



SFK ABQ  
Recd.

Certified Mail-Return Receipt Requested

April 9, 1993

Ed Horst  
New Mexico Environment Department  
Hazardous & Radioactive Materials Bureau  
PO BOX 26110  
Santa Fe, New Mexico 87502

Subject: Safety-Kleen Corp. (7-008-01)  
2720 Girard NE  
Albuquerque, New Mexico 87107

Dear Sir or Madam:

It is our desire to update your files for our facility. Under terms of U.S. EPA Regulations 40 CFR 264, Safety-Kleen Corp., must make arrangements to familiarize local authorities with the layout of the facility, places where facility personnel work, entrances to the facility and possible evacuation routes. Safety-Kleen has designated your department as the primary emergency authority except during fire-related emergencies.

As part of this emergency information, enclosed are copies of the Material Safety Data Sheets on solvents that are located at our facility: mineral spirits, carburetor cleaner, lacquer thinner, and dry cleaning products. These documents describe the properties and associated hazards of the materials.

A complete copy of our facilities Contingency plan is on file at all times. I would like to meet with you or a representative to review this information. Our plan lists emergency procedures and provided information on the location of chemicals and their related hazards. If you would like a copy of the plan prior to our meeting, I'd be happy to send you one.

Please contact me at your earliest convenience to set up a meeting. If you have any questions please contact me at (505) 884-2277.

Sincerely,

Ron Stephenson  
Branch Manager

RS/ao

Enclosures

*Not signed and not  
considered an official  
copy. Marc Sidis*

EMERGENCY INFORMATION  
ALBUQUERQUE, NEW MEXICO (7-008-01)

04-09-93

A. FACILITY EMERGENCY COORDINATOR - ALTERNATE COORDINATORS

RON STEPHENSON 135 MEADOW CREEK RD. PO BOX 2740 EDGEWOOD, NM 87015	SCOTT GARISS 7420 VICKREY DR. NE ALBUQ., NM 87109	GREG BEALL 9900 SPAIN NE APT. S1101 ALBUQ., NM 87111
TELEPHONE:		
OFFICE: 505-884-2277	505-884-2277	505-884-2277
HOME: 505-281-7792	505-821-6305	505-299-6747
MOBILE: 505-764-3809	PAGER: 505-766-4288	PAGER: 505-843-5495

B. EMERGENCY NOTIFICATION PHONE NUMBERS

a. INTERNAL

Safety Kleen Environmental Affairs Department  
24 HOUR EMERGENCY NUMBER: 708-888-4660

b. EXTERNAL

1. D.O.T. National Response Center  
24 HOUR EMERGENCY NUMBER: 1-900-424-8802
2. New Mexico Health and Environmental Department  
Environmental Improvement Division  
Hazardous & Radioactive Waste Bureau  
24 HOUR EMERGENCY NUMBER: 505-827-9329

C. EMERGENCY TEAM TO BE NOTIFIED

UNIT	TELEPHONE NUMBERS
a. Albuq. Fire Department (Responding Station #8) 4201 Menaul NE	911 or (Non Emer. 505-243-6601) 911 or (Non Emer. 505-888-8100)
b. Albuq. Police Department	911 or (Non Emer. 505-768-1986)
c. Presbyterian Hospital	505-841-1111 or (Non Emer. 505-841-1234)
d. Albuq. Industrial Medicine	505-842-5151
e. Rinchem	505-345-3655 or 505-883-4242 24 HOUR (Central Security) 505-766-0939 24 HOUR (Pager Number for Gary Michaelson)
f. Poison Control Center	505-843-2551
g. INTERNAL (BRANCH) PAGING SYSTEM	INSTRUCTIONS: PUSH INTERCOM BUTTON (above Conference button) THEN:  6 for Outside speakers 10 MANAGERS OFFICE 11 B.I.M.'s OFFICE 12 SALES REPS ROOM 13 FRS SECRETARY 14 BRANCH SECRETARY



CORPORATE POLICY

DISASTER AND FIRE PLAN

I. OBJECTIVE:

The objective of this plan is to prepare the Center for a disaster by having the proper equipment and procedures in place to prevent injuries and property losses. The plan is designed to keep our workers thinking in terms of prevention rather than reaction.

