POINT:

< 10° F

EVAPORATION RATE:

1.0 (Water = 1)

PERCENT VOLATILE: 92 Wt. %
VAPOR DENSITY: 2.6 (Air = 1.0)
VAPOR PRESSURE: 10.9 mm Hg at 25° C
SOLUBILITY IN WATER: Completely miscible in all proportions.
PH: 10.8, 50/50 (Water/Solvent)
SPECIFIC GRAVITY: 0.95 (Water = 1.0)
MOLECULAR WEIGHT: 127, Average molecular weight of components.
VOLATILE ORGANIC COMPOUNDS: N/E

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: SETA, 142° F (Min.)
AUTOIGNITION TEMPERATURE: Not Known
CONDITIONS OF FLAMMABILITY: Ignitable, if material is heated above its flash point.
FLAMMABLE LIMITS IN AIR - LOWER: 0.8 **UPPER:** 7.0
EXTINGUISHING MEDIA: None Special
FIRE FIGHTING PROCEDURES - SPECIAL: NFPA 704 Rating 2-2-0
UNUSUAL FIRE AND EXPLOSION HAZARDS:

Decomposition and combustion products may be toxic. Heated tanks may rupture, explode or be thrown into the air. Vapors are heavier than air and may travel great distances to ignition source and flashback.

HAZARDOUS COMBUSTION PRODUCTS:

Thermal decomposition and burning may produce carbon monoxide, oxides of nitrogen and acrid smoke.

SECTION V -- REACTIVITY DATA

STABILITY: Normally stable.
**INCOMPATIBILITY:
(CONDITIONS TO AVOID)** Strong oxidizing agents
(e.g. chlorine, peroxides, strong acids)
**HAZARDOUS
POLYMERIZATION:** Not known to occur under normal conditions, oxides of nitrogen and acrid smoke.
Glycol ethers have been shown to form explosive peroxides.
**HAZARDOUS DECOMPOSITION
PRODUCTS:** Normally none; however, incomplete burning may yield carbon monoxide.

SECTION VI -- HEALTH HAZARD DATA

**PRIMARY ROUTES
OF EXPOSURE:** Inhalation, skin and eye contact, skin absorption.
HEALTH HAZARD DATA/SIGNS AND SYMPTOMS OF EXPOSURE:
ACUTE: Skin: Corrosive to living tissue and is absorbed through the skin causing systemic poisoning. Contact with unprotected skin can cause discoloration, irritation, blistering and slow healing chemical burns.

Eyes: Contact with liquid may cause severe chemical burns and produce permanent damage.

Inhalation: May result in severe respiratory irritation; gastrointestinal distress (nausea, vomiting), central nervous system depression (headache, drowsiness, dizziness, confusion) and tingling or numbness of the extremities. Severe exposures may lead to respiratory failure, coma and death.

Ingestion: May produce burning pain in the mouth and stomach, severe abdominal pain with nausea, vomiting, slow respiration and irregular pulse. Symptoms similar to those for inhalation also may occur.

CHRONIC: Exposure to high concentrations may lead to damage to the liver, kidneys and lungs. Contact with skin may cause dermatitis, gastrointestinal disorders and produce symptoms similar to those for inhalation.

OTHER POTENTIAL HEALTH HAZARDS:

Dipropylene glycol methyl ether is a mild allergen.

MEDICAL CONDITIONS

AGGRAVATED BY

EXPOSURE: Individuals with pre-existing liver, kidney, lung or cardiovascular dysfunction may have increased susceptibility to the effects of exposure. Contact with skin may aggravate pre-existing dermatitis.

MUTAGENICITY: Naphthalene is an experimental tumorigen. Mutagenic data exists and Naphthalene is included in EPA Genetic Toxicology Program. Oleic acid is an experimental tumorigen. Methylene Chloride and Tetrachloroethylene are listed by IARC and NTP as suspected carcinogens.

SECTION VII -- EMERGENCY AND FIRST AID PROCEDURES

EYES: For direct contact, flush eyes with clean water for 20 minutes lifting upper and lower lids occasionally. Consult physician if irritation persists. If irritation or redness from exposure to vapors or mists develop, move victim away from exposure and into fresh air.

SKIN: Remove contaminated clothing. Wash skin twice with soap and water. If irritation develops and persists, consult a physician.

INGESTION: Aspiration hazard. If conscious, dilute with 4 to 8 ounces of water and seek immediate medical attention. DO NOT induce vomiting.

INHALATION: Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if respiration has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

SECTION VIII -- PRECAUTIONS FOR SAFE USE AND HANDLING

SPILL

PROCEDURES: Ventilate area and avoid breathing vapors. Absorb spill with oil absorbent or soda ash. Catch and collect for recovery as soon as possible. Shovel into closable container for disposal. Wear protective equipment specified below. Contain away from surface waters and sewers.

WASTE DISPOSAL

METHODS: Dispose in accordance with Federal, State and local regulations. Contact Safety-Kleen regarding recycling.

HANDLING

PRECAUTIONS: Keep away from heat, sparks and open flames. Use adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapors.

SHIPPING AND

STORING

PRECAUTIONS: Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Keep container tightly closed when not in use and during transport.

PERSONAL

HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products.

SECTION IX - CONTROL MEASURES

VENTILATION:	Provide local exhaust or general dilution ventilation, as determined necessary, to maintain concentrations of vapors below applicable exposure limits.
PROTECTIVE GLOVES:	Wear neoprene gloves to prevent skin contact.
EYE PROTECTION:	Where there is a likelihood of contact with the face and/or eyes, wear a faceshield and chemical goggles. Contact lenses should not be worn.
RESPIRATORY PROTECTION:	Use NIOSH-approved respiratory protective equipment when concentration of vapors exceeds applicable exposure limit. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges or canisters (for organic vapors). A self-contained breathing apparatus (SCBA) is required for large spills and emergencies. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 - Respiratory Protection.
OTHER PROTECTIVE EQUIPMENT:	A source of clean water should be available in the work area for flushing eyes and skin. Wear solvent-resistant boots, apron or other protective clothing where spills or splashes are possible.

