IMAGE QUALITY

AS YOU VIEW THE FOLLOWING DOCUMENT, PLEASE NOTE THAT PORTIONS OF THE ORIGINAL WERE OF POOR QUALITY

safety-kleen®

Certified Mail - Return Receipt Requested

May 29, 1990
EJJ 90-270

Mr. John Griffin
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Subject: Florida Service Centers
Nonhazardous Status of New Immersion Cleaner Formula

Dear Mr. Griffin,

This letter is to confirm, as you discussed with Sue Ryan on March 28, 1990, that the use of Safety-Kleen's new immersion cleaner (IC) formula does not result in a hazardous waste being generated. The existing formula contains chlorinated solvents and cresylic acid at levels which necessitate its regulation as a hazardous waste. It should be noted that these compounds are present in the existing formula at regulated levels prior to its use. The new formulation, a mixture of glycol-ether compounds, and a high flash aromatic hydrocarbon, provides a significant reduction in toxicity and environmental risk by eliminating the methylene chloride, cresylic acid and ortho-dichlorobenzene present in the existing forumula.

Analyses of the new IC have indicated that F-listed wastes and EP Toxic metals are not present in the used material at levels which would require its being regulated as a hazardous waste. In addition, it is not a characteristic waste using the criteria under 40 CFR 261.20 through 24. Copies of the analytical results and a product specification sheet are enclosed. Calculations to a) determine the appropriate number of samples to be analyzed, and b) confirm that a 90% confidence interval was achieved, were performed in accordance with SW 846 methods.

Safety-Kleen anticipates the new waste IC will be regulated as a hazardous waste under the new TCLP regulations (copy attached) and analyses necessary to determine the appropriate waste codes are currently in progress. The Company will submit revised Part A permit applications in accordance with 40 CFR 270.43 prior to the September 25, 1990 deadline. In addition, the Part B permit applications currently under review will be revised to include the new waste stream. Please advise us as to whether this is acceptable to the Department of

777 BIG TIMBER ROAD ELGIN, ILLINOIS 60123 PHONE 708/697-8460 FAX 708/697-4295

Environmental Regulation. A request for a modification to the Part B permits which have been issued will be submitted in accordance with 40 CFR 124.5.

You indicated during the March 28, 1990 telephone conversation that no additional facility permits (such as a solid waste permit) would be required to handle this waste. This was confirmed by Mr. John Reese, in a telephone conversation with Sue Ryan on May 15, 1990.

If you have any questions or require further information, please contact me on extension 2246.

Sincerely,

Ellen J. Jurczak, P.E.
Environmental Permits Manager

EJJ/as

cc: FL Branch Managers (3-079-01, 3-079-02, 3-097-01, 3-097-02, 3-130-01, 3-163-01, 3-163-02)
F. Stockbarger
P. Allen
M. Romero
J. Hartline
J. Reese, FDER, Solid Waste
U.S. EPA Region IV
Florida DER District Offices

Table 2.

Statistical Results For Round 2 Study of Waste Immersion Cleaner & Cold Parts Cleaner 699

Using the methods stipulated in SW 846, the number of statistically significant samples was determined to be six. In fact 16 samples were used.

Statistical Parameters	Flash Point (F)	EP Toxicity Testing Concentrations in milligrams per liter Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Mean	150	0.1	0.03	0.127	0.029	0.43	0.01	0.1	0.001
Standard Deviation of Sample	5.1	0.0	0.04	0.176	0.036	0.41	0.00	0.0	0.001
Sample Variance	26.3	0.0	0.00	0.031	0.001	0.17	0.00	0.0	0.000
Standard Error of the Mean	1.1	0.0	0.01	0.039	0.008	0.09	0.00	0.0	0.000
Lower Limit of 90% CI *	148.5	0.1	0.01	0.075	0.018	0.30	0.01	0.1	0.001
Upper Limit of 90% CI	151.6	0.1	0.04	0.179	0.039	0.55	0.01	0.1	0.002
Lower Limit of 95% CI	148.1	0.1	0.01	0.059	0.015	0.27	0.01	0.1	0.001
Upper Limit of 95% CI	152.0	0.1	0.04	0.195	0.043	0.58	0.01	0.1	0.002
EPA Threshold	140	5.0	100.0	1.0	5.0	5.0	0.2	1.0	5.0

All calculations were performed as per SW846 titled "USEPA Test Methods For Evaluating Solid Waste - Volume Two: Field Manual, Physical/Chemical Methods", dated September, 1986.