If a fire or disaster occurs, the prearranged procedures will eliminate much of the confusion. The workers at the Center must be instructed in their responsibilities and retrained on an annual basis. This training in prevention is important and all training must be documented and kept for inspection.

II. DISASTER AND FIRE BRIEFING:

List the employees, date of last instruction or refresher training and emergency job function;

1. Ron Stephenson	04-12-93	EMERGENCY COORDINATOR Notify Environmental Affairs Dept. Notify Emergency Agencies
2. Scott Gariss	04-12-93	ALTERNATE EMERGENCY COORDINATOR Supervise Evacuation Apply First Aide
3. Greg Beall	04-12-93	ALTERNATE EMERGENCY COORDINATOR Spill Clean up Coordinator- Retain, contain or slow the flow
4. Adrienne Osborne	04-12-93	Open gate, shut off electricity Secure building
5. Jayne Saavedra	04-12-93	Notify Neighbors Apply First Aide
6. Bruce Cain	04-12-93	Fire Extinguishers
7. Mike Hotchkiss	04-12-93	Fire Extinguishers
8. Steve Sparks	04-12-93	Gather Absorbents
9. Steve Stevens	04-12-93	Gather Absorbents
10. Larry Defeo	04-12-93	Gather Drums & shovels

**EMERGENCY CONTACT**

EMERGENCY COORDINATOR  
 RON STEPHENSON - BR. MGR  
 PHONE # HOME- 281-7792  
 MOBILE- 764-3809

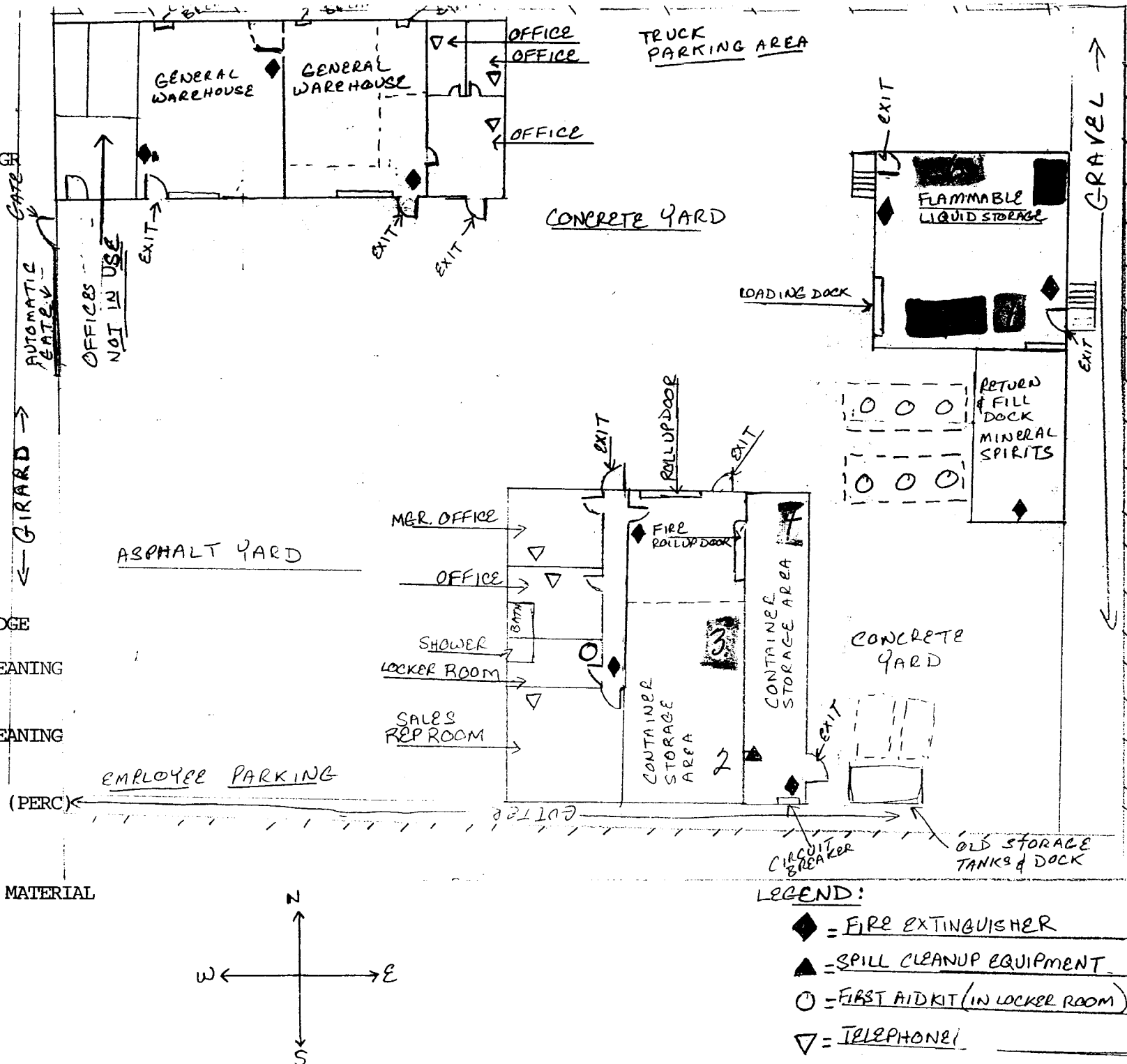
SCOTT GARISS - BFM  
 HOME - 821-6305  
 PAGER - 766-4288

