

Branch Manager FOR <i>RAY ZIMMERMAN</i>	<i>Scott A. Schneider</i>	Date <i>06 OCTOBER 2000</i>
Warehouse Manager		Date

**SAFETY-KLEEN SYSTEMS, INC.  
SANFORD BRANCH # 3-130-01  
STANDARD OPERATING PROCEDURE  
CONTINUED USE SOLVENT**

**OBJECTIVE**

This procedure has been developed in response to questions developed by the Florida Department of Environmental Protection, and should be treated as proprietary information.

**AFFECTED PERSONNEL**

Automotive Sales Representatives  
Industrial Sales Representatives  
Branch Automotive Managers  
Branch Industrial Managers  
Branch Manager  
Warehousemen  
Branch Administrative Personnel



**I. DEFINITION OF CONTINUED USE SOLVENT**

In the course of Safety-Kleen's regular business activities, 105 and 150 solvents are provided to customers for parts washing activities. This solvent, once used as parts washer solvent, can be employed for another solvent use per 21 August 1998 memorandum to Catherine McCord (SK) from David Bussard, USEPA. Safety-Kleen employs this solvent for drum washing. Such solvent does not meet the regulatory definition of spent material being reused; instead, the used solvent is continuing to be employed in solvent use, and remains a product. This product will be referred to as "Continued Use Solvent" in order to distinguish it from solvent being provided to customers for their use.

The MSDS's for 105, 150 (Premium Gold) solvents and Continued Use Solvent are provided in Attachment A.

A copy of the 21 August 1998 memorandum is provided in Attachment B.

## **II. IDENTIFICATION OF CUSTOMERS WHO MIGHT BE ELIGIBLE FOR THE CONTINUED USE PROGRAM**

Safety-Kleen managers identify customers who, based upon their historic use patterns, might qualify for the continued use program. These customers must utilize either Safety-Kleen 105 solvent or Safety-Kleen 150 solvent in their parts washing processes. The customer must agree to the conditions of the program, including full compliance at all times with the program. Due to the variation of parts washing applications, a customer may elect to be partially in the Continued Use Program (i.e., some parts washers at a customer location may be designated as continued use, while other parts washers at the same location have waste solvent removed as hazardous waste). However, a customer cannot elect to alternate between a continued use service and a hazardous waste service for a distinct parts washing unit. Potential candidates for the Continued Use Program include, but are not limited to the following: customers with properly trained environmental staff personnel who can oversee compliance with the program, and customers who generate only parts washer solvent materials.

A customer that generates hazardous waste from parts washing activity due to contamination of the parts washing solvent (e.g. use of perchloroethylene brake spray to aid in the washing process) may also be a potential candidate for the Continued Use Program. However, the customer must eliminate introduction of the contaminant to the parts washing solvent. If a customer cannot realistically eliminate the contaminant (e.g. parts washing operation would be negatively impacted), the customer is excluded from the Continued Use Program.

At any time, a customer may leave the program, or Safety-Kleen may ask a customer to leave the program due to inability to comply with the requirements for the generation of Continued Use product.

Line Managers and Sales Representatives from the Sanford facility are authorized to offer the Continued Use Program to customers. These individuals must identify, qualify, and train customers who have been selected for admission into the Continued Use Program.

## **III. Training of Customers**

Once a customer qualifies for the Continued Use Program, the customer's designated representative receives training from the Safety-Kleen Line Manager or the Safety-Kleen Sales Representative. Such training includes the following topics as a minimum:

- Types of solvents that qualify for the Continued Use Program (Safety-Kleen 105 or 150 Solvent). Solvent which has been mixed with hazardous waste (as defined by current regulations) is not applicable for use as Continued Use Solvent.
- Intended application of Continued Use Solvents—Only Safety-Kleen supplied 105 or 150 solvents used for parts washing are intended to be potential candidates for the

Continued Use Program. No other material may be mixed into the Continued Use Solvent, and the Safety-Kleen solvents must be used only for parts washing activities to qualify for the Continued Use Program.

- Physical properties of Continued Use Solvents—Color and clarity of the solvent should be consistent with the customer's parts washing application (e.g. automotive repair shop solvent should be green/brown in color and clear. No foreign materials are permitted in the Continued Use Solvent. The mixing of gasoline with the solvent is not permitted.
- No foreign materials (rags, paper, metal parts, etc.) are permitted in the Continued Use Solvent.
- Container marking and labeling must be consistent with the Continued Use Program requirements. The Continued Use Solvent marking must be visible on each container of Continued Use Solvent; no extraneous labels or markings may be used.
- Process changes and their potential effects on the Customer's eligibility to remain in the Continued Use Program—The customer must notify Safety-Kleen in the event of a process change which might affect his/her participation in the Continued Use program.

Customer training is provided by the Safety-Kleen Line Manager or the Safety-Kleen Sales Representative during the first service, and is repeated at the two subsequent services. Safety-Kleen documents this training during the first three service calls through a generator acknowledgement document. An example of a customer education documentation sample is provided as Attachment C.

Signed customer education documents are maintained on file at the local branch. Customers who fail to abide with the above conditions, or who refuse to undergo the repeated training will be removed from the Continued Use Program.

#### **IV. Shipping Papers**

At the designated service interval, a Safety-Kleen representative replaces the drum or drums of Continued Use Solvent with fresh solvent. A bill-of-lading or "preprint" is used as a shipping document in order to transport the Continued Use Solvent back to the local branch. Bills-of-lading for hazardous materials must meet the requirements of 49 CFR 172, Subpart C. Information on the preprint includes the following at a minimum:

- Generator's name and address
- Generator's EPA ID # if applicable
- Generator's certification of status
- Shipping description for the material
- Number and type of containers
- Quantity in weight or volume
- Transporter's name and ID #
- Consignee's name, address, and ID #
- Consignor's name and signature
- Driver's name and signature

- Date

An example preprint is included as Attachment D.

## **V. Drum Specifications**

Continued Use Solvents will be shipped to the Sanford branch in 16-gallon and 30-gallon steel drums furnished by Safety-Kleen. These drums carry UN Specification Code 1A2/Y1.6/200 or an equivalent specification, and have locking rings equipped with bolt and nut systems for closure.

## **VI. Drum Management at the Sanford Branch**

Continued Use Solvent drums are marked with a sticker provided in Attachment E. Additionally, at the time of pickup from the customer, the Safety-Kleen representative will mark the drum in a fashion that distinguishes it from a hazardous waste drum. (Example: Safety-Kleen is implementing a fluorescent green tag that attaches to the quick release handle on the drum lid ring for continued use drums.)

Upon return to the facility, Continued Use Solvent drums are off-loaded from the trucks and placed onto the Return & Fill Dock in preparation for drum washing activities. At certain times, as Continued Use Solvent drums are unloaded from trucks, they are immediately dumped into the Continued Use Vessel for drum washing during that shift.

## **VII. Equipment**

The Continued Use Solvent vessel recently installed at the Safety-Kleen Sanford branch consists of a 200-gallon open top vessel 3'x4'x5' which has been fitted with a sloped bottom directed to a centered 1½" threaded outlet. This vessel is equipped with a cover. While the vessel is in use, the cover is held open with a fusible-link for emergency closure in the event of a fire. The vessel is covered when not in use. Solvent for drum washing is taken preferentially from this vessel until the vessel is emptied. The vessel is fitted with a fine-mesh screen in order to ensure that Continued Use Solvent does not contain rags, paper, and debris. In the event that solids are trapped, the customer must be contacted. If the Safety-Kleen Manager determines that the generator intentionally deviated from the program guidelines, that customer will be removed from the Continued Use Program.

The system uses two ITT Marlow pumps which are 1 ½" open impeller, centrifugal pumps. The pumps are wired so that moving Continued Use Solvent from the vessel to the drum washer requires manual operation of the electronic control.

The feed is controlled through two 1 ½" ball valves which are electronically controlled to work in conjunction with the pump switches.

A single switch panel located on the Return & Fill Dock controls the valves simultaneously, and has indicator lights that verify the open or closed positions. The drum washer will only operate when each valve is opposite each other, assuring that Continued

Use Solvent cannot be mixed with waste solvent or new solvent during washing operations.

### **VIII. Actual Operational Procedures**

Actual operational steps for operating the Continued Use Solvent vessel at the Sanford Branch are as follows:

- A. Turn on power at master breaker panel located immediately North of the return and fill dock.
- B. Open the top of the Continued Use vessel, and prop open.
- C. Ensure that 1 ½" ball valve R2 located at the bottom of the Continued Use vessel is in the open position.
- D. Pump the solvent contained in the wet dumpster to the lowest level. (Note: If this is the start of operations for the shift, the wet dumpster should already be at its lowest level, check to make sure that this is true.)
- E. Open each Continued Use Solvent drum, and empty it into the Continued Use Solvent vessel. When an appropriate amount of Continued Use Solvent has been emptied into the vessel (determined by the amount of Continued Use Solvent available, or by the Continued Use Solvent level in the vessel), close the lid of the Continued Use Solvent vessel.
- F. Turn the switch located between the Continued Use vessel and the drum washer to the "Reuse Solvent" position. In this position, Continued Use Solvent will be pumped to the wet dumpster for drum washing activities. The Continued Use Solvent is piped directly to the drum flushing nozzle in the wet dumpster. (Note: When the supply of Continued Use Solvent has been exhausted, turn the centralized switch to the "Barrel Wash" position, and drums will be flushed/washed using the liquid in the bottom of the wet dumpster.)
- G. Wash drums as per normal operating procedure in the drum washer.
- H. Repeat steps D-I as required until that day's supply of Continued Use Solvent has been depleted. Any Continued Use Solvent not used for drum washing activity will remain in the Continued Use dumpster for the next day's washing activity.
- I. Pump the wet dumpster to the lowest practical level.

If, due to equipment breakdown, Continued Use Product cannot be pumped to the barrel washer, the solvent will be pumped manually to the barrel washer so that the solvent can be utilized that day for drum washing.

### **IX. Potential for Error**

Due to the presence of the specialized marking for every Continued Use Solvent drum, the potential for dumping hazardous wastes into the Continued Use vessel is minimal. If, however, employees mistakenly dump hazardous wastes into the Continued Use vessel, the wastes will be pumped to the barrel washer. The vessel will then be washed with fresh solvent, and pumped to the barrel washer, followed by another fresh solvent wash.

## **X. Inspections**

The Continued Use Solvent vessel, associated piping, valves, pumps, and flanges are inspected daily for visible leaks, breaches of the containment area, and general integrity using a form equivalent to the form provided in Attachment F.

## **XI. Tracking Procedures**

The profile number assigned to Continued Use Solvent is SK DOT 60. When a container of Continued Use Solvent reaches the branch, the container number is entered into the computerized container tracking system.

The containers of Continued Use Solvent are entered into the facility log in storage area PROD01. Once used for solvent washing, the containers are electronically consolidated into one container. This container is then moved from the PROD01 storage area into the DTANK storage area. The computerized printout of this activity reflects a consolidated container number in bold, followed by each individual original container number. All information, including original container number, original generator, original acceptance date, original bill of lading number, and customer number is maintained throughout the tracking process.