SECTION X -- OTHER REGULATORY INFORMATION

DOT PROPER SHIPPING NAME:	Compound; Cleaning Liquid
DOT CLASS:	Corrosive Liquid
DOT ID NUMBER:	NA1760
SARA TITLE III:	<p>Product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section II of this Material Safety Data Sheet.</p> <p>Product poses the following physical and/or health hazard(s) as defined in 40 CFR 370.3 (Sections 311, 312 of SARA Title III):</p> <ul style="list-style-type: none">Immediate (Acute) Health HazardDelayed (Chronic) Health HazardFire HazardReactivity Hazard

SECTION XI -- PREPARATION INFORMATION

PREPARED BY:	SK Technical Services	FORM NO.	900-14-057
ORIGINAL ISSUE DATE:	December 1, 1989	REVISED:	July 13, 1990
		SUPERSEDES:	April 6, 1990

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representation or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet applies to the material as supplied to the user.

SAFETY-KLEEN PERCHLOROETHYLENE

MATERIAL SAFETY DATA SHEET

SECTION I -- PRODUCT INFORMATION

Safety-Kleen Corporation - 777 Big Timber Road - Elgin, IL 60123
For Product/Sales Information Call 708/697-8460

EMERGENCY TELEPHONE

These numbers are for emergency use only. If you desire non-emergency information about this product, please call the telephone number listed above.

MEDICAL:

800/942-5969 or 312/942-5969
RUSH POISON CONTROL CENTER
CHICAGO, ILLINOIS (24 HOURS)

TRANSPORTATION:

800/424-9300
CHEMTREC

IDENTITY (TRADE NAME): SAFETY-KLEEN PERCHLOROETHYLENE
SK PART NUMBER: 775, 778, 10778, 30778
FAMILY/CHEMICAL NAME: CHLORINATED HYDROCARBON
PRODUCT USAGE: DRY CLEANING SOLVENT

SECTION II -- HAZARDOUS COMPONENTS

NAME	SYNONYM	%	CAS NO.	OSHA PEL (ppm)	ACGIH TLV (ppm)
Perchloroethylene (Stabilized)	1,1,2,2 - Tetra-chloroethylene	100	127-18-4	25	50 200 STEL

* See Section X - Other Regulatory Information

SECTION III -- PHYSICAL DATA

PHYSICAL STATE, APPEARANCE AND ODOR: Liquid - colorless, clear liquid with mildly sweet odor.
BOILING POINT: 250° F
MELTING POINT: - 9° F
EVAPORATION RATE: 0.09 (Toluene = 1)
PERCENT VOLATILE: Approximately 100%
VAPOR DENSITY: 5.83
VAPOR PRESSURE: 13 mm Hg @ 20° C (Concentrate)
SOLUBILITY IN WATER: 0.015 mg/100 gm @ 25° C
pH: Not Applicable
SPECIFIC GRAVITY: 1.6 (Water = 1.0)
MOLECULAR WEIGHT: 164
VOLATILE ORGANIC COMPOUNDS: None

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Non-Flammable
AUTOIGNITION TEMPERATURE: Not Applicable
CONDITIONS OF FLAMMABILITY: Non-Flammable
FLAMMABLE LIMITS IN AIR - LOWER: Non-Flammable **UPPER:** Non-Flammable
EXTINGUISHING MEDIA: Non-Flammable
FIRE FIGHTING PROCEDURES -- SPECIAL: NFPA 704 Rating 2-0-0

Self-contained breathing apparatus (SCBA) should be used by fire fighters in buildings where perchloroethylene is stored. Keep containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Concentrated vapors will decompose on contact with high intensity heat source and produce hydrogen chloride or phosgene.

HAZARDOUS COMBUSTION PRODUCTS:

Exposure to flames, an electric arc or other high energy sources will result in thermal decomposition forming toxic gases (e.g. phosgene and hydrogen chloride).

SECTION V -- REACTIVITY DATA

STABILITY: Stable under normal temperatures and pressures.
INCOMPATIBILITY (CONDITIONS TO AVOID): Open flames, hot surfaces, emissions from welding arcs. Strong alkalis and oxidizing materials. Reacts violently with barium, beryllium and lithium.
HAZARDOUS POLYMERIZATION: Does not normally occur under normal temperatures and pressures.
HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition produces phosgene and hydrogen chloride and other highly toxic substances.

SECTION VI -- HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Inhalation, skin and eye contact, skin absorption.

HEALTH HAZARD DATA/SIGNS AND SYMPTOMS OF EXPOSURE:

ACUTE:

Skin: May cause irritation, discomfort or pain. May be absorbed through the skin, although it is not expected to produce toxicity by this route.

Eyes: Contact with liquid may cause slight to moderate irritation resulting in pain, tearing and general inflammation.

Inhalation: May result in respiratory irritation, gastrointestinal distress (nausea, vomiting), central nervous system depression, headaches, drowsiness, dizziness, confusion, loss of coordination and equilibrium and more severe central nervous system effects at much higher concentrations. Overexposure can cause unconsciousness and even death in extreme cases.

Ingestion: May produce irritation of the mouth and gastrointestinal tract and cause effects similar to those of "Inhalation". Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possible death.

CHRONIC: Prolonged and repeated exposure to high concentrations may result in damage to the liver, kidneys and central nervous system. Prolonged or repeated contact with skin may cause skin to become reddened, rough and dry and may result in dermatitis.

OTHER POTENTIAL HEALTH HAZARDS:

Animals exposed to high levels have shown cardiac sensitization.

**MEDICAL CONDITIONS
AGGRAVATED BY EXPOSURE:**

Individuals with pre-existing liver, kidney or central nervous system dysfunction may have increased susceptibility to effects of the exposure. Contact with skin may aggravate pre-existing dermatitis.

CARCINOGENICITY: Perchloroethylene is listed by OSHA, NTP and IARC as a suspected carcinogen.

SECTION VII -- EMERGENCY AND FIRST AID PROCEDURES
--

EYES: Flush eyes with water for 20 minutes lifting upper and lower lids occasionally. Consult physician if irritation persists. If irritation or redness from exposure to vapors or mists develop, move victim away from exposure and into fresh air.

SKIN: Remove contaminated clothing. Wash skin twice with soap and water. If irritation persists, consult a physician.