GREG BEALL - BIM  
 HOME - 299-6747  
 PAGER - 843-5495

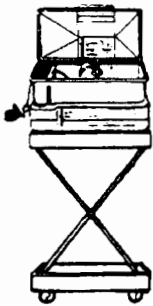
**LOCATION OF HAZARDOUS WASTE ON SITE**

1. MINERAL SPIRITS SLUDGE
2. CLEAN - COMPOUND CLEANING LIQUID
3. DIRTY - COMPOUND CLEANING LIQUID
4. TETRACHLOROETHYLENE (PERC)
5. LACQUER THINNER
6. WASTE PAINT RELATED MATERIAL

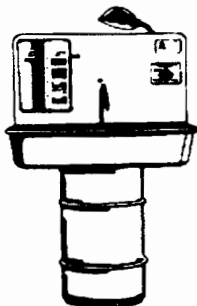
 FRS DRUM STORAGE



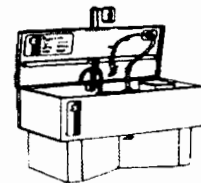
- LEGEND:**
- ◆ = FIRE EXTINGUISHER
  - ▲ = SPILL CLEANUP EQUIPMENT
  - = FIRST AID KIT (IN LOCKER ROOM)
  - ▽ = TELEPHONE



*Model 14 & 60*



*Model 16 & 30*



*Model 34 & 44, COMS, and  
other*

# *Material Safety Data Sheet*

## *Safety-Kleen 105 Solvent*

### *Part Number 6617*

Dear Safety-Kleen Customer,

At Safety-Kleen Corp., supplying material safety data sheets is more than a requirement to us; it is a commitment to our customers and their employees.

The material safety data sheet is a valuable source of product information and should be a part of your hazard communication program. With this in mind, we are providing you, our valued customer, this important product information.

Thank you for showing your concern for the environment by choosing Safety-Kleen Corp. products and services.

Sincerely,

Your friends at Safety-Kleen Corp.



# SAFETY-KLEEN 105 SOLVENT

## MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

### SECTION 1 -- PRODUCT AND PREPARATION INFORMATION

#### PRODUCT INFORMATION

**IDENTITY (TRADE NAME):** SAFETY-KLEEN 105 SOLVENT  
**SYNONYMS:** Mineral Spirits, Stoddard Solvent, Petroleum distillates, Petroleum naphtha  
**SK PART NUMBER(S):** 6617  
**FAMILY/CHEMICAL NAME:** Aliphatic hydrocarbon  
**PRODUCT USE:** Cleaning and degreasing metal parts.  
If this product is used in combination with other chemicals, refer to the Material Safety Data Sheets for those chemicals.