An example of the log is shown in Attachment H.



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B.  
Secre

October 25, 1999

Ms. Catherine A. McCord  
Manager, Environmental and Business Integration  
Safety-Kleen Systems  
1000 North Randall Road  
Elgin, Illinois 60123-7587

RE: Safety Kleen Branch-Based "Continued Use Program"

Dear Ms. McCord:

Your proposal for the continued use of Safety-Kleen solvents for the purposes of drum washing in the clean out dumpsters at each of the Safety-Kleen facilities in Florida, has been reviewed by staff. Your proposal as we understand it, is to divert a portion of the used mineral spirits from your qualified customers and place it in a nearby holding tank to be used for the chemical and mechanical cleaning of incoming hazardous waste mineral spirits drums. Safety-Kleen intends to apply these used mineral spirits as an effective substitute for commercial chemical products in accordance with 40 CFR 261.2 (e)(1)(ii) for drum cleaning operations.

The department staff had some concerns about the proposed process. We discussed these concerns with Safety Kleen via e-mail and at a meeting on October 20, 1999 with Phil Retallick, Lin Longshore, and David DeSha. At the October 20, 1999 meeting Safety Kleen submitted the following additional information:

1. Customer Best Management Practices Guide
2. Qualitative Measures to qualify Continued use customers
3. Continued Use Program Environmental Safeguards
4. Tracking and Record Keeping Systems
5. Results from a drum cleaning study testing the effectiveness of used solvent as a cleaning Agent.

Based on these reviews we are approving Safety Kleen's implementation of this "Continued Use Program" in the state of Florida. That authorization is contingent on the following conditions being adhered to by Safety Kleen's branch operations within our jurisdiction. These conditions are as follows:

I.D.2-9

Ms. Catherine A. McCord

October 25, 1999

Page Two

1. Education of the continued use customers in potential solvent cross contamination with toxic chemicals that will render the mixture hazardous waste and therefore ineligible to be transported as continued use materials on a DOT Shipping paper to the Safety Kleen branch facility.
2. Safety Kleen will pursue effective implementation of their customer's adherence to Safety Kleen's Best Management Practices and Environmental Safeguards and Controls as outlined in our meeting on October 20, 1999.
3. Each Safety Kleen branch facility operation will provide all manifests for waste and the DOT shipping papers for continued use materials as needed to our field inspectors for their review in the course of a compliance inspection at that branch.
4. Continued use materials will not be speculatively accumulated at a Safety Kleen branch operating facility or by any continued use customers.
5. This determination applies to the "Continued Use Program" implemented by Safety Kleen branches in Florida and does not apply to any other "similar in definition" programs Safety Kleen has or will implement.
6. If any part of a bulk shipment or individual container of solvent destined for continued use is reclaimed, burned for energy recovery, or otherwise defined as a solid and hazardous waste, the entire shipment or container is subject to hazardous waste regulation.
7. If the used solvents are used as drum washing agent when the drums do not need washing, using the used solvents would not be considered legitimate or the Continued Use Program.
8. If the used solvent(s) are being used in excess of the amount of solvent(s) needed for the drum-washing operation (i.e. more than would be necessary), using the used solvent(s) would not be considered legitimate.

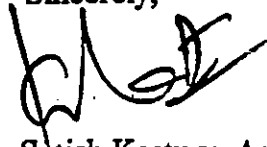


Ms. Catherine A. McCord  
October 25, 1999  
Page Three

9. If the used solvent(s) would not be an effective washing agent for the drums, using the used solvent(s) in lieu of other effective drum washing agents would not be considered legitimate.
10. Finally, this determination does not relieve any Safety Kleen branch operating in the state of Florida from obtaining any necessary permit modifications from this agency to implement this program or permits from any other agency within the state of Florida.

If you have any questions regarding this determination, please call Michael Redig at 850-488-0300 extension 955.

Sincerely,



Satish Kastury, Administrator  
Hazardous Waste Regulation

SK/mxro  
Enclosure

cc: Michael Redig, FDEP-HWR  
Susan Horlick, FDEP-HWR  
David Crowley, FDEP-OGC  
District Waste Program Administrators  
District Technical Committee Members  
Reading File



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 21 1998

OFFICE:  
SOLID WASTE AND  
RESPON

Ms. Catherine A. McCord  
Manager, Environment and Business Integration  
Safety-Kleen  
1000 North Randall Road  
Elgin, Illinois 60123-7857

Dear Ms. McCord:

Thank you for your April 25, 1997 letter to Michele Anders requesting written confirmation of the regulatory status of used parts washing solvent that is to be used for drum wash at Safety-Kleen's facilities without first being reclaimed. You asked whether the used parts washing solvent would be excluded from the definition of solid waste pursuant to 40 CFR §261.2(e)(1) when it is used as an effective substitute for a commercial product. Based on the information that you provided, it is the Agency's understanding that Safety-Kleen intends to collect used parts washing solvents from its customers. Some of the used parts washing solvent from designated customers would be used for drum washing at Safety-Kleen facilities. This used solvent designated for drum washing would be consolidated, but would not be reclaimed prior to its use for drum washing. The solvents designated for drum washing would also be segregated (i.e., always in separate containers or tanks) from the other used solvents collected from Safety-Kleen's customers.

Because the material (i.e., used solvent continuing to be employed in solvent uses) remains a product, your question about the applicability of 40 CFR §261.2(e)(1) is moot. That regulatory section is intended to apply to secondary materials, which is not the case for used solvents that are not yet "spent."

The Agency has previously stated that when a used solvent is employed for another solvent use, this continued use indicates that the solvent remains a product. The used solvent in this case is a material continuing to be used as a solvent, the purpose for which it is intended, rather than a spent material being reused. Consequently, the used solvent to be employed for drum washing would not be considered a solid waste and would not be subject to the Resource Conservation and Recovery Act ("RCRA") Subtitle C hazardous waste regulations when generated, transported, or used. 50 Fed. Reg. 614, 624 (1985). Accordingly, used parts washing solvents that are collected and consolidated by Safety-Kleen and then used for drum washing without first being reclaimed would not be a RCRA solid waste.

In the case of shipments of used solvents in tanker trucks, if any part of a shipment of solvent is reclaimed, burned for energy recovery, or otherwise defined as solid or hazardous waste (as opposed to being directly used only for drum wash), the entire shipment must be managed according to:


applicable RCRA Subtitle C regulations. In situations in which used solvents collected from multiple sources are handled in separate drums or containers on the same truck, each container must be handled according to the applicable regulations (depending on how the solvent is to be used or managed), including hazardous waste manifest requirements. After the solvents have been used for drum washing, any residual solvents would be subject to a hazardous waste determination and must be managed according to the applicable RCRA Subtitle requirements.

Furthermore, the Agency is aware of the potential for the "continued use" policy to be abused, and thus, notes that the continued use must be legitimate for the used solvents to be excluded from regulation as a solid waste. The Agency would consider the continued use of the used solvents for drum washing to be legitimate in situations in which: 1) the used solvents are effective for the drum-washing operation, especially if the used solvents substitute for solvents that would otherwise have to be purchased (if the used solvents would not be an effective washing agent for the drums, using the used solvents in lieu of other effective drum-washing agents would not be considered legitimate), 2) the used solvents are used only for washing drums that actually need it (if the used solvents are used as drum-washing agent when the drums do not need washing, using the used solvents would not be considered legitimate), and 3) the used solvents are not used in excess of what would normally be required to wash drums (if the used solvents are being used in excess of the amount of solvents needed for the drum-washing operation, e.g., more than would be necessary to wash the drums effectively, using the used solvents would not be considered legitimate).

The regulatory interpretation provided above is based on the U.S. EPA's interpretation of federal regulations. Some states in which the continued use of the used parts washing solvent occurs may have different regulatory requirements or interpretations. For case-specific determinations on the status of the continued use of the parts washing solvent for drum wash, please contact the appropriate state regulatory agency or EPA Regional Office.

If you have any questions or would like additional information, please contact Jeff Hannapel at (703) 308-8826.

Sincerely,

  
David Bussard  
Director, Hazardous Waste Identification  
Division  
Office of Solid Waste

August 10, 2000

**Additional Text for Section 2.3  
Description of S-K's Continued-Use Program/FL DEP  
Concurrence Letter**

**(Insert into 7/98 original application as Pages 2-8 through 2-9  
and Appendix 2.0)**

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Job Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struth  
Secretary

October 25, 1999

Ms. Catherine A. McCord  
Manager, Environmental and Business Integration  
Safety-Kleen Systems  
1000 North Randall Road  
Elgin, Illinois 60123-7587

RE: Safety Kleen Branch-Based "Continued Use Program"

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The department staff had some concerns about the proposed process. We discussed these concerns with Safety Kleen via e-mail and at a meeting on October 20, 1999 with Phil Retallick, Lin Longshore, and David DeSha. At the October 20, 1999 meeting Safety Kleen submitted the following additional information:

1. Customer Best Management Practices Guide
2. Qualitative Measures to qualify Continued use customers
3. Continued Use Program Environmental Safeguards
4. Tracking and Record Keeping Systems
5. Results from a drum cleaning study testing the effectiveness of used solvent as a cleaning Agent.

Based on these reviews we are approving Safety Kleen's implementation of this "Continued Use Program" in the state of Florida. That authorization is contingent on the following conditions being adhered to by Safety Kleen's branch operations within our jurisdiction. These conditions are as follows:

1. **Education of the continued use customers in potential solvent cross contamination with toxic chemicals that will render the mixture hazardous waste and therefore ineligible to be transported as continued use materials on a DOT Shipping paper to the Safety Kleen branch facility.**
2. **Safety Kleen will pursue effective implementation of their customer's adherence to Safety Kleen's Best Management Practices and Environmental Safeguards and Controls as outlined in our meeting on October 20, 1999.**
3. **Each Safety Kleen branch facility operation will provide all manifests for waste and the DOT shipping papers for continued use materials as needed to our field inspectors for their review in the course of a compliance inspection at that branch.**
4. **Continued use materials will not be speculatively accumulated at a Safety Kleen branch operating facility or by any continued use customers.**
5. **This determination applies to the "Continued Use Program" implemented by Safety Kleen branches in Florida and does not apply to any other "similar in definition" programs Safety Kleen has or will implement.**
6. **If any part of a bulk shipment or individual container of solvent destined for continued use is reclaimed, burned for energy recovery, or otherwise defined as a solid and hazardous waste, the entire shipment or container is subject to hazardous waste regulation.**
7. **If the used solvents are used as drum washing agent when the drums do not need washing, using the used solvents would not be considered legitimate or the Continued Use Program.**
8. **If the used solvent(s) are being used in excess of the amount of solvent(s) needed for the drum-washing operation (i.e. more than would be necessary), using the used solvent(s) would not be considered legitimate.**

9. If the used solvent(s) would not be an effective washing agent for the drums, using the used solvent(s) in lieu of other effective drum washing agents would not be considered legitimate.
  