The upper limit of the CI is compared with the EPA threshold to determine if the sample contains the contaminant of concern at a hazardous level. This contaminant is not considered to be present at a hazardous level if the upper limit of the CI is less than the EPA threshold.

The EPA threshold limits are documented in 40 CFR 261.24.

No threshold limits or deminimus have been established for % halogenates.

* CI = confidence interval

** When a "less than" value was reported, that value was used for calculation purposes.

SAFETY-KLEEN CORPORATION
MATERIAL ACCEPTANCE SPECIFICATION
(Tentative)

DRAFT

Material: Immersion Cleaner &
Cold Parts Cleaner 699
Formula 195-80C

S-K Part No. 6861 Page 1 of 1

Original Date October 09, 1989

Revision Date January 24, 1990

Supersedes January 11, 1990

Written by _____

Approved by _____

SCOPE

The specification covers a single-phase liquid product consisting of aromatic hydrocarbon (A-150), a propylene glycol ether (DPM), a cyclic amine (NMP), an alkanolamine (MEA), oleic acid, water, BHT and dye. The product is designed to clean carburetors and metal parts.

REQUIREMENTS

DRAFT

	Typical Values	Control Values	Test Method
Appearance	Clear, medium brown liquid	Comparable to previously approved standards	SK 9914
Flash Point	151°F	145°F Min.	SK 9401
Specific Gravity, 60/60°F	0.952	0.947-0.957	SK 9903
COMPOSITION:			
Monoethanolamine (MEA)	5.198 Wt.%	4.5-6.5 Wt.%	SK 9208
Dipropylene Glycol Methyl Ether (DPM)	10.107 Wt.%	9.0-11.0 Wt.%	SK 9208
N-Methyl-2-Pyrrolidone (NMP)	17.534 Wt.%	15.5-19.5 Wt.%	SK 9208
Aromatic 150	49.984 Wt.%	48.0-52.0 Wt.%	SK 9208
Water	9.575 Wt.%	8.5-10.5 Wt.%	SK 9801
Oleic Acid	7.601 Wt.%	7.6-10.5 Wt.%	SK 9907
BHT	50 ppm*		---
Brown Dye	50 ppm*		---
Chlorinated Solvents	<0.5%	1.0% Max.	SK 9206

---

* Certify addition of this material. No testing required.

CONFIDENTIAL

Sent 3-15-90 hempstead

TEXACO

INDUSTRIAL HYGIENE, TOXICOLOGY, AND MATERIAL SAFETY DATA SHEET

NOTE: NO REPRESENTATION IS MADE AS TO THE ACCURACY OF THE INFORMATION HEREIN. SEE PAGE 7 FOR CONDITIONS UNDER WHICH DATA ARE FURNISHED.

Trade Name and Synonyms
75716 AROMATICS A-150

Manufacturer's Name
Texaco Chemical Company

Emergency Telephone No.
(409) 722-8381

Address
3040 Post Oak Blvd. P.O. Box 27707 Houston, TX 77056

Chemical Name and/or Family or Description
Aromatic Hydrocarbon

THIS PRODUCT IS CLASSIFIED AS:

_____ CARCINOGENIC BY OSHA, IARC, OR NTP X NOT CARCINOGENIC

WARNING STATEMENT:

WARNING! CAUSES IRRITATION TO EYES
MAY CAUSE IRRITATION TO SKIN
COMBUSTIBLE

OCCUPATIONAL CONTROL PROCEDURES

Protective Equipment (Type)

Eyes: Chemical type goggles must be worn. Do not wear contact lenses.

Skin: Protective clothing such as uniforms, coveralls or lab coats should be worn. Launder or dry clean when soiled. Gloves resistant to chemicals and petroleum distillates required.

Inhalation: Supplied air respiratory protection for cleaning large spills or upon entry into tanks, vessels, or other confined spaces.