#### 24-HOUR EMERGENCY TELEPHONE

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

#### MEDICAL:

1-800-752-7869 (U.S.A.)  
1-312-942-5969 (CANADA)  
RUSH POISON CONTROL CENTER  
CHICAGO, ILLINOIS, U.S.A.

#### TRANSPORTATION:

1-708-888-4660 (U.S.A.)  
SAFETY-KLEEN ENVIRONMENT,  
HEALTH AND SAFETY DEPARTMENT  
1-613-996-6666 (CANADA)  
CANUTEC

**MANUFACTURER/SUPPLIER:** Safety-Kleen Corp. - 777 Big Timber Road - Elgin, IL, U.S.A. 60123  
Telephone number: 1-800-669-5840  
Safety-Kleen Canada Inc. - 3090 Blvd. Le Carrefour - Suite 300 - Chomedey Laval  
Quebec, Canada H7T 2J7 Telephone number: 1-800-363-2260

#### PREPARATION INFORMATION

**MSDS FORM NO.:** 82310  
**REVISION DATE:** January 15, 1992  
**ORIGINAL ISSUE DATE:** July 20, 1989  
**SUPERSEDES:** December 14, 1990  
**PREPARED BY:** Product MSDS Coordinator  
**APPROVED BY:** MSDS Task Force  
**TELEPHONE NUMBER:** For Product Technical Information Call 1-312-694-2700 (U.S.A.);  
1-800-363-2260 (Canada)

### SECTION 2 -- HAZARDOUS COMPONENTS

NAME	SYNONYM	CAS NO.	WT%	OSHA PEL		ACGIH TLV		OTHER DATA	
				TWA (ppm)	STEL (ppm)	TWA (ppm)	STEL (ppm)	LD <sup>a</sup>	LC
Parts Washer Solvent (consists predominantly of C9-C13 saturated hydrocarbons)	Mineral Spirits	64741-41-9	85.0	100 <sup>c</sup>	N.Av.	100 <sup>c</sup>	N.Av.	>5000 <sup>c</sup>	>5500 <sup>b,c</sup> mg/m <sup>3</sup> /4 hours
C8 <sup>+</sup> Aromatics	N.Av.	mixture	12.0	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
*Xylene <sup>c</sup>	Dimethylbenzene	1330-20-7	1.0	100	150	100	150	4300	5000 <sup>b</sup> ppm/4 hours
*Ethylbenzene <sup>c</sup>	Phenylethane	100-41-4	0.5	100	125	100	125	3500	4000 <sup>d</sup> ppm/4 hours

# SAFETY-KLEEN 105 SOLVENT

## MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

*Toluene	Methylbenzene	108-88-3	0.5	100	150	100	150	5000	4000 <sup>d</sup> ppm/4 hours
*1,1,1-trichloroethane	Methyl chloroform	71-55-6	0-0.5**	350	450	350	450	10300	18000 <sup>b</sup> ppm/4 hours
*Perchloroethylene	Tetrachloro-ethylene	127-18-4	0-0.5**	25	N.Av.	50	200	2629	34200 <sup>b</sup> mg/m <sup>3</sup> /8 hours

N.Av. = Not Available

<sup>a</sup>Oral-Rat LD50 (mg/kg)

\*See Section 9-Other Regulatory Information

<sup>b</sup>Inhalation-Rat LC50

\*\*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>c</sup>For Stoddard Solvent

<sup>d</sup>Inhalation-Rat LCLo

<sup>e</sup>Constituent of C8<sup>+</sup> Aromatics

### SECTION 3 -- EMERGENCY AND FIRST AID PROCEDURES

- EYES:** For direct contact, flush eyes with water for 15 minutes lifting upper and lower lids occasionally. If irritation or redness from exposure to vapor or mist develops, move victim away from exposure into fresh air. Consult physician if irritation or pain persists.
- SKIN:** Remove contaminated clothing and shoes. Wash skin twice with soap and water. Consult physician if irritation or pain persists.
- INHALATION: (Breathing)** Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.
- INGESTION: (Swallowing)** Seek immediate medical attention. Do NOT induce vomiting. If spontaneous vomiting occurs, keep head below hips to avoid aspiration (into lungs).
- SPECIAL NOTE TO PHYSICIAN:** Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Contact Rush Poison Control Center (see Section 1) for additional medical information.