INGESTION: Aspiration hazard. If conscious, dilute with 4 to 8 ounces of water and seek immediate medical attention. DO NOT induce vomiting.

INHALATION: Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

SECTION VIII -- PRECAUTIONS FOR SAFE HANDLING AND USE
--

**SPILL
PROCEDURES:** Isolate area and deny entry. Ventilate area and avoid breathing vapors. Absorb onto sand or other absorbent material. Shovel into closable container for disposal. Wear protective equipment specified below. Contain away from surface waters and sewers.

**WASTE DISPOSAL
METHODS:** Dispose in accordance with Federal, State and local regulations. Contact Safety-Kleen regarding recycling.

**HANDLING
PRECAUTIONS:** Do not get into eyes, on skin or clothing. Avoid breathing vapors. DO NOT smoke when using this product.

**SHIPPING AND
STORING
PRECAUTIONS:** Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Keep container tightly closed when not in use and during transport. Because vapors are much heavier than air, do not store in basements, pits or depressions without ventilation at floor level.

**PERSONAL
HYGIENE:** Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products. Clothing which becomes soaked with solvent should be removed immediately and must not be worn until it is thoroughly laundered and dried.

SECTION IX -- CONTROL MEASURES

- VENTILATION:** Provide local exhaust or general dilution ventilation as determined appropriate to maintain concentrations of vapors below applicable exposure limits.
- PROTECTIVE GLOVES:** Wear solvent-resistant gloves such as nitrile or neoprene to prevent contact with skin.
- EYE PROTECTION:** Use protective eyewear such as chemical goggles or faceshield to prevent contact from splash, spray or mist. Contact lenses should not be worn.
- RESPIRATORY PROTECTION:** Use NIOSH-approved respiratory protective equipment when concentration of vapors exceeds applicable exposure limit. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (for organic vapors). A self-contained breathing apparatus (SCBA) is required for large spills and emergencies. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 - Respiratory Protection.
- OTHER PROTECTIVE EQUIPMENT:** A source of clean water should be available in work area for flushing eyes and skin. Wear boots, apron and other protective clothing as need to protect against contact with skin.

SECTION X -- OTHER REGULATORY INFORMATION

- DOT PROPER SHIPPING NAME:** Perchloroethylene
- DOT CLASS:** ORM-A
- DOT ID NUMBER:** UN 1897
- SARA TITLE III:** Product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section II of this Material Safety Data Sheet.
- Product poses the following physical and/or health hazard(s) as defined in 40 CFR 370.3 (Sections 311, 312 of SARA Title III):
- Immediate (Acute) Health Hazard
 - Delayed (Chronic) Health Hazard
- OTHER:** State of California Safe Drinking Water and Toxic Enforcement Act (Proposition #65)
- Warning: Perchloroethylene is known to the State of California to cause cancer.
- California South Coast Air Quality Management District Rule 443.1:
- Maximum Volatile Organic Carbon (VOC): 1620 grams/liter
 - VOC Vapor Pressure at 20° C: 13 mm Hg

SECTION XI -- PREPARATION INFORMATION

PREPARED BY: SK Product Review Committee **FORM NO.** 900-14-022

ORIGINAL ISSUE DATE: July 20, 1989 **REVISED:** December 1, 1989 **SUPERSEDES:** July 20, 1989

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MATERIAL SAFETY DATA SHEET

SECTION I -- PRODUCT INFORMATION

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For Product/Sales Information Call 708/697-8460

EMERGENCY TELEPHONE

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800/942-5969 or 312/942-5969
RUSH POISON CONTROL CENTER
CHICAGO, ILLINOIS (24 HOURS)

TRANSPORTATION:

800/424-9300
CHEMTREC

IDENTITY (TRADE NAME): SAFETY-KLEEN DRY CLEANING GRADE SOLVENT F 780
SK PART NUMBER: 780
FAMILY/CHEMICAL NAME: CHLORINATED/FLUORINATED HYDROCARBON
PRODUCT USAGE: DRY CLEANING SOLVENT

SECTION II -- HAZARDOUS COMPONENTS

<u>NAME</u>	<u>SYNONYM</u>	<u>%</u>	<u>CAS NO.</u>	<u>OSHA PEL (ppm)</u>	<u>ACGIH TLV (ppm)</u>
*Trichlorotrifluoroethane	Fluorocarbon 113	- 100	76-13-1	1000 1250 STEL	1000

* See Section X - Other Regulatory Information

SECTION III -- PHYSICAL DATA

PHYSICAL STATE, APPEARANCE AND ODOR: Liquid - clear, colorless liquid with slight ethereal odor.
BOILING POINT: 117.6° F
MELTING POINT: Not Applicable
EVAPORATION RATE: 0.1 (CCl₄ = 1)
PERCENT VOLATILE: 100%
VAPOR DENSITY: 6.5 (Air = 1)
VAPOR PRESSURE: 334 mm Hg @ 77° F
SOLUBILITY IN WATER: 0.02% by weight (77° F)
pH: Not Applicable
SPECIFIC GRAVITY: 1.57 (Water = 1, @ 77° F)
MOLECULAR WEIGHT: 187
VOLATILE ORGANIC COMPOUNDS: None

OTHER POTENTIAL HEALTH HAZARDS: None Known

**MEDICAL CONDITIONS
AGGRAVATED BY EXPOSURE:**

Individuals with pre-existing lung, skin and cardiovascular system dysfunction may have increased susceptibility to effects of the exposure. Contact with skin may aggravate pre-existing dermatitis.

CARCINOGENICITY: No components are listed by OSHA, NTP or IARC as known or suspected carcinogens.