10. Finally, this determination does not relieve any Safety Kleen branch operating in the state of Florida from obtaining any necessary permit modifications from this agency to implement this program or permits from any other agency within the state of Florida.

If you have any questions regarding this determination, please call Michael Redig at 850-488-0300 extension 955.

Sincerely,



Satish Kastury, Administrator  
Hazardous Waste Regulation

SK/mxro  
Enclosure

cc: Michael Redig, FDEP-HWR  
Susan Horlick, FDEP-HWR  
David Crowley, FDEP-OGC  
District Waste Program Administrators  
District Technical Committee Members  
Reading File

August 10, 2000

## **CONTINUED-USE PROGRAM DESCRIPTION & ENVIRONMENTAL SAFEGUARDS**

Safety-Kleen Systems, Inc. (Safety-Kleen) utilizes an alternative approach to manage the solvent cleaning solutions removed from generator locations. This does not mean Safety-Kleen will relax its strict dedication to protection of the environment. Safety-Kleen's Best Management Practices for Continued-Use products is based around the company's Closed Loop System. The Closed Loop System includes customers' Continued-Use Solvent shipped to a Safety-Kleen Branch. The product is then used at the Branch and the Branch then becomes the generator of this material as hazardous waste once it is spent. The material is then shipped with a hazardous waste manifest to a Safety-Kleen Corp. Recycle Center. After the spent solvent is recycled into a fresh product, recycled solvent may then be shipped back to Safety-Kleen Branches. From there, the product is sold/leased back to Safety-Kleen customers.

Safety-Kleen's alternative approach is a non-waste management system for its customers, therefore no Hazardous Waste Manifests or Land Ban forms are required for the initial user. Alternatively, under Safety-Kleen's Continued-Use Program, the used cleaning solutions are packaged and transported under all other applicable DOT shipping papers' and packaging requirements. Safety-Kleen uses a Preprint (Bill of Lading) which provides the general DOT description, Company name/address and volume of Continued-Use Solvent transported back to the branch. This material is all closely monitored and logged at involved Branch locations.

The Safety-Kleen employees (services representatives) that are involved in the Continued- Use Program are integral to it. Each service representative is trained in the area of their responsibility for proper shipment and protection of the environment. The areas of training that are provided for the Safety-Kleen service representatives include: general criteria for the Continued-Use Program, waste management rules, safety procedures, DOT compliance, and initial spill or emergency response identification. It is important to note, any possible spills of Continued-Use material is handled similarly to any other release of this type of product as a Hazardous Material. Spill residues become Safety-Kleen generated wastes. Like all Safety-Kleen services, our Continued-Use Program is backed by a Certificate of Assurance and Indemnification. This certificate attests that Safety-Kleen will take full responsibility for managing all materials in an environmentally responsible manner.

Safety-Kleen's collection and shipment procedures were developed and are followed to provide Best Management Practices for not only the customers, but also the protection of the environment. At the time of a new Continued-Use product customer sign-up, a Safety-Kleen service representative will verify that the customer's material will meet Safety-Kleen's expected material specification (i.e., Safety-Kleen provided mineral spirits-based cleaning solutions). A service contract (S-K Pre-Print) is provided for customer signature. Contract



August 10, 2000

language requires the customer to certify that no adulteration of the mineral spirits will take or has taken place (e.g., addition of toxic or hazardous waste to the mineral spirits).

Collection procedures also include two additional important practices. For the first three services (pick-ups) of Continued-Use product, the service representative will both physically examine the contents of the container and complete a procedural check-off list with the customer. If the first three services are completed with no problems with the product, these two procedures will not need to be completed for any future services.

The physical examination of a container will consist of probing the contents with a device to check for debris or objects too large to pass through the branch container cleaning system. If possible, this material will be removed from the mineral spirits and the customer will be further educated regarding the material specifications. In addition the material must be consistent with normal solvent properties regarding color and odor. All other typical pre-shipment procedures are followed such as completing DOT shipping papers and marking the Continued-Use Solvent container (e.g., with a black rubber identification band).

Upon receipt at the Safety-Kleen Branch, facility warehouse personnel also verify that all containers of Continued-Use Solvent conform to expected physical characteristics of color and odor. If a shipment of Continued-Use Solvent is received at a Branch and is then determined not to be suitable for use in the Continued-Use container cleaning system, the customer will be notified and an Unmanifested Waste Report will be completed if the customer is a hazardous waste Large Quantity Generator or Small Quantity Generator (if toll agreement is not applicable). A determination will be made with the customer that will be based upon their ability to meet the requirements of the Continued-Use Program in reference to the management of any future shipments.

When the Continued-Use Solvent is utilized at the Branch Continued-Use Container Cleaning operation, this activity is conducted above secondary containment structures. Following the final use of the Continued-Use Solvent, it is bulked with other spent solvents and shipped to a Safety-Kleen Corp. Recycle Center. When this material is subsequently shipped and then received at the Safety-Kleen Corp. Recycle Center, a representative sample is taken and a receipt analysis is conducted to assure conformity with the accompanying Hazardous Waste Manifest. This material is then processed for reclamation and redistribution back to a Branch. Any process residues or "bottoms" from the recycling process are analyzed and the appropriate waste determination is made before shipment for further treatment or energy recovery.

A copy of the Florida Department of Environmental Protection's concurrence letter for the implementation of the Continued-Use Program is included herein as Appendix 2.0.

August 10, 2000

**Appendix 2.0**  
**Florida Department of Environmental Protection's October 25,**  
**1999 Continued-Use Program Concurrence Letter**

**ATTACHMENT A**  
**MSDS**



**MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** SAFETY-KLEEN 105 SOLVENT RECYCLED

**SYNONYMS:** Parts Washer Solvent; Petroleum Distillates; Petroleum Naptha; Naptha, Solvent; Stoddard Solvent; Mineral Spirits.

**PRODUCT PART NUMBERS:** 6614, 6617, 1011662, 1014662.

**PRODUCT USE:** Cleaning and degreasing metal parts.  
If this product is used in combination with other products, refer to the Material Safety Data Sheets for those products.

	<b>24-HOUR EMERGENCY PHONE NUMBERS</b>	
<b>These numbers are for emergency use only. If you desire non-emergency product information, please call a phone number listed below.</b>	<b>MEDICAL:</b>	<b>TRANSPORTATION (SPILL):</b>
	<b>1-800-752-7869</b>	<b>1-800-468-1760 (USA)</b>
	<b>Extension 2</b> or <b>1-312-906-6194</b>	<b>1-613-996-6666 (CANADA)</b> <b>(call collect)</b>

**SUPPLIER:** Safety-Kleen Corp.  
1301 Gervais Street, Suite 300  
Columbia, SC 29201  
USA  
**1-803-933-4200**

**TECHNICAL INFORMATION:** 1-800-669-5740, Extension 7500

**MSDS FORM NUMBER:** 82310

**ISSUE:** March 24, 2000

**ORIGINAL ISSUE:** April 8, 1976

**SUPERSEDES:** April 4, 1997

**PREPARED BY:** Product MSDS Coordinator

**APPROVED BY:** MSDS Task Force

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

WT%	NAME	SYNONYM	CAS NO.	OSHA PEL		ACGIH TLV®		LD	LC
				TWA	STEL	TWA	STEL		
99 to 100	Distillates (petroleum), hydrotreated light <sup>e</sup>	N.Av.	64742-47-8	500 <sup>d</sup> ppm	N.Av.	100 <sup>d</sup> ppm	N.Av.	>5000 <sup>g,c</sup>	>5500 <sup>d,h</sup> mg/m <sup>3</sup> /4 hours
0 to 0.2*	Tetrachloroethene	Perchloroethylene; Tetrachloroethylene	127-18-4	100 ppm	200 ppm (ceiling)	25 ppm	100 ppm	2629 <sup>a,f</sup>	34200 <sup>b</sup> mg/m <sup>3</sup> /8 hours

N.Av. = Not Available

\*Even though the concentration range does not fall under the ranges prescribed by WHMIS, this is the actual range which varies with each batch of the product.

<sup>a</sup>Oral-Rat LD<sub>50</sub> (mg/kg)

<sup>b</sup>Inhalation-Rat LC<sub>50</sub>

<sup>c</sup>Based on Stoddard solvent: Skin-Rabbit LD<sub>50</sub> >3000 mg/kg

<sup>d</sup>Based on Stoddard Solvent.

<sup>e</sup>Based on Stoddard Solvent, NIOSH IDLH (Immediately Dangerous to Life or Health):

20000 mg/m<sup>3</sup> (5000 ppm)

<sup>f</sup>Skin-Rabbit LD<sub>50</sub> >10000 mg/kg

<sup>g</sup>Oral-Rat LD (mg/kg)

<sup>h</sup>Inhalation-Rat LC

**SECTION 3: HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**APPEARANCE**

Liquid, clear and green, mild hydrocarbon odor.

**WARNING!**

**PHYSICAL HAZARD**

Combustible liquid and vapor.

**HEALTH HAZARDS**

May be harmful if inhaled.

May irritate eyes and skin.

May be harmful if swallowed.

Suspect cancer hazard. Contains material (less than 0.3 WT%) which may cause cancer.

Risk of cancer depends on duration and level of exposure.

Contains material which may cause birth defects.

Contains material which may cause central nervous system damage.

**ENVIRONMENTAL HAZARDS**

Toxic to aquatic life.

**SAFETY-KLEEN 105 SOLVENT RECYCLED  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

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**POTENTIAL HEALTH EFFECTS**

**INHALATION (BREATHING):** High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

**EYES:** May cause irritation with watering, stinging, and/or redness.

**SKIN:** May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

**INGESTION (SWALLOWING):** May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

**CHRONIC:** Prolonged or repeated inhalation may cause toxic effects as noted under **INHALATION (BREATHING)**. Prolonged or repeated inhalation and/or ingestion has been suggested to produce kidney toxicity in dogs but in no other species, including humans. According to one unsubstantiated human case report, prolonged or repeated inhalation, skin contact, and/or ingestion may cause mild, acute chemical hepatitis and acute, yellow atrophy (size reduction) of the liver. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis); and/or burns.

**CANCER INFORMATION:** This product contains perchloroethylene which may cause cancer. Risk of cancer depends on duration and level of exposure. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA**.

**POTENTIAL ENVIRONMENTAL EFFECTS**

Product is toxic to aquatic life. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

**SECTION 4: FIRST AID MEASURES**

- INHALATION:  
(BREATHING)** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.
- EYES:** If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.
- SKIN:** Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists.
- INGESTION:  
(SWALLOWING)** Do NOT induce vomiting. Immediately get medical attention. Call 1-800-752-7869, extension 2 or 1-312-906-6194 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.
- NOTE TO  
PHYSICIANS:** Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Treatment may vary with condition of victim and specifics of incident. Call 1-800-752-7869, extension 2 or 1-312-906-6194 for additional information.