Ventilation: Local exhaust ventilation recommended

Permissible Concentrations:

Air: None established

EMERGENCY AND FIRST AID PROCEDURES

First Aid

Eyes: Flush thoroughly with water for at least fifteen minutes. Get medical attention.

Skin: Wash exposed areas with soap and water.

Ingestion: Do NOT induce vomiting. Aspiration may cause chemical pneumonia.

Inhalation: Should symptoms noted under physiological effects occur, remove to fresh air. If not breathing, apply artificial respiration.

Other Instructions: None.

N.D. - Not Determined N.A. - Not Applicable
< - Less Than > - Greater Than

PHYSIOLOGICAL EFFECTS:

Code No. 73716

Effects of Exposure

Acute:

Eyes: Believed to cause moderate eye irritation.

Skin: Believed to be moderately irritating; Believed to cause redness, edema or drying of the skin.

Respiratory System: May cause irritation of upper respiratory tract. Symptoms include headache, drowsiness, weakness and dizziness.

Chronic: N.D.

Other: -

Sensitization Properties:

Skin: Yes ___ No ___ Unknown X Respiratory: Yes ___ No ___ Unknown X

Median Lethal Dose (LD_{50} LC_{50})(Species)

Oral: Believed to be > 5 g/kg (rat); practically non-toxic

Inhalation: N.D.

Dermal: Believed to be > 3 g/kg (rabbit); practically non-toxic

Other: N. D.

Irritation Index, Estimation of Irritation (Species)

Skin: Believed to be > 3.0-5.0/8.0 (rabbit); moderately irritating

Eyes: Believed to be > 25-50/110 (rabbit); moderately irritating

Symptoms of Exposure: See Additional Comments pg. 6

FIRE PROTECTION INFORMATION

Ignition Temp. °F. N.D. Flash Point °F. (Method) 145° F

Flammable Limits (%) Lower N.D. Upper N.D.

Products Evolved When Subjected to Heat or Combustion:

Carbon monoxide and carbon dioxide may be formed on burning in limited air supply.

Recommended Fire Extinguishing Agents And Special Procedures:

According to the National Fire Protection Guide 49, combustible liquid fires may be extinguished by water spray, dry chemical, foam or carbon dioxide. Use water to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.

Unusual or Explosive Hazards:

None.

N.D. - Not Determined N.A. - Not Applicable
< - Less Than > - Greater Than

ENVIRONMENTAL PROTECTION

Code No. 75716

Waste Disposal Method:
Under RCRA, it is the responsibility of the user of products to determine, at the time of disposal, whether product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixture, processes, etc. may render the resulting material hazardous. (See Remarks for Waste Classification.)

Procedures in Case of Breakage or Leakage: (Transportation Spills Call CHEMTREC (800) 424-9300)
Avoid contact with eyes. Contain spill if possible. Wipe up or absorb on suitable material and shovel up.

Remarks:
Waste Classification: Product has been evaluated for RCRA characteristics and does not meet criteria of a hazardous waste if discarded in its purchased form.

PRECAUTIONS

WARNING! CAUSES IRRITATION TO EYES
MAY CAUSE IRRITATION TO SKIN
COMBUSTIBLE

Avoid contact with eyes and prolonged contact with skin.
Keep away from heat and flame.
Use only in well-ventilated locations.
Avoid prolonged breathing of mist or vapor.
Keep head away from container when opening or dispensing.
Wash thoroughly after handling.

Requirements for Transportation, Handling and Storage:
Store away from heat and open flame. Placard required only when material is contained in packaging or container that exceeds 110 gallons, or in tank car or tank truck. Transport, handle, and store in accordance with OSHA Regulation 1910.106 and applicable DOT regulations.

DOT Proper Shipping Name: See additional comments
DOT Hazard Class (if applicable): Combustible liquid UN 1255 RQ

CHEMICAL AND PHYSICAL PROPERTIES

Boiling Point (°F) 355-415 Vapor Pressure < 5mm @ 100 F (mmHg)

Specific Gravity 0.9100 (H_2O=1) Vapor Density 4.0 (Air=1)

Appearance and Odor water white, aromatic odor

pH of undiluted product N.A. Solubility insol.