SECTION VII -- EMERGENCY AND FIRST AID PROCEDURES

- EYES:** Flush eyes with water for 20 minutes lifting upper and lower lids occasionally. Consult physician if irritation persists. If irritation or redness from exposure to vapors or mists develop, move victim away from exposure and into fresh air.
- SKIN:** Remove contaminated clothing. Wash skin twice with soap and water. If irritation persists, consult a physician.
- INGESTION:** Aspiration hazard. If conscious, dilute with 4 to 8 ounces of water and seek immediate medical attention. DO NOT induce vomiting.
- INHALATION:** Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

SECTION VIII -- PRECAUTIONS FOR SAFE HANDLING AND USE

- SPILL
PROCEDURES:** Isolate area and deny entry. Ventilate area and avoid breathing vapors. Remove residue with inert sorbent such as sand, oil dry or other absorbent material. Shovel into closable container for disposal. Wear protective equipment specified below. Contain away from surface waters and sewers.
- WASTE DISPOSAL
METHODS:** Dispose in accordance with Federal, State and local regulations. Contact Safety-Kleen regarding recycling.
- HANDLING
PRECAUTIONS:** Do not get into eyes, on skin or clothing. Avoid breathing vapors or mists.
- SHIPPING AND
STORING
PRECAUTIONS:** Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Keep container tightly closed when not in use and during transport. Do not store above 125° F.
- PERSONAL
HYGIENE:** Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products.

SECTION IX -- CONTROL MEASURES

- VENTILATION:** Provide local exhaust or general dilution ventilation as determined necessary to maintain concentrations of vapors below applicable exposure limits.
- PROTECTIVE
GLOVES:** Wear neoprene or nitrile gloves for repeated or prolonged contact.
- EYE
PROTECTION:** Where there is likelihood of spill or splash, wear chemical goggles or faceshield. Contact lenses should not be worn.

**RESPIRATORY
PROTECTION:**

Use NIOSH-approved respiratory protective equipment when concentration of vapors exceeds applicable exposure limit. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (chemical cartridge for organic vapors). A self-contained breathing apparatus (SCBA) is required for large spills and emergencies. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 - Respiratory Protection.

**OTHER PROTECTIVE
EQUIPMENT:**

A source of clean water should be available in work area for flushing eyes and skin. Wear rubber boots, apron and other protective clothing as need to protect against contact with skin.

SECTION X -- OTHER REGULATORY INFORMATION
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**DOT PROPER
SHIPPING NAME:**

Cleaning Compound N.O.I.

DOT CLASS:

None

DOT ID NUMBER:

None

SARA TITLE III:

Product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section II of this Material Safety Data Sheet.

Product poses the following physical and/or health hazard(s) as defined in 40 CFR 370.3 (Sections 311, 312 of SARA Title III):

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard

SECTION XI -- PREPARATION INFORMATION
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PREPARED BY: SK Product Review Committee

FORM NO. 900-14-021

ORIGINAL ISSUE DATE: July 20, 1989

REVISED: December 1, 1989

SUPERSEDES: July 20, 1989

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet applies to the material as supplied to the user.

SECTION I -- PRODUCT INFORMATION

Safety-Kleen Corporation - 777 Big Timber Road - Elgin, IL 60123
For Product/Sales Information Call 312/697-8460

EMERGENCY TELEPHONE

These numbers are for emergency use only. If you desire non-emergency information about this product, please call the telephone number listed above.

MEDICAL:

800/942-5969 or 312/942-5969
RUSH POISON CONTROL CENTER
CHICAGO, ILLINOIS (24 HOURS)

TRANSPORTATION:

800/424-9300
CHEMTREC

IDENTITY (TRADE NAME): SAFETY-KLEEN 140 PARTS WASHING SOLVENT
SYNONYMS: PETROLEUM DISTILLATES, PETROLEUM NAPHTHA
SK PART NUMBER: 6616
FAMILY/CHEMICAL NAME: HYDROCARBON SOLVENT
PRODUCT USAGE: SOLVENT FOR CLEANING AND DEGREASING PARTS

SECTION II -- HAZARDOUS COMPONENTS

NAME	%	CAS NO.	OSHA PEL (ppm)	ACGIH TLV (ppm)
Mineral Spirits	99.5	64742-88-7	100 (Stoddard Solvent)	100 (Stoddard Solvent)
Dye (contains Xylene)	.003	1330-20-7	100 150 STEL	100 150 STEL
Anti-Static Agent (contains Xylene)	1 ppm	1330-20-7	100 150 STEL	100 150 STEL

SECTION III -- PHYSICAL DATA

PHYSICAL STATE,
APPEARANCE AND ODOR: Liquid - clear, green, with characteristic hydrocarbon odor.

BOILING POINT: 360° - 400° F

MELTING POINT: Not Available

EVAPORATION RATE: (Toluene = 1) 0.2

PERCENT VOLATILE: 99.9%

VAPOR DENSITY: 4.9 (Air = 1)

VAPOR PRESSURE: 2 mm of Hg at 68° F.

SOLUBILITY IN WATER: Negligible

SPECIFIC GRAVITY:

Approximately 0.770 to 0.811

MOLECULAR WEIGHT:

Approximately 142

VOLATILE ORGANIC COMPOUNDS: 795 g/L

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 140° F (TCC)

AUTOIGNITION TEMPERATURE: 475° F

CONDITIONS OF FLAMMABILITY: Materials must be moderately heated before ignition can occur.

FLAMMABLE LIMITS IN AIR - LOWER: 0.7% **UPPER:** 6.0%

EXTINGUISHING MEDIA: Carbon Dioxide, Foam, Dry Chemical, Water (mist only).

FIRE FIGHTING PROCEDURES -- SPECIAL:

Keep storage tanks cool with water spray. Use self-contained breathing apparatus (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Decomposition and combustion products may be toxic. Heated tanks may rupture, explode or be thrown into the air. Vapors are heavier than air and may travel great distances to ignition source and flashback.

HAZARDOUS COMBUSTION PRODUCTS:

Thermal decomposition and burning may produce carbon monoxide.

SECTION V -- REACTIVITY DATA

STABILITY: Normally stable even under fire exposure conditions and is not reactive with water. Normal firefighting procedures may be used.

INCOMPATIBILITY (CONDITIONS TO AVOID): Strong oxidizing agents (e.g. chlorine, peroxides, strong acids).

HAZARDOUS POLYMERIZATION: Not known to occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Normally none; however, incomplete burning may yield carbon monoxide.

SECTION VI -- HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE: Skin and eye contact; inhalation.

HEALTH HAZARD DATA/SIGNS AND SYMPTOMS OF EXPOSURE:

ACUTE: **Skin:** Prolonged or repeated contact tends to remove skin oils, possibly leading to irritation and dermatitis. No significant skin absorption hazard.