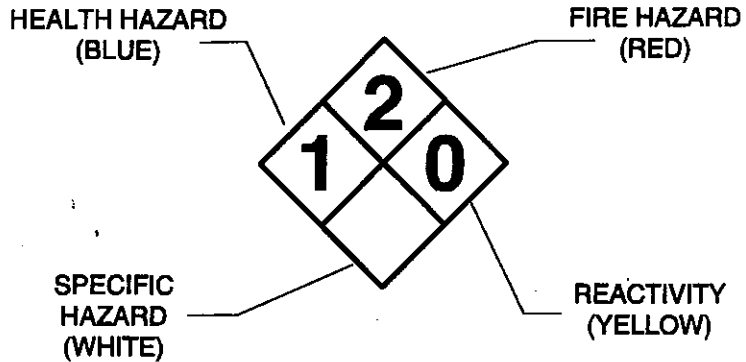
**SECTION 5: FIRE FIGHTING MEASURES**

- FLASH POINT:** 105°F (40°C) (minimum) Tag Closed Cup
- FLAMMABLE LIMITS IN AIR:** **LOWER:** 0.7 VOL% (minimum)  
**UPPER:** 5 VOL% (maximum)
- AUTOIGNITION  
TEMPERATURE:** 410°F (210°C) (minimum)
- HAZARDOUS COMBUSTION  
PRODUCTS:** Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.
- CONDITIONS OF  
FLAMMABILITY:** Heat, sparks, or flame.
- EXTINGUISHING MEDIA:** Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

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**NFPA 704  
HAZARD  
IDENTIFICATION:**

This information is intended solely for the use by individuals trained in this system.



**FIRE FIGHTING  
INSTRUCTIONS:**

Keep storage containers cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

**FIRE AND  
EXPLOSION HAZARDS:**

Vapor explosion hazard indoors, outdoors, or in sewers. Vapors may travel to ignition source and flashback. Vapors will spread along the ground and collect in low or confined areas. Run-off to sewer may create a fire hazard. Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Not sensitive to mechanical impact. Product may be sensitive to static discharge, which could result in fire or explosion.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface waters and sewers. Contain spill as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **SECTION 15: REGULATORY INFORMATION**.



**SECTION 7: HANDLING AND STORAGE**

**HANDLING:** Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product.

**SHIPPING AND STORING:** Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See **SECTION 14: TRANSPORT INFORMATION** for Packing Group information.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.

**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** Use NIOSH-certified, air-purifying respirators with organic vapor cartridges respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air-purifying respirators is limited. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

**EYE PROTECTION:** Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

**SKIN PROTECTION:** Where skin contact is likely, wear nitrile, supported neoprene, Viton®, polyvinyl alcohol (PVA), laminate (such as North Silver Shield®, Safety 4 4h®, Ansell Edmont Barrier®), or equivalent protective gloves; use of polyvinyl chloride (PVC), natural rubber (latex), or equivalent gloves is not recommended.

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To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

**PERSONAL HYGIENE:** Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with the product.

**OTHER PROTECTIVE EQUIPMENT:** Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE, APPEARANCE, AND ODOR:** Liquid, clear and green, mild hydrocarbon odor.

**ODOR THRESHOLD:** 30 ppm (based on Stoddard Solvent)

**MOLECULAR WEIGHT:** Not available.

**SPECIFIC GRAVITY:** 0.77 to 0.80 at 60°F/60°F (15.6°C/15.6°C) (water = 1)

**DENSITY:** 6.4 to 6.7 LB/US gal (770 to 800 g/l)

**VAPOR DENSITY:** 5 (air = 1) (approximately)

**VAPOR PRESSURE:** 0.4 mm Hg at 68°F (20°C) (approximately)  
1.0 mm Hg at 100°F (38°C) (approximately)

**BOILING POINT:** 310°F (155°C) (initial)

**FREEZING/MELTING POINT:** -45°F (-43°C) (maximum)

**pH:** Not applicable.

**EVAPORATION RATE:** 0.1 (butyl acetate = 1) (based on Stoddard Solvent)

**SOLUBILITY IN WATER:** Insoluble.

**FLASH POINT:** 105°F (40°C) (minimum) Tag Closed Cup



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Based on best current information, the other component listed in **SECTION 2** is not a carcinogen.

Also see **SECTION 3: CANCER INFORMATION** and **SECTION 15: CALIFORNIA**.

**REPRODUCTIVE TOXICITY:** Based on best current information, there is no known reproductive toxicity associated with this product.

Also see **SECTION 15: CALIFORNIA**.

**TERATOGENICITY:** Perchloroethylene has demonstrated animal effects of teratogenicity.

Based on best current information, the other component listed in **SECTION 2** is not a teratogen.

**TOXICOLOGICALLY SYNERGISTIC PRODUCT(S):** Based on best current information, there are no known toxicologically synergistic products associated with this product.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICITY:** 2900 ug/L 96 hour LC<sub>50</sub> Rainbow trout, donaldson trout (Oncorhynchus mykiss) (based on Distillates (petroleum) hydrotreated light).

**OCTANOL/WATER PARTITION COEFFICIENT:** Not available.

**VOLATILE ORGANIC COMPOUNDS:** 100 WT%; 6.4 to 6.7 LB/US gal; 770 to 800 g/l  
As per 40 CFR Part 51.100(s).

**SECTION 13: DISPOSAL CONSIDERATIONS**

**DISPOSAL:** Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

**USEPA WASTE CODE(S):** D001, D018, D039, and D040  
Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA),  
NA1993, PG III

**TDG:** Petroleum Distillates, N.O.S., Class 3, UN1268, PG III

**EMERGENCY RESPONSE  
GUIDE NUMBER:** 128  
Reference *North American Emergency Response Guidebook*

**SECTION 15: REGULATORY INFORMATION**

**USA REGULATIONS**

**SARA SECTIONS  
302 AND 304:** Based on the ingredients listed in **SECTION 2**, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA SECTIONS  
311 AND 312:** This product poses the following physical and health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):  
Immediate (Acute) Health Hazard  
Delayed (Chronic) Health Hazard  
Fire Hazard

**SARA SECTION  
313:** The following component is subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Material	CAS
Perchloroethylene	127-18-4

**CERCLA:** Based on the ingredients listed in **SECTION 2**, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantity (RQ):

Material	CAS	RQ
Perchloroethylene	127-18-4	100 LB (15.4 kg)

**TSCA:** All the components of this product are listed on the TSCA Inventory.

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**CALIFORNIA:** This product may contain detectable amounts of benzene CAS 71-43-2, p-dichlorobenzene CAS 106-46-7, methylene chloride CAS 75-09-2, perchloroethylene CAS 127-18-4, and trichloroethylene CAS 79-01-6. **WARNING:** These chemicals are known to the State of California to cause cancer.

This product may contain detectable amounts of benzene CAS 71-43-2 and toluene CAS 108-88-3. **WARNING:** These chemicals are known to the State of California to cause birth defects or other reproductive harm.

**CANADIAN REGULATIONS**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS:** B3, D2A, D2B

**CANADIAN  
ENVIRONMENTAL  
PROTECTION ACT  
(CEPA):**

All the components of this product are listed on the Canadian Domestic Substances List (DSL).

**SECTION 16: OTHER INFORMATION**

**REVISION INFORMATION:** Revised format. This MSDS has been revised in the following sections:  
**SECTION 3:** Emergency Overview, Inhalation, Chronic  
**SECTION 4:** Ingestion  
**SECTION 5:** Upper Flammable Limit, Autoignition Temperature  
**SECTION 8:** Skin Protection  
**SECTION 9:** Molecular Weight  
**SECTION 11:** Mutagenicity, Carcinogenicity, Reproductive Toxicity, Teratogenicity  
**SECTION 12:** Ecotoxicity  
**SECTION 13:** USEPA Waste Codes

**LABEL/OTHER INFORMATION:** This product is United States Department of Agriculture (USDA) approved, Underwriter's Laboratories (UL) classified, and Factory Mutual (FM) approved.

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 apply to the product as supplied to the user.



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**MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT

**SYNONYMS:** Parts Washer Solvent; Petroleum Distillates; Petroleum Naptha;  
Naptha, Solvent; Stoddard Solvent; Mineral Spirits.

**PRODUCT PART  
NUMBERS:** 6605, 6638.

**PRODUCT USE:** Cleaning and degreasing metal parts.  
If these products are used in combination with other products, refer to  
the Material Safety Data Sheets for those products.

	<b>24-HOUR EMERGENCY PHONE NUMBERS</b>	
<b>These numbers are for emergency use only. If you desire non-emergency product information, please call a phone number listed below.</b>	<b>MEDICAL:</b>	<b>TRANSPORTATION (SPILL):</b>
	<b>1-800-752-7869</b>	<b>1-800-468-1760 (USA)</b>
	<b>Extension 2</b> or <b>1-312-906-6194</b>	<b>1-613-996-6666 (CANADA)</b> <b>(call collect)</b>

**SUPPLIER:** Safety-Kleen Corp.  
1301 Gervais Street, Suite 300  
Columbia, SC 29201  
USA  
**1-803-933-4200**

**TECHNICAL INFORMATION:** 1-800-669-5740, Extension 7500

**MSDS FORM NUMBER:** 82658 (Also formerly known as 82529) **ISSUE:** March 24, 2000

**ORIGINAL ISSUE:** January 26, 1995 (Also formerly January 7, 1993) **SUPERSEDES:** April 4, 1997

**PREPARED BY:** Product MSDS Coordinator **APPROVED BY:** MSDS Task Force

**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

WT%	NAME	SYNONYM	CAS NO.	OSHA PEL		ACGIH TLV®		LD <sup>a</sup>	LC <sup>b</sup>
				TWA	STEL	TWA	STEL		
100	Distillates (petroleum), hydrotreated light <sup>e</sup>	N.Av.	64742-47-8	500 <sup>d</sup> ppm	N.Av.	100 <sup>d</sup> ppm	N.Av.	>5000 <sup>c</sup>	>5500 <sup>d</sup> mg/m <sup>3</sup> /4 hours

N.Av. = Not Available

<sup>a</sup>Oral-Rat LD (mg/kg)

<sup>b</sup>Inhalation-Rat LC

<sup>c</sup>Based on Stoddard solvent: Skin-Rabbit  
LD<sub>50</sub> >3000 mg/kg

<sup>d</sup>Based on Stoddard Solvent.

<sup>e</sup>Based on Stoddard Solvent, NIOSH IDLH  
(Immediately Dangerous to Life or Health):  
20000 mg/m<sup>3</sup> (5000 ppm)

**SECTION 3: HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**APPEARANCE**

Liquid, clear, colorless to pale yellow, mild hydrocarbon odor.

**WARNING!**

**PHYSICAL HAZARD**

Combustible liquid and vapor.

**HEALTH HAZARDS**

May be harmful if inhaled.

May irritate eyes and skin.

May be harmful if swallowed.

Contains material which may cause central nervous system damage.

**ENVIRONMENTAL HAZARDS**

Not toxic to aquatic life.