### SECTION 4 -- HEALTH HAZARD DATA AND TOXICOLOGICAL PROPERTIES

**PRIMARY ROUTES OF EXPOSURE:** Eye and skin contact; inhalation, ingestion.

**EXPOSURE LIMITS:** See Section 2.

#### SIGNS AND SYMPTOMS OF EXPOSURE

**ACUTE: Eyes:** Contact with liquid or exposure to vapor may cause mild to moderate irritation with stinging, tearing or redness.

**Skin:** Contact tends to remove skin oils, possibly leading to irritation and dermatitis. No significant skin absorption hazard.

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

**Ingestion (Swallowing):** Low order of acute oral toxicity. May cause irritation of the throat, nausea, vomiting, myocardial injury with arrhythmias and symptoms of central nervous system depression as listed for ACUTE Inhalation. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

**CHRONIC:** Prolonged or repeated skin contact may cause drying and cracking or dermatitis.



# SAFETY-KLEEN 105 SOLVENT

## MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

### **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:**

Individuals with pre-existing lung, cardiac, central nervous system or skin disorders may have increased susceptibility to the effects of exposure.

### **CARCINOGENICITY:**

IARC classifies chemicals by their carcinogenic risk, including agents that are known, probable or possible carcinogens. NTP classifies chemicals as either known carcinogens or for which there is a limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Perchloroethylene is listed by IARC as a possible carcinogen. Perchloroethylene is classified by NTP as having limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Also see Section 9.

### **OTHER POTENTIAL HEALTH HAZARDS:**

The following information is required by Canadian WHMIS regulations. Irritancy is covered in Signs and Symptoms of Exposure in Section 4. There is no known human sensitization or toxicologically synergistic product associated with this material. Xylene and toluene have demonstrated experimental effects for reproductive toxicity, mutagenicity and teratogenicity. Studies indicate ethylbenzene and 1,1,1-trichloroethane are experimental teratogens.

## SECTION 5 -- FIRE AND EXPLOSION HAZARD DATA

### **EMERGENCY RESPONSE GUIDE NUMBER:**

27  
Reference Emergency Response Guidebook (DOT 5800.5)

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

Vapor explosion hazard may occur indoors, outdoors or in sewers. Decomposition and combustion products may be toxic. Heated containers may rupture, explode or be thrown into the air. Vapors are heavier than air and may travel great distances to ignition source and flash back. Not sensitive to mechanical impact. Material may be sensitive to static discharge, which could result in fire or explosion.

### **FIRE FIGHTING PROCEDURES:**

NFPA 704 Rating 0-2-0 (Health-Fire-Reactivity)  
Keep storage containers cool with water spray. Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection.

### **EXTINGUISHING MEDIA:**

Carbon dioxide, foam, dry chemical or water spray.

### **CONDITIONS OF FLAMMABILITY:**

Heat, sparks or flame.

### **FLASH POINT:**

105°F (40°C) SETA

### **AUTOIGNITION TEMPERATURE:**

473°F (245°C)

### **FLAMMABLE LIMITS IN AIR:**

**LOWER:** 0.7 Vol. %                      **UPPER:** 6.0 Vol. %

### **HAZARDOUS COMBUSTION PRODUCTS:**

Burning may produce carbon monoxide.

## SECTION 6 -- REACTIVITY DATA

### **STABILITY:**

Stable under normal temperatures and pressures, and not reactive with water.

### **INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID):**

Acids, oxidizing agents or chlorine may cause a violent reaction. Avoid heat, sparks or flame.