Eyes: Contact may cause slight to moderate irritation. High vapor concentrations (> 500 ppm) are irritating to the eyes.

and dizziness, are anesthetic and may have other central nervous system effects.
Ingestion: Low order of acute oral toxicity. May cause irritation of the throat, nausea, vomiting and symptoms of central nervous system depression. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

CHRONIC: Prolonged and/or repeated contact may cause drying and cracking of the skin or dermatitis.

OTHER POTENTIAL HEALTH HAZARDS: None Known

MEDICAL CONDITIONS

AGGRAVATED BY

EXPOSURE: Individuals with pre-existing central nervous system dysfunction may have increased susceptibility to the effects of exposure. Contact with skin may aggravate pre-existing dermatitis.

CARCINOGENICITY: None of the ingredients are known or suspected carcinogens.

SECTION VII -- EMERGENCY AND FIRST AID PROCEDURES

- EYES:** For direct contact, flush eyes with water for 15 minutes lifting upper and lower lids occasionally. Consult physician if irritation or pain persists. If irritation or redness from exposure to vapors or mists develop, move victim away from exposure into fresh air.
- SKIN:** Remove contaminated clothing. Wash twice with soap and water. If irritation develops and persists, consult a physician.
- INGESTION:** If conscious, dilute with 4-8 ounces of water and seek immediate medical attention. DO NOT induce vomiting.
- INHALATION:** Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if respiration has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

SECTION VIII -- PRECAUTIONS FOR SAFE USE AND HANDLING

SPILL

PROCEDURES: Remove all ignition sources. Ventilate area and avoid breathing vapors. For large spills, isolate area and deny entry. If possible, contain as a liquid for possible re-refining. Absorb onto sand or other absorbent material. Shovel into closable container for disposal. Wear protective equipment specified below. Contain away from surface waters and sewers.

WASTE DISPOSAL

METHODS: Dispose in accordance with Federal, State, and local regulations. Contact Safety-Kleen regarding recycling.

HANDLING

PRECAUTIONS: Avoid contact with eyes, skin or clothing. Use in well ventilated area and avoid breathing vapors or mists. Keep away from heat, sparks and open flames.

**SHIPPING AND
STORING**

PRECAUTIONS: Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Keep container tightly closed when not in use and during transport.

PERSONAL

HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products. Launder contaminated clothing and clean protective equipment before reuse.

SECTION IX - CONTROL MEASURES

- VENTILATION:** Provide local exhaust or general dilution ventilation as determined necessary to maintain concentrations of vapors or mists below applicable exposure limits. Where explosive mixtures may be present, systems safe for such locations should be used.
- PROTECTIVE GLOVES:** Use nitrile or neoprene gloves to prevent contact with skin.
- EYE PROTECTION:** Use protective eyewear such as safety glasses with side shields. Where there is likelihood of spill or splash, wear chemical goggles or faceshield. Contact lenses should not be worn.
- RESPIRATORY PROTECTION:** Use NIOSH-approved respiratory protective equipment when concentration of mists exceeds applicable exposure limit. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (for organic vapor). A self-contained breathing apparatus (SCBA) is required for large spills and emergencies. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 - Respiratory Protection.
- OTHER PROTECTIVE EQUIPMENT:** Wear solvent-resistant boots, apron or other protective clothing where spills and splashes are possible. A source of clean water should be available in work areas for flushing the eyes and skin.

SECTION X -- OTHER REGULATORY INFORMATION

- DOT PROPER SHIPPING NAME:** Petroleum Naphtha
- DOT CLASS:** Combustible Liquid
- DOT NUMBER:** UN 1255
- TSCA INVENTORY STATUS:** Ingredients listed are reported in EPA TSCA Inventory

SECTION XI - PREPARATION INFORMATION

- PREPARED BY:** SK Product Review Committee **FORM NO.:** 900-14-031
- ORIGINAL ISSUE DATE:** July 20, 1989 **REVISED:** **SUPERSEDES:**

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers.

SAFETY-KLEEN HEAVY DUTY LACQUER THINNER 6782

MATERIAL SAFETY DATA SHEET

SECTION I -- PRODUCT INFORMATION

Safety-Kleen Corporation - 777 Big Timber Road - Elgin, IL 60123
For Product/Sales Information Call 708/697-8460

EMERGENCY TELEPHONE

These numbers are for emergency use only. If you desire non-emergency information about this product, please call the telephone number listed above.

MEDICAL:

800/942-5969 or 312/942-5969
RUSH POISON CONTROL CENTER
CHICAGO, ILLINOIS (24 HOURS)

TRANSPORTATION:

800/424-9300
CHEMTREC

IDENTITY (TRADE NAME): SAFETY-KLEEN HEAVY DUTY LACQUER THINNER 6782
SK PART NUMBER: 5820, 5825
FAMILY/CHEMICAL NAME: N/A
PRODUCT USAGE: LACQUER THINNER

SECTION II -- HAZARDOUS COMPONENTS

NAME	SYNONYM	%	CAS NO.	OSHA PEL (ppm)	ACGIH TLV (ppm)
*Toluene	Toluol	5-60	108-88-3	100 150 STEL	100 150 STEL
*Xylene	Xylol	5-20	1330-20-7	100 150 STEL	100 150 STEL
Heptane	n-Heptane	N/E	142-82-5	400 500 STEL	400 500 STEL
*Methyl Ethyl Ketone	MEK	5-40	78-93-3	200 300 STEL	200 300 STEL
*Methyl Isobutyl Ketone	MIBK	0.1-10	108-10-1	50 75 STEL	50 75 STEL
Methylcyclohexane	Cyclohexylmethane	0.10-40	108-87-2	400	400
*Acetone	2-Propanone	2-20	67-64-1	750 1000 STEL	750 1000 STEL
*Cyclohexane			110-82-7	300	300
*Isopropanol	Isopropyl Alcohol	0.1-20	67-63-0	400 500 STEL	400 500 STEL
*Methanol	Methyl Alcohol	2-10	67-56-1	200 250 STEL	200 250 STEL
Lactol Spirits	VM & P Naphtha	0.1-20	8030-30-6	300 400 STEL	300
Ethanol	Ethyl Alcohol	0.1-10	64-17-5	1000	1000
n-Butyl Acetate	Butyl Acetate	0.1-15	123-86-4	150 200 STEL	150 200 STEL
Isobutyl Acetate	Isobutyl Ester Acetic Acid	0.1-15	110-19-0	150	150
/1 3-Ethoxypropionate	3-Ethoxypropionic Acid Ethyl Ester	N/E	763-69-9	N/E	N/E