**POTENTIAL HEALTH EFFECTS**

**INHALATION (BREATHING):** High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

**EYES:** May cause irritation with watering, stinging, and/or redness.

**SKIN:** May cause irritation. Not likely to be absorbed through the skin in harmful amounts.



**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

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**INGESTION (SWALLOWING):** May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

**CHRONIC:** Prolonged or repeated inhalation may cause toxic effects as noted under **INHALATION (BREATHING)**. Prolonged or repeated inhalation and/or ingestion has been suggested to produce kidney toxicity in dogs but in no other species, including humans. According to one unsubstantiated human case report, prolonged or repeated inhalation, skin contact, and/or ingestion may cause mild, acute chemical hepatitis and acute, yellow atrophy (size reduction) of the liver. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis); and/or burns.

**CANCER INFORMATION:** No known carcinogenicity. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA**.

**POTENTIAL ENVIRONMENTAL EFFECTS**

Product is not toxic to aquatic life. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

<b>SECTION 4: FIRST AID MEASURES</b>
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**INHALATION: (BREATHING)** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

**EYES:** If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

**SKIN:** Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists.

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**INGESTION:  
(SWALLOWING)** Do NOT induce vomiting. Immediately get medical attention. Call 1-800-752-7869, extension 2 or 1-312-906-6194 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.

**NOTE TO  
PHYSICIANS:** Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Treatment may vary with condition of victim and specifics of incident. Call 1-800-752-7869, extension 2 or 1-312-906-6194 for additional information.

**SECTION 5: FIRE FIGHTING MEASURES**

**FLASH POINT:** 148°F (64°C) (approximately) Tag Closed Cup

**FLAMMABLE LIMITS IN AIR:** **LOWER:** 0.7 VOL% (minimum)  
**UPPER:** 5 VOL% (maximum)

**AUTOIGNITION  
TEMPERATURE:** 410°F (210°C) (minimum)

**HAZARDOUS COMBUSTION  
PRODUCTS:** Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.

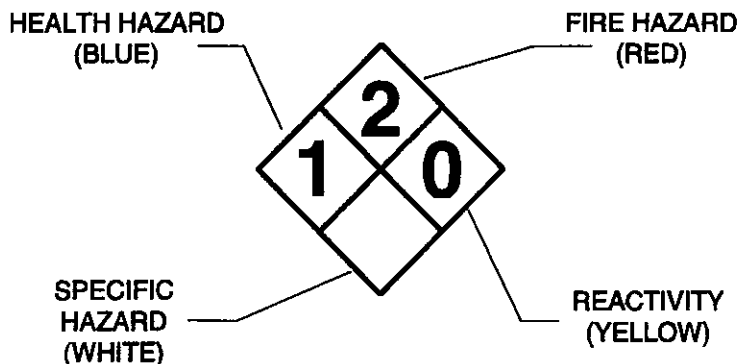
**CONDITIONS OF  
FLAMMABILITY:** Heat, sparks, or flame.

**EXTINGUISHING MEDIA:** Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

**NFPA 704**

**HAZARD  
IDENTIFICATION:**

This information is intended solely for the use by individuals trained in this system.



**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**FIRE FIGHTING  
INSTRUCTIONS:**

Keep storage containers cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

**FIRE AND  
EXPLOSION HAZARDS:**

Vapor explosion hazard indoors, outdoors, or in sewers. Vapors may travel to ignition source and flashback. Vapors will spread along the ground and collect in low or confined areas. Run-off to sewer may create a fire hazard. Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Not sensitive to mechanical impact. Product may be sensitive to static discharge, which could result in fire or explosion.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface waters and sewers. Contain spill as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

**SECTION 7: HANDLING AND STORAGE**

**HANDLING:**

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using these products.

**SHIPPING AND  
STORING:**

Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See **SECTION 14: TRANSPORT INFORMATION** for Packing Group information.

**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.

**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** Use NIOSH-certified, air-purifying respirators with organic vapor cartridges respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air-purifying respirators is limited. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

**EYE PROTECTION:** Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

**SKIN PROTECTION:** Where skin contact is likely, wear nitrile, supported neoprene, Viton®, polyvinyl alcohol (PVA), laminate (such as North Silver Shield®, Safety 4 4h®, Ansell Edmont Barrier®), or equivalent protective gloves; use of polyvinyl chloride (PVC), natural rubber (latex), or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

**PERSONAL HYGIENE:** Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with the product.

**OTHER PROTECTIVE EQUIPMENT:** Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>PHYSICAL STATE, APPEARANCE, AND ODOR:</b>	Liquid, clear, colorless to pale yellow, mild hydrocarbon odor.
<b>ODOR THRESHOLD:</b>	30 ppm (based on Stoddard Solvent)
<b>MOLECULAR WEIGHT:</b>	Not available.
<b>SPECIFIC GRAVITY:</b>	0.78 to 0.82 at 60°F/60°F (15.6°C/15.6°C) (water = 1)
<b>DENSITY:</b>	6.5 to 6.8 LB/US gal (780 to 820 g/l)
<b>VAPOR DENSITY:</b>	5 (air = 1) (approximately)
<b>VAPOR PRESSURE:</b>	0.2 mm Hg at 68°F (20°C) (approximately) 0.6 mm Hg at 100°F (38°C) (approximately)
<b>BOILING POINT:</b>	350°F (177°C) (initial)
<b>FREEZING/MELTING POINT:</b>	-45°F (-43°C) (maximum)
<b>pH:</b>	Not applicable.
<b>EVAPORATION RATE:</b>	0.1 (butyl acetate = 1) (based on Stoddard Solvent)
<b>SOLUBILITY IN WATER:</b>	Insoluble.
<b>FLASH POINT:</b>	148°F (64°C) (approximately) Tag Closed Cup
<b>FLAMMABLE LIMITS IN AIR:</b>	<b>LOWER:</b> 0.7 VOL% (minimum) <b>UPPER:</b> 5 VOL% (maximum)
<b>AUTOIGNITION TEMPERATURE:</b>	410°F (210°C) (minimum)

**SECTION 10: STABILITY AND REACTIVITY**

<b>STABILITY:</b>	Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.
<b>INCOMPATIBILITY:</b>	Avoid acids, alkalies, oxidizing agents, reducing agents, or reactive halogens.

**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**REACTIVITY:** Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.**

**SECTION 11: TOXICOLOGICAL INFORMATION**

**SENSITIZATION:** Based on best current information, there is no known human sensitization associated with these products.

**MUTAGENICITY:** Based on best current information, there is no known mutagenicity associated with these products.

**CARCINOGENICITY:** Based on best current information, there is no known carcinogenicity as regulated by OSHA; as categorized by ACGIH A1 or A2 substances; as categorized by IARC Group 1, Group 2A, or Group 2B agents; or as listed by NTP as either known carcinogens or substances for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Also see **SECTION 15: CALIFORNIA.**

**REPRODUCTIVE TOXICITY:** Based on best current information, there is no known reproductive toxicity associated with these products.

Also see **SECTION 15: CALIFORNIA.**

**TERATOGENICITY:** Based on best current information, there is no known teratogenicity associated with these products.

**TOXICOLOGICALLY SYNERGISTIC PRODUCT(S):** Based on best current information, there are no known toxicologically synergistic products associated with these products.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICITY:** A Static Acute Bioassay as per the California Department of Fish and Game WPCL, was done using fathead minnows, and up to 750 ppm of the products in water.

The material passed the bioassay with only 1 out of 10 minnows dying. To fail the bioassay, more than 40% of the fish would die in 750 ppm.

**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**OCTANOL/WATER**

**PARTITION COEFFICIENT:** Not available.

**VOLATILE ORGANIC  
COMPOUNDS:**

100 WT%; 6.5 to 6.8 LB/US gal; 780 to 820 g/l  
As per 40 CFR Part 51.100(s).

**SECTION 13: DISPOSAL CONSIDERATIONS**

**DISPOSAL:** Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

**USEPA WASTE  
CODE(S):**

Not regulated.  
Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of these products.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA),  
NA1993, PG III

**TDG:** Not regulated.

**EMERGENCY RESPONSE  
GUIDE NUMBER:**

128  
Reference *North American Emergency Response Guidebook*

**SECTION 15: REGULATORY INFORMATION**

**USA REGULATIONS**

**SARA SECTIONS  
302 AND 304:**

Based on the ingredient listed in **SECTION 2**, these products do not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA SECTIONS  
311 AND 312:**

These products pose the following physical and health hazards as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):  
Immediate (Acute) Health Hazard  
Delayed (Chronic) Health Hazard  
Fire Hazard

**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
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**SARA SECTION 313:** These products do not contain toxic chemicals subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

**CERCLA:** Based on the ingredient listed in **SECTION 2**, these products do not contain any "hazardous substance" listed pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

**TSCA:** All the components of these products are listed on the TSCA Inventory.

**CALIFORNIA:** These products may contain detectable amounts of benzene CAS 71-43-2 (at or below 0.4 mg/L) and p-dichlorobenzene CAS 106-46-7 (at or below 5 mg/L). **WARNING:** These chemicals are known to the State of California to cause cancer.

These products may contain detectable amounts of benzene CAS 71-43-2 (at or below 0.4 mg/L) and toluene CAS 108-88-3 (at or below 30 mg/L). **WARNING:** These chemicals are known to the State of California to cause birth defects or other reproductive harm.

**CANADIAN REGULATIONS**

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS:** B3, D2B

**CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):** All the components of these products are listed on the Canadian Domestic Substances List (DSL).



**SAFETY-KLEEN PREMIUM SOLVENT  
SAFETY-KLEEN PREMIUM GOLD SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**SECTION 16: OTHER INFORMATION**

**REVISION INFORMATION:**

Revised format. This MSDS has been revised in the following sections:

**SECTION 1:** added SAFETY-KLEEN PREMIUM SOLVENT product

**SECTION 3:** Emergency Overview, Inhalation, Chronic

**SECTION 4:** Ingestion

**SECTION 5:** Upper Flammable Limit, Autoignition Temperature

**SECTION 8:** Skin Protection

**SECTION 9:** Molecular Weight

**SECTION 12:** Ecotoxicity

**LABEL/OTHER INFORMATION:**

These products are United States Department of Agriculture (USDA) approved and Underwriter's Laboratories (UL) classified.

User assumes all risks incident to the use of these products. 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 apply to the products as supplied to the user.



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**MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** CONTINUED USE PRODUCT - SOLVENT

**SYNONYMS:** Parts Washer Solvent; Petroleum Distillates; Petroleum Naptha; Naptha, Solvent; Stoddard Solvent; Mineral Spirits.

**PRODUCT PART NUMBER:** None.

**PRODUCT USE:** For washing drums at Safety-Kleen facilities or for use in lower grade solvent applications.  
If this product is used in combination with other products, refer to the Material Safety Data Sheets for those products.