Percent Volatile by Volume 100 Evaporation 0.01 ( )=1

Viscosity N.D. Other -

Hazardous Polymerizations _____ Occur X Do not occur

The Material Reacts Violently With: (If others is checked below, see additional comments on page 6 for futher details)

Air	Water	Heat	Strong Oxidizers	Others	None of These
			X		

N.D. - Not Determined N.A. - Not Applicable
< - Less Than > - Greater Than

COMPOSITION

Code No. 75716

Chemical/Common Name	CAS No.	Exposure Limit	Range in %
*Naphthalene	91203	10ppm(50mg/m3) ACGIH 10ppm(50mg/m3) OSHA	4.00 - 10.99
Heavy aromatic solvent petroleum naphtha	64742945	5mg/m3 ACGIH (MIST) 5mg/m3 OSHA (MIST) 10mg/m3 STEL (MIST)	80.00 - 94.99

*Hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.

SARA TITLE III

I. Title III Section 302/304 Extremely Hazardous Substance

Component	CAS No.	%	RQ (Lbs)	TPQ (Lbs)
NONE				

II. CERCLA Section 102(a) Hazardous Substance

Component	CAS No.	%	RQ (Lbs)
Naphthalene	91203	4.0-10.99	100

III. Title III Section 311 Hazard Categorization

Acute	Chronic	Fire	Pressure	Reactive	Not Applicable
X	X	X			

IV. Title III Section 313 Toxic Chemicals

Component	CAS No.	%
Naphthalene	91203	4.0-10.99

PRODUCT SHIPPING LABEL

Code No. 75716

75716 AROMATICS A-150

WARNING! CAUSES IRRITATION TO EYES
MAY CAUSE IRRITATION TO SKIN
COMBUSTIBLE

Avoid contact with eyes and prolonged contact with skin.
Keep away from heat and flame.
Use only in well-ventilated locations.
Avoid prolonged breathing of mist or vapor.
Keep head away from container when opening or dispensing.
Wash thoroughly after handling.

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
Wash skin with soap and plenty of water.
If swallowed, DO NOT induce vomiting.
Call a doctor immmediately.

In case of fire use water spray, foam, dry chemical or CO2.

Chemical/Common Name	CAS No.	Range in %
*Naphthalene	91203	4.00 - 10.99
Heavy aromatic solvent petroleum naphtha	64742945	80.00 - 94.99

*Hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.

HMIS

Health : 2 Reactivity : 0
Flammability: 2 Special : -

DOT Proper Shipping Name: See additional comments
DOT Hazardous Class : Combustible liquid UN 1255 RQ

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

HEALTH EMERGENCY TELEPHONE: (914) 831-3400 (EXT. 204)

Texaco
2000 Westchester Avenue
White Plains, New York 10650

For Additional Information Concerning:

Fuels/Lubricants/Antifreezes
call (914) 831-3400 (EXT.204)
Chemicals
call (512) 459-6543
Transportation Spills
call CHEMTREC (800) 424-9300

ADDITIONAL COMMENTS	Code No. 75716

STATE OF MICHIGAN CRITICAL MATERIALS ACT (REVISED 1988)
No critical materials present

This product contains naphthalene which has been shown to cause cataracts in laboratory animals upon systemic exposure.
DOT Proper Shipping Name:Petroleum naphtha (contains naphthalene)

To determine applicability or effect of any law or regulation with respect to the product, users should consult his legal advisor or the appropriate government agency. Texaco does not undertake to furnish advice on such matters.

By F. E. Bentley Title Coordinator of Product Safety

Date 03-31-89 ☐ New ☒ Revised, Supersedes 10-10-88

N.D. - Not Determined N.A. - Not Applicable

26. U.S. EPA, "Estimates of Waste Generation by the Pulp and Paper Industry", August 12, 1987.
27. U.S. EPA, "Estimates of Waste Generation by the Synthetic Fibers Industry", November 18, 1987.
28. U.S. EPA, "Estimates of Waste Generation by Textile Mills", December 15, 1987.
29. U.S. EPA, "Synthetic Rubber Industry", November 1987.
30. U.S. EPA, "Wastewater Treatment Profiles for Industrial Sectors Impacted by Proposed Toxicity Characteristic", August 19, 1988.
31. U.S. EPA, "Wastewater Treatment Profiles for Industrial Sectors Impacted by Proposed Toxicity Characteristic", August 24, 1988.
32. U.S. EPA, "Liner Location Risk and Cost Analysis Model, Phase II", Draft Report, 1986.
33. U.S. EPA, "Composition and Management of Used Oil Generated in the United States", September 1984.
34. U.S. EPA, "Risk Assessment of Proposed Waste Oil Standards for the Management of Used Oil", August 1985.