N/E = Not Established

* See Section X - Other Regulatory Information

SECTION III -- PHYSICAL DATA

PHYSICAL STATE, APPEARANCE AND ODOR:	Liquid - colorless, clear, with a characteristic solvent odor.
BOILING POINT:	- 131 - 347° F
MELTING POINT:	Not Applicable
EVAPORATION RATE:	3.68 (N-Butyl = 1)
PERCENT VOLATILE:	100%
VAPOR DENSITY:	3.02 (Air = 1)
VAPOR PRESSURE:	94.7 mm Hg @ 20 ° C
SOLUBILITY IN WATER:	Appreciable
pH:	Not Applicable
SPECIFIC GRAVITY:	- 0.802 (Water = 1)
MOLECULAR WEIGHT:	Use molecular weight of individual components.
VOLATILE ORGANIC COMPOUNDS:	802 g/L

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	< 20° F (TCC)	
AUTOIGNITION TEMPERATURE:	Not Available	
CONDITIONS OF FLAMMABILITY:	Normal temperatures and pressures.	
FLAMMABLE LIMITS IN AIR - LOWER:	1.0%	UPPER: 13.2%
EXTINGUISHING MEDIA:	Carbon dioxide, foam, dry chemical, water (mist only)	
FIRE FIGHTING PROCEDURES – SPECIAL:	NFPA 704 Rating 2-3-0	

Water may be used to cool containers and firefighters. However, water could cause free solvent to float and spread fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Flammable liquid. Most components are Class 1B with flash point below 73° F and boiling point above 100° F.

HAZARDOUS COMBUSTION PRODUCTS:	Carbon Monoxide
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SECTION V -- REACTIVITY DATA

STABILITY:	Stable under normal temperatures and conditions.
INCOMPATIBILITY: (CONDITIONS TO AVOID)	Heat sparks, flames, fire, strong oxidizing agents.
HAZARDOUS POLYMERIZATION:	Not known to occur under normal conditions.
HAZARDOUS DECOMPOSITION PRODUCTS:	Normally none. Incomplete burning may yield carbon monoxide.

SECTION VI -- HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE:	Inhalation, skin and eye contact.
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HEALTH HAZARD DATA/SIGNS AND SYMPTOMS OF EXPOSURE:

ACUTE:

Skin: Contact may cause irritation, dryness and cracking. Prolonged or repeated contact may remove skin oils, possibly leading to irritation and dermatitis. Material is readily absorbed through skin.

Eyes: Direct contact may cause severe irritation and temporary corneal damage. Vapors may cause noticeable redness, tearing, irritation and pain. Conjunctivitis may occur upon chronic exposure.

Inhalation: Can cause headache, dizziness, confusion, nausea, vomiting, irritation of the respiratory system and other central nervous system effects including unconsciousness in extreme cases.

Ingestion: Can cause burning of the mouth, throat and abdomen, nausea, vomiting, diarrhea, symptoms of the central nervous system depression, including weakness, dizziness, slow and shallow respiration, unconsciousness and convulsions. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possible death.

CHRONIC:

Inhalation: Prolonged overexposure may cause damage to the liver, kidney, spleen, lungs or nervous system.

OTHER POTENTIAL HEALTH HAZARDS:

Reports have associated prolonged and repeated occupational exposure to solvents with permanent brain and/or central nervous system damage. Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal. Observe all appropriate control measures.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Individuals with pre-existing liver, kidney, spleen, lungs, skin or nervous system dysfunction may have increased susceptibility to the effects of the exposure. Contact with skin may aggravate pre-existing dermatitis.

CARCINOGENICITY: No components are known or suspected carcinogens.

SECTION VII -- EMERGENCY AND FIRST AID PROCEDURES

- EYES:** For direct contact, flush eyes with clean water for 15 minutes lifting upper and lower lids occasionally. Consult physician if irritation persists. If irritation or redness from exposure to vapors or mists develop, move victim away from exposure and into fresh air.
- SKIN:** Remove contaminated clothing. Wash skin twice with soap and water. If irritation develops and persists, consult a physician.
- INGESTION:** Aspiration hazard. If conscious, dilute with 4 to 8 ounces of water and seek immediate medical attention. DO NOT induce vomiting.
- INHALATION:** Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if respiration has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

SECTION VIII -- PRECAUTIONS FOR SAFE USE AND HANDLING

- SPILL PROCEDURES:** Remove all ignition sources. Isolate area and deny entry. If possible, contain as a liquid for possible recycling. Absorb onto sand or other absorbent material. Shovel into closable container for disposal. Wear protective equipment specified below. Contain away from surface waters and sewers.
- WASTE DISPOSAL METHODS:** Dispose in accordance with Federal, State and local regulations. Contact Safety-Kleen regarding recycling.
- HANDLING PRECAUTIONS:** Do not get into eyes, on skin or clothing. Avoid breathing vapors. DO NOT smoke when handling this product.

**STORAGE
PRECAUTIONS:**

Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Keep container tightly closed when not in use and during transport.

**PERSONAL
HYGIENE:**

Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products.

SECTION IX - CONTROL MEASURES

VENTILATION:

Provide local exhaust or general dilution ventilation as determined necessary, when concentrations of vapors exceed applicable exposure limits. Where explosive mixtures may be present, systems safe for such locations should be used.

**PROTECTIVE
GLOVES:**

To protect against contact with skin, wear nitrile gloves.

**EYE
PROTECTION:**

Where there is likelihood of eye contact, wear chemical goggles. Contact lenses should not be worn.

**RESPIRATORY
PROTECTION:**

Use NIOSH-approved respiratory protective equipment when concentration of vapors exceeds applicable exposure limit. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (for organic vapors). A self-contained breathing apparatus (SCBA) is required for large spills and emergencies. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 - Respiratory Protection.

**OTHER PROTECTIVE
EQUIPMENT:**

A source of clean water should be available in the work area for flushing eyes and skin. Wear rubber apron or other protective clothing as needed to protect against spills or splash.