	<b>24-HOUR EMERGENCY PHONE NUMBERS</b>	
<b>These numbers are for emergency use only. If you desire non-emergency product information, please call a phone number listed below.</b>	<b>MEDICAL:</b>	<b>TRANSPORTATION (SPILL):</b>
	1-800-752-7869	1-800-468-1760 (USA)
	Extension 2 or 1-312-906-6194	1-613-996-6666 (CANADA) (call collect)

**SUPPLIER:** Safety-Kleen Corp.  
1301 Gervais Street, Suite 300  
Columbia, SC 29201  
USA  
1-803-933-4200

**TECHNICAL INFORMATION:** 1-800-669-5740, Extension 7500

**MSDS FORM NUMBER:** 82696

**ISSUE:** April 13, 2000

**ORIGINAL ISSUE:** October 24, 1996

**SUPERSEDES:** July 27, 1998

**PREPARED BY:** Product MSDS Coordinator

**APPROVED BY:** MSDS Task Force

**CONTINUED USE PRODUCT - SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

WT%	NAME	SYNONYM	CAS NO.	OSHA PEL		ACGIH TLV®		LD	LC
				TWA	STEL	TWA	STEL		
99 to 100	Distillates (petroleum), hydrotreated light <sup>e</sup>	N.Av.	64742-47-8	500 <sup>d</sup> ppm	N.Av.	100 <sup>d</sup> ppm	N.Av.	>5000 <sup>g,c</sup>	>5500 <sup>d,h</sup> mg/m <sup>3</sup> /4 hours
0 to 0.2*	Tetrachloroethene	Perchloroethylene; Tetrachloroethylene	127-18-4	100 ppm	200 ppm (ceiling)	25 ppm	100 ppm	2629 <sup>a,f</sup>	34200 <sup>b</sup> mg/m <sup>3</sup> /8 hours

N.Av. = Not Available

\*Even though the concentration range does not fall under the ranges prescribed by WHMIS, this is the actual range which varies with each batch of the product.

<sup>a</sup>Oral-Rat LD<sub>50</sub> (mg/kg)

<sup>b</sup>Inhalation-Rat LC<sub>50</sub>

<sup>c</sup>Based on Stoddard solvent: Skin-Rabbit LD<sub>50</sub> >3000 mg/kg

<sup>d</sup>Based on Stoddard Solvent.

<sup>e</sup>Based on Stoddard Solvent, NIOSH IDLH (Immediately Dangerous to Life or Health):

20000 mg/m<sup>3</sup> (5000 ppm)

<sup>f</sup>Skin-Rabbit LD<sub>50</sub> >10000 mg/kg

<sup>g</sup>Oral-Rat LD (mg/kg)

<sup>h</sup>Inhalation-Rat LC

**SECTION 3: HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**APPEARANCE**

Liquid, brown to black, mild hydrocarbon odor.

**WARNING!**

**PHYSICAL HAZARD**

Combustible liquid and vapor.

**HEALTH HAZARDS**

May be harmful if inhaled.

May irritate eyes and skin.

May be harmful if swallowed.

Suspect cancer hazard. Contains material (less than 0.3 WT%) which may cause cancer.

Risk of cancer depends on duration and level of exposure.

Contains material which may cause birth defects.

Contains material which may cause central nervous system damage.

**ENVIRONMENTAL HAZARDS**

Toxic to aquatic life.

**CONTINUED USE PRODUCT - SOLVENT  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

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**POTENTIAL HEALTH EFFECTS**

**INHALATION (BREATHING):** High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

**EYES:** May cause irritation with watering, stinging, and/or redness.

**SKIN:** May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

**INGESTION (SWALLOWING):** May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

**CHRONIC:** Prolonged or repeated inhalation may cause toxic effects as noted under **INHALATION (BREATHING)**. Prolonged or repeated inhalation and/or ingestion has been suggested to produce kidney toxicity in dogs but in no other species, including humans. According to one unsubstantiated human case report, prolonged or repeated inhalation, skin contact, and/or ingestion may cause mild, acute chemical hepatitis and acute, yellow atrophy (size reduction) of the liver. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis); and/or burns.

**CANCER INFORMATION:** This product contains perchloroethylene which may cause cancer. Risk of cancer depends on duration and level of exposure. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA**.

**POTENTIAL ENVIRONMENTAL EFFECTS**

Product is toxic to aquatic life. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

**SECTION 4: FIRST AID MEASURES**

- INHALATION:  
(BREATHING)** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.
- EYES:** If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.
- SKIN:** Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists.
- INGESTION:  
(SWALLOWING)** Do NOT induce vomiting. Immediately get medical attention. Call 1-800-752-7869, extension 2 or 1-312-906-6194 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.
- NOTE TO  
PHYSICIANS:** Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Treatment may vary with condition of victim and specifics of incident. Call 1-800-752-7869, extension 2 or 1-312-906-6194 for additional information.

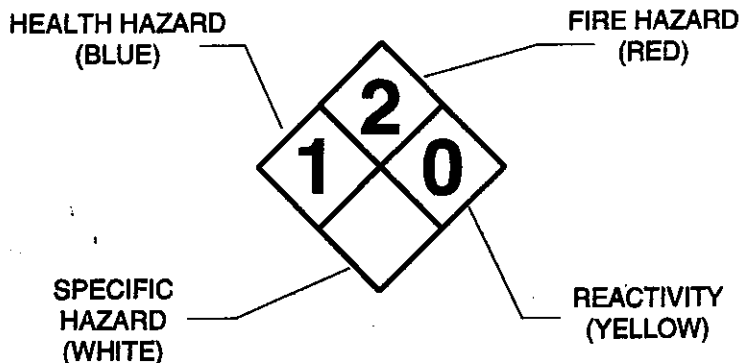
**SECTION 5: FIRE FIGHTING MEASURES**

- FLASH POINT:** 100°F to 150°F (38°C to 66°C) (typical) Tag Closed Cup
- FLAMMABLE LIMITS IN AIR:** **LOWER:** 0.7 VOL% (minimum)  
**UPPER:** 5 VOL% (maximum)
- AUTOIGNITION  
TEMPERATURE:** 410°F (210°C) (minimum)
- HAZARDOUS COMBUSTION  
PRODUCTS:** Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.
- CONDITIONS OF  
FLAMMABILITY:** Heat, sparks, or flame.
- EXTINGUISHING MEDIA:** Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

**CONTINUED USE PRODUCT - SOLVENT**  
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**NFPA 704**  
**HAZARD**  
**IDENTIFICATION:**

This information is intended solely for the use by individuals trained in this system.



**FIRE FIGHTING**  
**INSTRUCTIONS:**

Keep storage containers cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

**FIRE AND**  
**EXPLOSION HAZARDS:**

Vapor explosion hazard indoors, outdoors, or in sewers. Vapors may travel to ignition source and flashback. Vapors will spread along the ground and collect in low or confined areas. Run-off to sewer may create a fire hazard. Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Not sensitive to mechanical impact. Product may be sensitive to static discharge, which could result in fire or explosion.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface waters and sewers. Contain spill as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **SECTION 15: REGULATORY INFORMATION**.

**SECTION 7: HANDLING AND STORAGE**

**HANDLING:** Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product.

**SHIPPING AND STORING:** Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See **SECTION 14: TRANSPORT INFORMATION** for Packing Group information.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.

**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** Use NIOSH-certified, air-purifying respirators with organic vapor cartridges respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air-purifying respirators is limited. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

**EYE PROTECTION:** Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

**SKIN PROTECTION:** Where skin contact is likely, wear nitrile, supported neoprene, Viton®, polyvinyl alcohol (PVA), laminate (such as North Silver Shield®, Safety 4 4h®, Ansell Edmont Barrier®), or equivalent protective gloves; use of polyvinyl chloride (PVC), natural rubber (latex), or equivalent gloves is not recommended.

**CONTINUED USE PRODUCT - SOLVENT**  
**MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

**PERSONAL  
HYGIENE:**

Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with the product.

**OTHER  
PROTECTIVE  
EQUIPMENT:**

Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE,  
APPEARANCE, AND ODOR:**

Liquid, brown to black, mild hydrocarbon odor.

**ODOR THRESHOLD:**

30 ppm (based on Stoddard Solvent)

**MOLECULAR WEIGHT:**

Not available.

**SPECIFIC GRAVITY:**

0.77 to 0.80 at 60°F/60°F (15.6°C/15.6°C) (water = 1)

**DENSITY:**

6.4 to 6.7 LB/US gal (770 to 800 g/l)

**VAPOR DENSITY:**

5 (air = 1) (approximately)

**VAPOR PRESSURE:**

0.4 mm Hg at 68°F (20°C) (approximately)  
1.0 mm Hg at 100°F (38°C) (approximately)

**BOILING POINT:**

310°F (155°C) (initial)

**FREEZING/MELTING POINT:**

-45°F (-43°C) (maximum)

**pH:**

Not applicable.

**EVAPORATION RATE:**

0.1 (butyl acetate = 1) (based on Stoddard Solvent)

**SOLUBILITY IN WATER:**

Insoluble.

**FLASH POINT:**

100°F to 150°F (38°C to 66°C) (typical) Tag Closed Cup





**CONTINUED USE PRODUCT - SOLVENT**  
**MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

Based on best current information, the other component listed in **SECTION 2** is not a carcinogen.

Also see **SECTION 3: CANCER INFORMATION** and **SECTION 15: CALIFORNIA**.

**REPRODUCTIVE TOXICITY:** Based on best current information, there is no known reproductive toxicity associated with this product.

Also see **SECTION 15: CALIFORNIA**.

**TERATOGENICITY:** Perchloroethylene has demonstrated animal effects of teratogenicity.

Based on best current information, the other component listed in **SECTION 2** is not a teratogen.

**TOXICOLOGICALLY SYNERGISTIC PRODUCT(S):** Based on best current information, there are no known toxicologically synergistic products associated with this product.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICITY:** 2900 ug/L 96 hour LC<sub>50</sub> Rainbow trout, donaldson trout (Oncorhynchus mykiss) (based on Distillates (petroleum) hydrotreated light).

**OCTANOL/WATER PARTITION COEFFICIENT:** Not available.

**VOLATILE ORGANIC COMPOUNDS:** 100 WT%; 6.4 to 6.7 LB/US gal; 770 to 800 g/l  
As per 40 CFR Part 51.100(s).

**SECTION 13: DISPOSAL CONSIDERATIONS**

**DISPOSAL:** Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

**USEPA WASTE CODE(S):** D001, D018, D039, and D040  
Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA),  
NA1993, PG III

**TDG:** Petroleum Distillates, N.O.S., Class 3, UN1268, PG III

**EMERGENCY RESPONSE** 128  
**GUIDE NUMBER:** Reference *North American Emergency Response Guidebook*

**SECTION 15: REGULATORY INFORMATION**

**USA REGULATIONS**

**SARA SECTIONS 302 AND 304:** Based on the ingredients listed in **SECTION 2**, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA SECTIONS 311 AND 312:** This product poses the following physical and health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):  
Immediate (Acute) Health Hazard  
Delayed (Chronic) Health Hazard  
Fire Hazard

**SARA SECTION 313:** The following component is subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Material	CAS
Perchloroethylene	127-18-4

**CERCLA:** Based on the ingredients listed in **SECTION 2**, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantity (RQ):

Material	CAS	RQ
Perchloroethylene	127-18-4	100 LB (15.4 kg)

**TSCA:** All the components of this product are listed on the TSCA Inventory.

**CONTINUED USE PRODUCT - SOLVENT**  
**MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**

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**CALIFORNIA:**

This product may contain detectable amount of benzene CAS 71-43-2, cadmium and cadmium compounds CAS 7440-43-9, chromium (hexavalent compounds) CAS 7440-47-3, p-dichlorobenzene CAS 106-46-7, hexachlorobenzene CAS 118-74-1, lead and lead compounds CAS 7439-92-1, perchloroethylene CAS 127-18-4, and trichloroethylene CAS 79-01-6. **WARNING:** These chemicals are known to the State of California to cause cancer.