### **HAZARDOUS POLYMERIZATION:**

Not known to occur under normal temperatures and pressures.

# SAFETY-KLEEN 105 SOLVENT

## MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

### HAZARDOUS DECOMPOSITION PRODUCTS:

None under normal temperatures and pressures.

## SECTION 7 -- PREVENTIVE MEASURES

### PRECAUTIONS FOR SAFE USE AND HANDLING

#### HANDLING PRECAUTIONS:

Keep away from heat, sparks or flame. Metal containers, including tank cars and trucks, should be grounded and bonded when material is transferred. Avoid contact with eyes, skin, clothing or shoes. Use in well ventilated area and avoid breathing vapor or mist.

#### PERSONAL HYGIENE:

Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products. Clean contaminated clothing, shoes and protective equipment before reuse. Discard contaminated clothing, shoes or protective equipment if they cannot be thoroughly cleaned.

#### SHIPPING AND STORING PRECAUTIONS:

Keep container tightly closed when not in use and during transport. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Empty product containers may contain product residue. See Section 9 for Packing Group information.

#### SPILL PROCEDURES:

Remove all ignition sources. Stop leak if you can do it without risk. Wear protective equipment specified in Section 7, CONTROL MEASURES. Ventilate area and avoid breathing vapor or mist. Water spray may reduce vapor; but it may not prevent ignition in closed spaces. For large spills, isolate area and deny entry; dike far ahead of liquid spill for later disposal. Contain away from surface waters and sewers. If possible, contain as a liquid for possible re-refining or sorb with compatible sorbent material and shovel with a non-sparking tool into closable container for disposal. See Emergency Response Guidebook (DOT P 5800.5) Guide Number 27 for more information.

#### WASTE DISPOSAL METHODS:

Dispose in accordance with federal, state, provincial and local regulations. Contact Safety-Kleen regarding recycling or proper disposal.

### CONTROL MEASURES

#### EYE PROTECTION:

Where there is likelihood of eye contact, wear chemical goggles and faceshield. Do NOT wear contact lenses.

#### PROTECTIVE GLOVES:

Use Nitrile, Viton<sup>®</sup> or equivalent gloves to prevent contact with skin. Do NOT use Butyl rubber, natural rubber or equivalent gloves.

#### RESPIRATORY PROTECTION:

Use NIOSH/MSHA-approved respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limit. A self-contained breathing apparatus (SCBA) and full protective equipment is required for large spills or fire emergencies. Selection and use of respiratory protective equipment should be in accordance in the U.S.A. with OSHA General Industry Standard 29 CFR 1910.134 and in Canada with CSA Standard Z94.4-M1982.

#### ENGINEERING CONTROLS:

Provide process enclosure or local ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where explosive mixtures may be present, systems safe for such locations should be used.

#### OTHER PROTECTIVE EQUIPMENT:

Where spills and splashes are possible, wear appropriate solvent-resistant boots, apron or other protective clothing. Clean water should be available in work areas for flushing the eye and skin.

## SECTION 8 -- PHYSICAL DATA

#### PHYSICAL STATE, APPEARANCE AND ODOR:

Liquid, clear, green with characteristic hydrocarbon odor

#### ODOR THRESHOLD:

Not available

# SAFETY-KLEEN 105 SOLVENT

## MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

<b>SPECIFIC GRAVITY:</b>	0.77 to 0.80 at 60/60°F (16/16°C) (water = 1)
<b>DENSITY:</b>	6.4 to 6.7 lbs/gal
<b>VAPOR DENSITY:</b>	4.9 (air = 1)
<b>VAPOR PRESSURE:</b>	2 mm Hg at 68°F (20°C)
<b>BOILING POINT:</b>	304 to 435°F (151 to 224°C)
<b>FREEZING POINT:</b>	Not available
<b>pH:</b>	7 (water extraction)
<b>VOLATILE ORGANIC COMPOUNDS: (US EPA DEFINITION)</b>	100 WT%; 6.4 to 6.7 lbs/gal; 770 to 800 g/l
<b>EVAPORATION RATE:</b>	0.1 (butyl acetate = 1)
<b>SOLUBILITY IN WATER:</b>	Slight
<b>COEFFICIENT OF WATER/OIL DISTRIBUTION:</b>	Not available
<b>MOLECULAR WEIGHT:</b>	142 (approximately)