SECTION X -- OTHER REGULATORY INFORMATION

**DOT PROPER
SHIPPING NAME:**

Paint-Related Material

DOT CLASS:

Flammable Liquid

DOT ID NUMBER:

NA1263 UN1263

SARA TITLE III:

Product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section II of this Material Safety Data Sheet.

Product poses the following physical and/or health hazard(s) as defined in 40 CFR 370.3 (Sections 311, 312 of SARA Title III):

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard
Fire Hazard

SECTION XI -- PREPARATION INFORMATION

PREPARED BY:

SK Product Review Committee

FORM NO. 900-14-055

ORIGINAL ISSUE DATE: July 20, 1989

REVISED: December 1, 1989

SUPERSEDES: July 20, 1989

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, are made for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information is applied. The data contained on this sheet applies to the material as supplied to the user.

SAFETY-KLEEN MULTI-USE LACQUER THINNER 6801

MATERIAL SAFETY DATA SHEET

SECTION I -- PRODUCT INFORMATION

Safety-Kleen Corporation - 777 Big Timber Road - Elgin, IL 60123
For Product/Sales Information Call 708/697-8460

EMERGENCY TELEPHONE

These numbers are for emergency use only. If you desire non-emergency information about this product, please call the telephone number listed above.

MEDICAL:

800/942-5969 or 312/942-5969
RUSH POISON CONTROL CENTER
CHICAGO, ILLINOIS (24 HOURS)

TRANSPORTATION:

800/424-9300
CHEMTREC

IDENTITY (TRADE NAME): SAFETY-KLEEN MULTI-USE LACQUER THINNER 6801
SK PART NUMBER: 6801
FAMILY/CHEMICAL NAME: N/A
PRODUCT USAGE: LACQUER THINNER

SECTION II -- HAZARDOUS COMPONENTS

NAME	SYNONYM	%	CAS NO.	OSHA PEL (ppm)	ACGIH TLV (ppm)
*Toluene	Toluol	11-43	108-88-3	100 150 STEL	100 150 STEL
*Xylene	Xylol	3-4	1330-20-7	100 150 STEL	100 150 STEL
*Methyl Ethyl Ketone	MEK	- 5	78-93-3	200 300 STEL	200 300 STEL
*Methyl Isobutyl Ketone	MIBK	- 3	108-10-1	50 75 STEL	50 75 STEL
*Acetone	2-Propanone	20-30	67-64-1	750 1000 STEL	750 1000 STEL
*Isopropanol	Isopropyl Alcohol	5-15	67-63-0	400 500 STEL	400 500 STEL
Special Lactol Spirits	VM & P Naphtha	0.5-32	8030-30-6	300 400 STEL	300 STEL
Isobutyl Acetate	Isobutyl Ester Acetic Acid	0.1-15	110-19-0	150	150
Ethyl 3-Ethoxypropionate	3-Ethoxypropionic Acid Ethyl Ester	- 5	763-69-9	N/E	N/E

N/E = Not Established

* See Section X - Other Regulatory Information

SECTION III -- PHYSICAL DATA

PHYSICAL STATE, APPEARANCE AND ODOR: Liquid - colorless, clear, with a characteristic solvent odor.
BOILING POINT: ~ 131 - 347° F
MELTING POINT: Not Applicable
EVAPORATION RATE: 3.30 (N-Butyl = 1)

VAPOR DENSITY: 3.02 (Air = 1)
VAPOR PRESSURE: 78.6 mm Hg @ 20° C
SOLUBILITY IN WATER: Appreciable
pH: Not Applicable
SPECIFIC GRAVITY: ~ 0.8000 - 0.8438 (Water = 1)
MOLECULAR WEIGHT: Use molecular weight of individual components.
VOLATILE ORGANIC COMPOUNDS: 800 - 844 g/L

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: < 20° F (TCC)
AUTOIGNITION TEMPERATURE: Not Available
CONDITIONS OF FLAMMABILITY: Normal temperatures and pressures.
FLAMMABLE LIMITS IN AIR - LOWER: 1.0% UPPER: 13.2%
EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical, water (mist only)
FIRE FIGHTING PROCEDURES -- SPECIAL: NFPA 704 Rating 2-3-0
Water may be used to cool containers and fire fighters. However, water could cause free solvent to float and spread fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Flammable liquid. Most components are Class 1B with flash point below 73° F and boiling point above 100° F.

HAZARDOUS COMBUSTION PRODUCTS: Carbon Monoxide

SECTION V -- REACTIVITY DATA

STABILITY: Stable under normal temperatures and conditions.
INCOMPATIBILITY:
(CONDITIONS TO AVOID) Heat sparks, flames, fire, strong oxidizing agents.
HAZARDOUS
POLYMERIZATION: Not known to occur under normal conditions.
HAZARDOUS DECOMPOSITION
PRODUCTS: Normally none. Incomplete burning may yield carbon monoxide.

SECTION VI -- HEALTH HAZARD DATA

PRIMARY ROUTES
OF EXPOSURE: Inhalation, skin and eye contact.

HEALTH HAZARD DATA/SIGNS AND SYMPTOMS OF EXPOSURE:

ACUTE: Skin: Contact may cause irritation, dryness and cracking. Prolonged or repeated contact may remove skin oils, possibly leading to irritation and dermatitis. Material is readily absorbed through skin.

Eyes: Direct contact may cause severe irritation and temporary corneal damage. Vapors may cause noticeable redness, tearing, irritation and pain. Conjunctivitis may occur upon chronic exposure.

Inhalation: Can cause headache, dizziness, confusion, nausea, vomiting, irritation of the respiratory system and other central nervous system effects including unconsciousness in extreme cases.

Ingestion: Can cause burning of the mouth, throat and abdomen, nausea, vomiting, diarrhea, symptoms of the central nervous system depression, including weakness, dizziness, slow and shallow respiration, unconsciousness and convulsions. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possible death.

CHRONIC: **Inhalation:** Prolonged overexposure may cause damage to the liver, kidney, spleen, lungs or nervous system.