This product may contain detectable amounts of benzene CAS 71-43-2, cadmium and cadmium compounds CAS 7440-43-9, hexachlorobenzene CAS 118-74-1, lead and lead compounds CAS 7439-92-1, and toluene CAS 108-88-3. **WARNING:** These chemicals are known to the State of California to cause birth defects or other reproductive harm.

**CANADIAN REGULATIONS**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS:**

B3, D2A, D2B

**CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):**

All the components of this product are listed on the Canadian Domestic Substances List (DSL).

**SECTION 16: OTHER INFORMATION**

**REVISION INFORMATION:**

Revised format. This MSDS has been revised in the following sections:

**SECTION 1:** Product Name, Product Part Number.

**SECTION 3:** Emergency Overview, Inhalation, Chronic

**SECTION 4:** Ingestion

**SECTION 5:** Flash Point, Upper Flammable Limit, Autoignition Temperature

**SECTION 8:** Skin Protection

**SECTION 9:** Molecular Weight

**SECTION 11:** Mutagenicity, Carcinogenicity, Reproductive Toxicity, Teratogenicity

**SECTION 12:** Ecotoxicity

**SECTION 13:** USEPA Waste Codes

**SECTION 15:** California

**LABEL/OTHER INFORMATION:** Not available.

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 apply to the product as supplied to the user.



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**ATTACHMENT B**  
**21 AUGUST 1998 MEMORANDUM**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 21 1998

OFFICE OF  
SOLID WASTE AND  
RESPONSE

Ms. Catherine A. McCord  
Manager, Environment and Business Integration  
Safety-Kleen  
1000 North Randall Road  
Elgin, Illinois 60123-7857

Dear Ms. McCord:

Thank you for your April 25, 1997 letter to Michele Anders requesting written confirmation of the regulatory status of used parts washing solvent that is to be used for drum wash at Safety-Kleen's facilities without first being reclaimed. You asked whether the used parts washing solvent would be excluded from the definition of solid waste pursuant to 40 CFR §261.2(e)(1) when it is used as an effective substitute for a commercial product. Based on the information that you provided, it is the Agency's understanding that Safety-Kleen intends to collect used parts washing solvents from its customers. Some of the used parts washing solvent from designated customers would be used for drum washing at Safety-Kleen facilities. This used solvent designated for drum washing would be consolidated, but would not be reclaimed prior to its use for drum washing. The solvents designated for drum washing would also be segregated (i.e., always in separate containers or tanks) from the other used solvents collected from Safety-Kleen's customers.

Because the material (i.e., used solvent continuing to be employed in solvent uses) remains a product, your question about the applicability of 40 CFR §261.2(e)(1) is moot. That regulatory section is intended to apply to secondary materials, which is not the case for used solvents that are not yet "spent."

The Agency has previously stated that when a used solvent is employed for another solvent use, this continued use indicates that the solvent remains a product. The used solvent in this case is a material continuing to be used as a solvent, the purpose for which it is intended, rather than a spent material being reused. Consequently, the used solvent to be employed for drum washing would not be considered a solid waste and would not be subject to the Resource Conservation and Recovery Act ("RCRA") Subtitle C hazardous waste regulations when generated, transported, or used. 50 Fed. Reg. 614, 624 (1985). Accordingly, used parts washing solvents that are collected and consolidated by Safety-Kleen and then used for drum washing without first being reclaimed would not be a RCRA solid waste.

In the case of shipments of used solvents in tanker trucks, if any part of a shipment of solvent is reclaimed, burned for energy recovery, or otherwise defined as solid or hazardous waste (as opposed to being directly used only for drum wash), the entire shipment must be managed according to

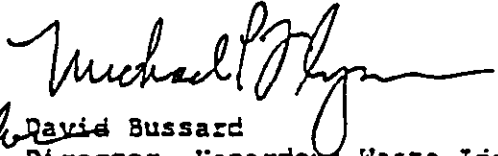
applicable RCRA Subtitle C regulations. In situations in which used solvents collected from multiple sources are handled in separate drums or containers the same truck, each container must be handled according to the applicable regulations (depending on how the solvent is to be used or managed), including hazardous waste manifest requirements. After the solvents have been used for drum washing, any residual solvents would be subject to a hazardous waste determination and must be managed according to the applicable RCRA Subtitle requirements.

Furthermore, "the Agency is aware of the potential for the "continued use" policy to be abused, and thus, notes that the continued use must be legitimate for the used solvents to be excluded from regulation as a solid waste. The Agency would consider the continued use of the used solvents for drum washing to be legitimate in situations in which: 1) the used solvents are effective for the drum-washing operation, especially if the used solvents substitute for solvents that would otherwise have to be purchased (if the used solvents would not be an effective washing agent for the drums, using the used solvents in lieu of other effective drum-washing agents would not be considered legitimate), 2) the used solvents are used only for washing drums that actually need it (if the used solvents are used as drum-washing agent when the drums do not need washing, using the used solvents would not be considered legitimate), and 3) the used solvents are not used in excess of what would normally be required to wash drums (if the used solvents are being used in excess of the amount of solvents needed for the drum-washing operation, e.g., more than would be necessary to wash the drums effectively, using the used solvents would not be considered legitimate).

The regulatory interpretation provided above is based on the U.S. EPA's interpretation of federal regulations. Some states in which the continued use of the used parts washing solvent occurs may have different regulatory requirements or interpretations. For case-specific determinations on the status of the continued use of the parts washing solvent for drum wash, please contact the appropriate state regulatory agency or EPA Regional Office.

If you have any questions or would like additional information, please contact Jeff Hannapel at (703) 308-8826.

Sincerely,

  
David Bussard  
Director, Hazardous Waste Identification  
Division  
Office of Solid Waste



**ATTACHMENT C**  
**CUSTOMER EDUCATION DOCUMENT**



**Sanford, FL  
Continued Use Service Checklist**

Customer Name (Company): \_\_\_\_\_

Customer Number: \_\_\_\_\_

**Yes    No**    (check the answer that applies for each question)

- \_\_\_\_\_    \_\_\_\_\_    1. Customer has used only Safety-Kleen 150 or 105 Solvent?
- \_\_\_\_\_    \_\_\_\_\_    2. The solvent has been used for its intended application (i.e. parts washing)?
- \_\_\_\_\_    \_\_\_\_\_    3. The solvent properties are consistent with regards to color (example – brown to black) and odor (does not smell of thinners, gasoline, or other additives)?
- \_\_\_\_\_    \_\_\_\_\_    4. The solvent drum is free of gasoline, thinners, rags, gaskets, gasket materials, and large metal objects?
- \_\_\_\_\_    \_\_\_\_\_    5. The solvent is in the proper container, and the container is marked in a distinctive manner (black rubber band or fluorescent green tag)?
- \_\_\_\_\_    \_\_\_\_\_    6. There are no additional labels on the container (e.g. hazardous waste label)?
- \_\_\_\_\_    \_\_\_\_\_    7. The customer has confirmed that there have been no process changes which may have altered the solvent?
- \_\_\_\_\_    \_\_\_\_\_    8. All shipping papers have been properly completed and signed?

\_\_\_\_\_  
Customer Representative (print)

\_\_\_\_\_  
Customer Representative (signature)

\_\_\_\_\_  
Date

\_\_\_\_\_  
SK Representative (print)

\_\_\_\_\_  
SK Representative (signature)

\_\_\_\_\_  
Date



**ATTACHMENT D**  
**EXAMPLE PREPRINT**

#0320-005

14 of 16

20000000

1000 North Randall Road  
Elgin, Illinois 60123-7857  
CUSTOMER ACCOUNT NO

WE CARE

DLMS NO 05106-0408 FED ID NO 30-4080010

4-076-02-7297

Estel MFG Corp  
2045 Andrew J. Brown Ave  
2045 Marlindale Ave  
Indianapolis IN 46202

FOR SERVICE CALL	TRANSPORTER	DOC. EXP.	SCHEDULED SERVICE FEE	SCHEDULED TEMPORARY	RESERVE FEE
317-888-0570	Keith Miller	01/10/98	97.46	03	154357
CREDIT FEE		PREV BALANCE	BAL OVER 90 DAYS		
3		1874.28			
BUSINESS TYPE	CHAIN	COUNTY	SVC. FC	PROD. FC	
09	30	NO	634	001	
TAX EXEMPTION NUMBER					

SERVICE DATE	SALES REP NO	CUSTOMER P O NUMBER	CUSTOMER PHONE #	TAX CODE	HANDLED CODE	ASSOC CODE	SERVICE TAX	G.O.M.S. TAX	PRODUCT TAX
11-13-97	5430		317-636-3531	15-245-3978			05	05	05

DEPT	SERVICE/PRODUCT	QUAN	CHARGE	SALES TAX	TOTAL CHARGE	WASTE MIN.	SOLVENT/DRUMS	CC	SERVICE TERM	CHANGE SERVICE TERM	PROMO NO.
1	33150 22017306	1	164.50	8.23	172.73	25.91	575	4	2		
3	33520 22017306	1	164.50	8.23	172.73	25.91	1715	1	2		

TOTAL-SERVICE/PRODUCTS

MANIFEST NO.	USEPA TRANSPORTER ID NO.	GENERATOR USEPA ID NO.	GENERATOR STATE ID NO.
	710984508292	710006423397	0180019999

11. US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID.)

12 CONTAINER NO.	13 TYPE	14 TOTAL QUANTITY	15 DOT NUMBER
		15	600

DESIGNATED FACILITY NAME AND ADDRESS: **Selaby-Kland Corp.**  
475 S. 200 St. Greenwood IN 46143

USA EPA ID NO. **IND 954874776**  
STATE ID NO.

CASH <input type="checkbox"/>	TOTAL RECEIVED	APPLY PAYMENT TO:
CHECK NUMBER		TODAY'S SERVICE/SALE
INVOICE #	AMOUNT \$	PREVIOUS BALANCE (IF APPLICABLE)
INVOICE #	AMOUNT \$	
PREVIOUS CREDIT CARD NO.	CREDIT CARD NO.	AMEX VISA MC
CUSTOMER REFERENCE INFORMATION		EXP. DATE

LDN MESSAGE

MANIFEST CODE

SEQ #

IN THE EVENT OF AN EMERGENCY CALL 1-800-468-1720 (24 hours)

I AGREE TO PAY THE ABOVE CHARGES AND TO BE BOUND BY THE TERMS AND CONDITIONS SET FORTH ABOVE AND ON THE REVERSE SIDE OF THIS DOCUMENT PLEASE CHANGE MY ADDRESS FOR THIS TRANSACTION UNLESS OTHERWISE INDICATED IN THE PAYMENT RECEIVED SECTION THE INDIVIDUAL SIGNING THIS DOCUMENT IS ONLY AUTHORIZED TO SIGN AND BIND CUSTOMER TO THIS TERMS

*Colin River*  
Print Customer Name

*Edman River*  
Customer's Authorized Representative

TOTAL CHARGE (FROM ABOVE)	
WASTE BNL (FROM ABOVE)	
TOTAL DUE	172.73

PRICING IS SUBJECT TO CHANGE. EXAMPLE ONLY

ELGIN OFFICE

WASTE RECEIPT AND SALES ACKNOWLEDGMENT (USE REVERSE SIDE)

ATTACHMENT D - Conversion Service Document

**ATTACHMENT E**  
**EXAMPLE CONTINUED USE STICKER**

# **CONTINUED USE PRODUCT**

The cleaning solvent/solution in this  
parts cleaner is destined for  
Continued Use.