List of Subjects in 40 CFR Parts 261, 264, 265, 268, 271, and 302

Administrative practice and procedure, Air pollution control, Chemicals, Confidential business information, Hazardous materials transportation, Hazardous substances, Hazardous waste, Indian lands, Intergovernmental relations, Natural resources, Nuclear materials, Penalties, Pesticides and pests, Radioactive materials, Recycling, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply, Waste treatment and disposal.

Dated: March 5, 1990.

William K. Reilly,

Administrator.

For the reasons set out in the preamble, Chapter I of Title 40 of the Code of Federal Regulations is amended as follows:

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, and 6922.

2. Section 261.4 is amended by revising paragraphs (b)(6)(i) introductory text, and (b)(9) and by adding paragraph (b)(10) to read as follows:

§ 261.4 Exclusions.

* * * * *

(b) * * *

(6)(i) Wastes which fail the test for the Toxicity Characteristic because chromium is present or are listed in subpart D due to the presence of chromium, which do not fail the test for the Toxicity Characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:

* * * * *

(9) Solid waste which consists of discarded wood or wood products which fails the test for the Toxicity Characteristic solely for arsenic and which is not a hazardous waste for any other reason or reasons, if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.

(10) Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of § 261.24 and are subject to the corrective action regulations under part 280 of this chapter.

3. Section 261.8 is added to subpart A to read as follows:

§ 261.8 PCB Wastes Regulated Under Toxic Substance Control Act

The disposal of PCB-containing dielectric fluid and electric equipment containing such fluid authorized for use and regulated under part 761 of this chapter and that are hazardous only because they fail the test for the Toxicity Characteristic (Hazardous Waste Codes D018 through D043 only) are exempt from regulation under parts 261 through 265, and parts 268, 270, and 124 of this chapter, and the notification requirements of section 3010 of RCRA.

4. Section 261.24 is revised to read as follows:

§ 261.24 Toxicity characteristic.

(a) A solid waste exhibits the characteristic of toxicity if, using the test methods described in Appendix II or equivalent methods approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21, the extract from a representative sample of the waste contains any of the contaminants listed in Table 1 at the concentration equal to or greater than the respective value given in that Table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Appendix II, is considered to be the extract for the purpose of this section.

(b) A solid waste that exhibits the characteristic of toxicity, but is not listed as a hazardous waste in subpart D, has the EPA Hazardous Waste Number specified in Table 1 which corresponds to the toxic contaminant causing it to be hazardous.

TABLE 1.—MAXIMUM CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC

EPA HW No.[1]	Contaminant	CAS No.[2]	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride.	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0.
D023	o-Cresol	95-48-7	[4] 200.0
D024	m-Cresol	108-39-4	[4] 200.0
D025	p-Cresol	106-44-5	[4] 200.0
D026	Cresol		[4] 200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene.	106-46-7	7.5
D028	1,2-Dichloroethane.	107-06-2	0.5
D029	1,1-Dichloroethylene.	75-35-4	0.7
D030	2,4-Dinitrotoluene.	121-14-2	[3] 0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its hydroxide).	76-44-8	0.008
D032	Hexachlorobenzene.	118-74-1	[3] 0.13
D033	Hexachlorobutadiene.	87-68-3	0.5
D034	Hexachloroethane.	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone.	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentrachlorophenol.	87-86-5	100.0
D038	Pyridine	110-86-1	[3] 5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene.	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene.	79-01-6	0.5
D041	2,4,5-Trichlorophenol.	95-95-4	400.0
D042	2,4,6-Trichlorophenol.	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

[1] Hazardous waste number.
[2] Chemical abstracts service number.
[3] Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.
[4] If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.