### SECTION 9 -- OTHER REGULATORY INFORMATION

#### TRANSPORTATION INFORMATION

<b>DOT PROPER SHIPPING NAME:</b>	COMBUSTIBLE LIQUID, N.O.S. (Mineral Spirits)
<b>DOT CLASS:</b>	Combustible Liquid
<b>DOT ID NUMBER:</b>	NA1993, PGIII
<b>TDG CLASSIFICATION:</b>	Naphtha, solvent, Class 3.3, UN1256, P.G. III

**SARA TITLE III:** Product contains toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section 2 of this Material Safety Data Sheet.

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

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

**WHMIS CLASSIFICATION:** Class B3, Combustible Liquids;  
Class D2A, Infectious and Toxic Materials, Other Toxic Effects, Very Toxic Material;  
Class D2B, Infectious and Toxic Materials, Other Toxic Effects, Toxic Material

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 expressed 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 material as supplied to the user.



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Revision 1/92; Form No. 82310



*Model 110 & 5 gal bucket*

# *Material Safety Data Sheet*

## *Immersion Cleaner and Cold Parts Cleaner*

*Part Numbers 699, 6861, 9699*

Dear Safety-Kleen Customer,

At Safety-Kleen Corp., supplying material safety data sheets is more than a requirement to us; it is a commitment to our customers and their employees.

The material safety data sheet is a valuable source of product information and should be a part of your hazard communication program. With this in mind, we are providing you, our valued customer, this important product information.

Thank you for showing your concern for the environment by choosing Safety-Kleen Corp. products and services.

Sincerely,

Your friends at Safety-Kleen Corp.



**IMMERSION CLEANER AND COLD PARTS CLEANER**  
**MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA**

**SECTION 1 -- PRODUCT AND PREPARATION INFORMATION**

**PRODUCT INFORMATION**

**IDENTITY (TRADE NAME):** IMMERSION CLEANER AND COLD PARTS CLEANER  
**SYNONYMS:** None  
**SK PART NUMBER(S):** 699, 6861, 9699  
**FAMILY/CHEMICAL NAME:** None  
**PRODUCT USE:** For cleaning carburetors and metal parts.  
 If this product is used in combination with other chemicals,  
 refer to the Material Safety Data Sheets for those chemicals.

<b>24-HOUR EMERGENCY TELEPHONE</b>	<b>MEDICAL:</b>	<b>TRANSPORTATION:</b>
These numbers are for emergency use only. If you desire non-emergency information about this product, please call a telephone number listed below.	<b>1-800-752-7869 (U.S.A.)</b>  <b>1-312-942-5969 (CANADA)</b>  RUSH POISON CONTROL CENTER CHICAGO, ILLINOIS, U.S.A.	<b>1-708-888-4660 (U.S.A.)</b> SAFETY-KLEEN ENVIRONMENT, HEALTH AND SAFETY DEPARTMENT  <b>1-613-996-6666 (CANADA)</b> CANUTEC

**MANUFACTURER/SUPPLIER:** Safety-Kleen Corp. - 777 Big Timber Road - Elgin, IL, U.S.A. 60123  
 Telephone number: 1-800-669-5840  
 Safety-Kleen Canada Inc. - 3090 Blvd. Le Carrefour - Suite 300 - Chomedey Laval  
 Quebec, Canada H7T 2J7 Telephone number: 1-800-363-2260

**PREPARATION INFORMATION**

**MSDS FORM NO.:** 82411 **REVISION DATE:** March 18, 1992  
**ORIGINAL ISSUE DATE:** December 1, 1989 **SUPERSEDES:** July 13, 1990  
**PREPARED BY:** Product MSDS Coordinator **APPROVED BY:** MSDS Task Force  
**TELEPHONE NUMBER:** For Product Technical Information Call 1-312-694-2700 (U.S.A.);  
 1-800-363-2260 (Canada)