©1997 FLEXmark® V400FW Rev. 10/97 SK81648

**ATTACHMENT F**  
**SAMPLE INSPECTION FORM**

## Daily Inspection of Continued Use System.

**Inspector's Name/Title:** \_\_\_\_\_

Inspector's Signature/Date/Time				
Monday	Tuesday	Wednesday	Thursday	Friday

**Continued Use Solvent Vat:**

Empty?	Monday		Tuesday		Wednesday		Thursday		Friday	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Tank Exterior: (Anchoring rusty or loose, properly grounded, wet spots not present, no visible leaking, no distortion)	A	N	A	N	A	N	A	N	A	N
Containment Area: (Any material which accumulates in the containment area must be removed within 24 hours. No cracks, no wet spots or ponding, no stains, intact sealant, no signs of leakage from vat)	A	N	A	N	A	N	A	N	A	N
Piping and Supports: (No visible leakage, not loose, not rusty)	A	N	A	N	A	N	A	N	A	N
Pump Seals: (No leaks)	A	N	A	N	A	N	A	N	A	N
Motors: (Overheating not observed)	A	N	A	N	A	N	A	N	A	N
Fittings: (No leaking)	A	N	A	N	A	N	A	N	A	N
Valves: (No leaking or sticking)	A	N	A	N	A	N	A	N	A	N
Hose connections and Fittings: (Not cracked, not loose, no leaks)	A	N	A	N	A	N	A	N	A	N

**Pumps, Flanges, and Valves:**

Pump, flange, or valve number:	M	Tu	Wed	Th	Fri
<u>R1-Flange</u>	A	N	A	N	A
<u>R2-Valve</u>	A	N	A	N	A
<u>R3-Flange</u>	A	N	A	N	A
<u>R4-Flange</u>	A	N	A	N	A
<u>R5-Valve</u>	A	N	A	N	A
<u>R6-Flange</u>	A	N	A	N	A
<u>R7-Cutoff</u>	A	N	A	N	A
_____	A	N	A	N	A
_____	A	N	A	N	A
_____	A	N	A	N	A

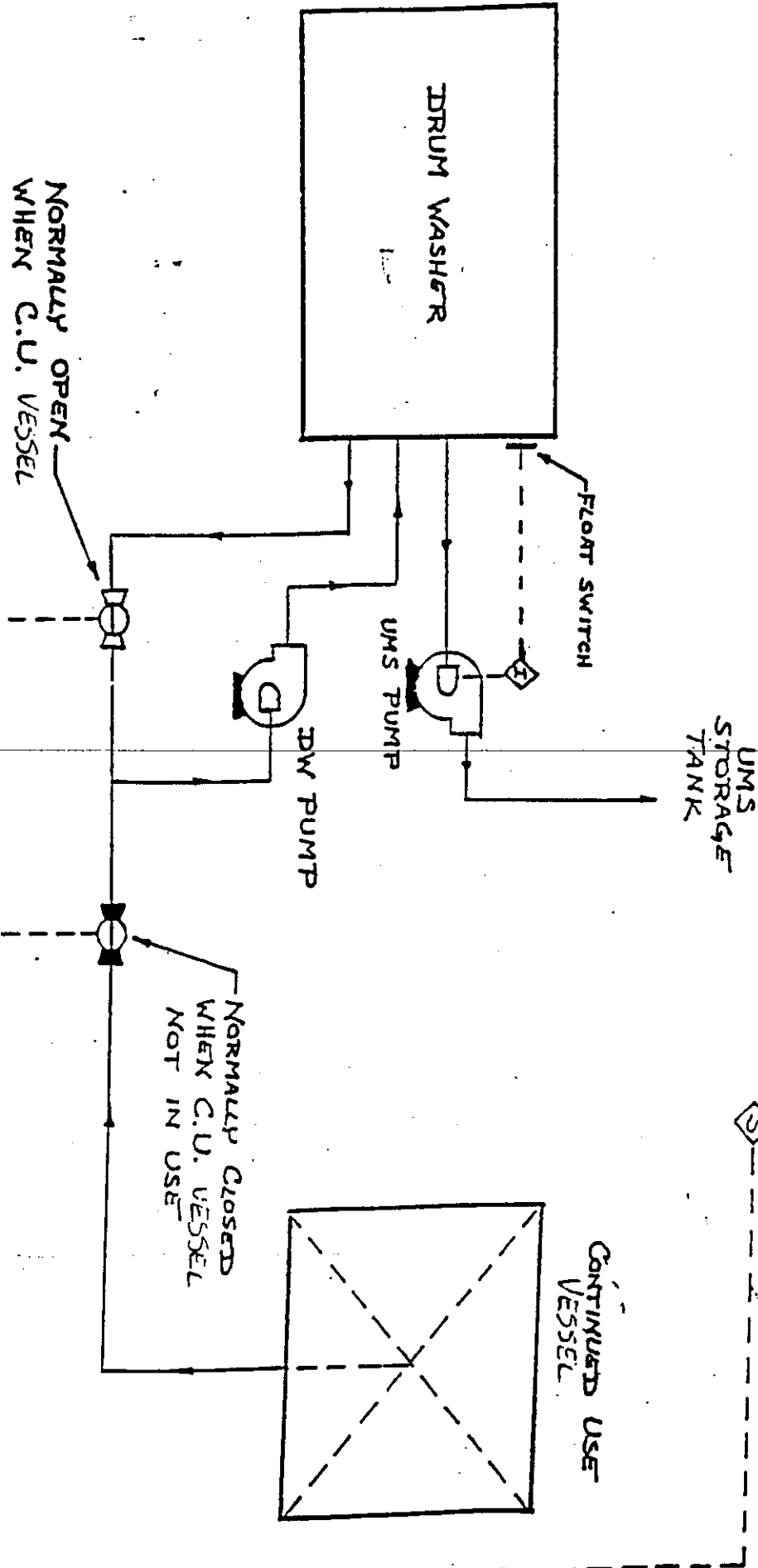
**Comments:** \_\_\_\_\_



**ATTACHMENT G**  
**RETURN AND FILL SCHEMATIC**

# CONTINUED USE

## R/E SCHEMATIC



**ATTACHMENT H**  
**EXAMPLE OF DAILY FACILITY LOG**

\*\* THIS COLUMN INDICATES EITHER THE OUTBOUND LOCATION OR THE MOVEMENT TO A NEW STORAGE AREA WITH THE SAME FACILITY.

81233-R3925  
 316301 TAMPA  
 DTNK01 SOLVENT DUMP  
 HANDLING CODE: S02

SAFETY-KLEEN CORP  
 FACILITY OPERATING LOG  
 PERIOD 06 TO DATE

PAGE 65  
 RUN DATE 06/17/00  
 LOGGED: 05-21-2000 THRU 06-17-2000

DATE RECD	CONTAINER COMMENTS	GENERATOR NAME	GENERATOR NUMBER	INBOUND MANIFEST	DATE SHIPPED	OUTBOUND MANIFEST	**OUTBOUND LOCATION	ACTUAL WT/VOL	CONT TYPE
060600	005130464934	SOUTHEASTERN REPLACEMENT S	0001770719	0002925366					
061200	005210466613	GENERAL CABLE CD	0000157678	04481				14.00	DM
061200	005210466625	GENERAL CABLE CD	0000157678	04481				15.00	DM
061200	005210466637	GENERAL CABLE CD	0000157678	04481				15.00	DM
061400	005210465573	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465585	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465597	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465608	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465611	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465623	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465635	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465647	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465639	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465662	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	005210465674	DAHRON AUTO INC	0000157134	04449				4.44	DM
061400	006100463704	FLORIDA DIESEL INJ	0002380484	0002925486				17.00	DM
061400	006100463716	FLORIDA DIESEL INJ	0002380484	0002925486				17.00	DM
061500	005270464131	NUAIR	0000156189	87763				16.00	DM
061500	005270464143	NUAIR	0000156189	87763				16.00	DM
061500	005060482084	HOME DEPOT #6327	0002380384	0002925486				16.00	DM
061500	005210466129	JIM GUINLAN CHEVY OED	0009027131	04797				17.00	DM

GROUP NUMBER 84382425 CONSOLIDATED CONTAINER  
 \* BK/DOT 0000060 COMBUSTIBLE LIQUID, N.O.S.

(PETROLEUM NAPHTHA) NA1993 PGIII  
 (ERG#128)

DM

+012600	001020470892	RINGHAVER EQUIPMENT CO.	0000772619	1440580	051900				
+012600	001020470939	RINGHAVER EQUIPMENT CO.	0000772619	1440580	051900			630	DM
+020200	001080466644	RINGHAVER EQUIPMENT CO.	0000772619	1517809	051900			15.00	DM
+041800	003260472713	AUTOWAY DODGE	0000772619	0002359249	051900			4.44	DM
+050300	004080499544	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			1.50	DM
+050300	004080499546	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499547	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499548	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499549	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499550	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499551	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499552	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499553	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499554	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499555	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499556	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499557	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499558	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499559	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004080499560	RINGHAVER EQUIPMENT CO.	0000772619	30791	051900			5.50	DM
+050300	004150457913	RINGHAVER EQUIPMENT CO.	0000772619	14826	051900			14.00	DM
+050500	004150457921	RINGHAVER EQUIPMENT CO.	0000772619	14826	051900			16.00	DM
+050500	004150457937	RINGHAVER EQUIPMENT CO.	0000772619	14826	051900			16.00	DM
+050500	004150457949	RINGHAVER EQUIPMENT CO.	0000772619	14826	051900			16.00	DM

GROUP NUMBER 237483350 CONSOLIDATED CONTAINER  
 \* BK/DOT 0000060 COMBUSTIBLE LIQUID, N.O.S.

(PETROLEUM NAPHTHA) NA1993 PGIII  
 (ERG#128)

DM

+010700	001100023395	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900				
+010700	001100023406	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			630	DM
+010700	001100023445	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM
+010700	001100023483	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM
+010700	001100023469	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM
+010700	001100023472	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM
+010700	001100023484	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM
+010700	001100023496	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM
+010700	001100023519	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM
+010700	001100023523	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM
+010700	001100023545	RINGHAVER EQUIPMENT CO.	0000772619	11114274	051900			16.00	DM