OTHER POTENTIAL HEALTH HAZARDS:

Reports have associated prolonged and repeated occupational exposure to solvents with permanent brain and/or central nervous system damage. Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal. Observe all appropriate control measures.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Individuals with pre-existing liver, kidney, spleen, lungs, skin or nervous system dysfunction may have increased susceptibility to the effects of the exposure. Contact with skin may aggravate pre-existing dermatitis.

CARCINOGENICITY: No components are known or suspected carcinogens.

SECTION VII -- EMERGENCY AND FIRST AID PROCEDURES

- EYES:** For direct contact, flush eyes with clean water for 15 minutes lifting upper and lower lids occasionally. Consult physician if irritation persists. If irritation or redness from exposure to vapors or mists develop, move victim away from exposure and into fresh air.
- SKIN:** Remove contaminated clothing. Wash skin twice with soap and water. If irritation develops and persists, consult a physician.
- INGESTION:** Aspiration hazard. If conscious, dilute with 4 to 8 ounces of water and seek immediate medical attention. DO NOT induce vomiting.
- INHALATION:** Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if respiration has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

SECTION VIII -- PRECAUTIONS FOR SAFE USE AND HANDLING

SPILL

PROCEDURES: Remove all ignition sources. Isolate area and deny entry. If possible, contain as a liquid for possible recycling. Absorb onto sand or other absorbent material. Shovel into closable container for disposal. Wear protective equipment specified below. Contain away from surface waters and sewers.

WASTE DISPOSAL METHODS:

Dispose in accordance with Federal, State and local regulations. Contact Safety-Kleen regarding recycling.

HANDLING PRECAUTIONS:

Do not get into eyes, on skin or clothing. Avoid breathing vapors. DO NOT smoke when handling this product.

SHIPPING AND STORING PRECAUTIONS:

Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Keep container tightly closed when not in use and during transport.

PERSONAL HYGIENE:

Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products.

SECTION IX - CONTROL MEASURES

- VENTILATION:** Provide local exhaust or general dilution ventilation as determined necessary, when concentrations of vapors exceed applicable exposure limits. Where explosive mixtures may be present, systems safe for such locations should be used.
- PROTECTIVE GLOVES:** To protect against contact with skin, wear nitrile gloves.
- EYE PROTECTION:** Where there is likelihood of eye contact, wear chemical goggles. Contact lenses should not be worn.
- RESPIRATORY PROTECTION:** Use NIOSH-approved respiratory protective equipment when concentration of vapors exceeds applicable exposure limit. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (for organic vapors). A self-contained breathing apparatus (SCBA) is required for large spills and emergencies. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134 - Respiratory Protection.
- OTHER PROTECTIVE EQUIPMENT:** A source of clean water should be available in the work area for flushing eyes and skin. Wear rubber apron or other protective clothing as needed to protect against spills or splash.

SECTION X -- OTHER REGULATORY INFORMATION

- DOT PROPER SHIPPING NAME:** Paint-Related Material
- DOT CLASS:** Flammable Liquid
- DOT ID NUMBER:** NA1263
- SARA TITLE III:** Product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section II of this Material Safety Data Sheet.
- Product poses the following physical and/or health hazard(s) as defined in 40 CFR 370.3 (Sections 311, 312 of SARA Title III):
- Immediate (Acute) Health Hazard
 - Delayed (Chronic) Health Hazard
 - Fire Hazard

SECTION XI -- PREPARATION INFORMATION

- PREPARED BY:** SK Product Review Committee **FORM NO.** 900-14-056
- ORIGINAL ISSUE DATE:** July 20, 1989 **REVISED:** December 1, 1989 **SUPERSEDES:** July 20, 1989

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet applies to the material as supplied to the user.

APPENDIX B
LETTERS TO LOCAL AUTHORITIES





October 23, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Hospital Administrator
Humana Hospital - Brandon
119 Oakfield Drive
Brandon, FL 33511

RE: Safety-Kleen Corp. (3-163-01), 5309 24th Avenue, Tampa, Florida 33619

Dear Sir:

Under terms of U.S.E.P.A. Regulation 40 CFR 264.37, Safety-Kleen Corp. is required to familiarize local hospitals with the properties of the materials handled at their facilities and the types of injuries or illnesses which could result from fires, explosions, or releases at this facility.

Updated emergency contact lists are provided for your use.

As required by law, Safety-Kleen will need your acknowledgment of receipt of this letter and indications that you have been familiarized with the action necessary in the event of an emergency and that you are willing to provide assistance.

If you have any questions or desire to visit the facility, please contact the branch manager, Mr. James A. Davis (813) 621-5457.

Sincerely,

Victor L. San Agustin, P.E.
Regional Environmental Manager
Tampa Region

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Enclosure

13112.19B/TSK10/EXHIBITS.OCT



October 23, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Police Chief, Tampa Police Department
1710 North Tampa Street
Tampa, FL 33602

RE: Safety-Kleen Corp. (3-163-01), 5309 24th Avenue, Tampa, Florida 33619

Dear Sir:

Under terms of U.S.E.P.A. Regulation 40 CFR 264.37, Safety-Kleen Corp. must make arrangements to familiarize police and fire departments with the layout of the facility, places where facility personnel would be working, entrances to roads inside the facility, and possible evacuation routes.

Updated emergency contact lists are provided for your use.

As required by law, Safety-Kleen will need your acknowledgment of receipt of this letter and indications that you have been familiarized with the action necessary in the event of an emergency and that you are willing to provide assistance.

If you have any questions or desire to visit the facility, please contact the branch manager, Mr. James A. Davis (813) 621-5457.

Sincerely,

Victor L. San Agustin, P.E.
Regional Environmental Manager
Tampa Region

mmm

Enclosure

13112.19B/TSK10/EXHIBITS.OCT



October 23, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Fire Chief, Tampa Fire Department
715 South 58th Street
Tampa, FL 33619

RE: Safety-Kleen Corp. (3-163-01), 5309 24th Avenue, Tampa, Florida 33619

Dear Sir:

Under terms of U.S.E.P.A. Regulation 40 CFR 264.37, Safety-Kleen Corp. must make arrangements to familiarize police and fire departments with the layout of the facility, places where facility personnel would be working, entrances to roads inside the facility, and possible evacuation routes.

Updated emergency contact lists are provided for your use.

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Sincerely,

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