**SECTION 2 -- HAZARDOUS COMPONENTS**

<u>NAME</u>	<u>SYNONYM</u>	<u>CAS NO.</u>	<u>WT%</u>	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>OTHER DATA</u>	
				<u>TWA</u>	<u>STEL</u>	<u>TWA</u>	<u>STEL</u>	<u>LD<sup>a</sup></u>	<u>LC</u>
Aromatic 150 <sup>c</sup>	Heavy aromatic solvent naphtha	64742-94-5	30-60	N.Av.	N.Av.	N.Av.	N.Av.	> 5000 Exxon recommended	N.Av.
N-Methyl-2-pyrrolidone	1-Methyl-2-pyrrolidinone	872-50-4	10-30	N.Av.	N.Av.	N.Av.	N.Av.	3914	N.Av.
Dipropylene glycol monomethyl ether	(2-methoxymethyl ethoxy)-propanol	34590-94-8	7-13	100 ppm (skin)	150 ppm (skin)	100 ppm (skin)	150 ppm (skin)	5135	N.Av.
Oleic acid	Red Oil	112-80-1	5-10	5 <sup>e</sup> mg/m <sup>3</sup>	N.Av.	10 <sup>d</sup> mg/m <sup>3</sup>	N.Av.	74000	N.Av.
Monoethanolamine	2-Amino-ethanol	141-43-5	3-7	3 ppm	6 ppm	3 ppm	6 ppm	1720	N.Av.

# IMMERSION CLEANER AND COLD PARTS CLEANER

## MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

*Naphthalene <sup>h</sup>	Naphthalin	91-20-3	0-6**	10 ppm	15 ppm	10 ppm	15 ppm	490	N.Av.
*1,4-Dichlorobenzene	Dichlorobenzene, para-	106-46-7	0-0.4**	75 ppm	110 ppm	75 ppm	110 ppm	500	N.Av.
*Methylene chloride	Dichloromethane	75-09-2	0-0.3**	500 ppm	N.Av.	50 ppm	N.Av.	1600	88000 <sup>b</sup> mg/m <sup>3</sup> /30 minutes
*Perchloroethylene	Tetrachloroethylene	127-18-4	0-0.5**	25 ppm	N.Av.	50 ppm	200 ppm	2629	34200 <sup>b</sup> mg/m <sup>3</sup> /8 hours

N.Ap. = Not Applicable

N.Av. = Not Available

\*See Section 9-Other Regulatory Information

\*\*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 LD50 (mg/kg)

<sup>b</sup>Inhalation-Rat LC50

<sup>c</sup>Exxon recommended 8hr workday exposure: 100 ppm

<sup>d</sup>Vegetable oil mists

<sup>e</sup>Respirable fraction

<sup>f</sup>Inhalation-Rat LCLo

<sup>g</sup>Monsanto MSDS

<sup>h</sup>Constituent of Aromatic 150

### SECTION 3 -- EMERGENCY AND FIRST AID PROCEDURES

<b>EYES:</b>	For direct contact, flush eyes with water for 15 minutes lifting upper and lower lids occasionally. If irritation or redness from exposure to vapor or mist develops, move victim away from exposure into fresh air. Consult physician if irritation or pain persists.
<b>SKIN:</b>	Remove contaminated clothing and shoes. Wash skin twice with soap and water. Consult physician if irritation or pain persists.
<b>INHALATION: (Breathing)</b>	Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.
<b>INGESTION: (Swallowing)</b>	Seek immediate medical attention. Do NOT induce vomiting. If spontaneous vomiting occurs, keep head below hips to avoid aspiration (into lungs).
<b>SPECIAL NOTE TO PHYSICIAN:</b>	Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Contact Rush Poison Control Center (Section 1) for additional medical information.

### SECTION 4 -- HEALTH HAZARD DATA AND TOXICOLOGICAL PROPERTIES

**PRIMARY ROUTES OF EXPOSURE:** Eye and skin contact; inhalation, ingestion.

**EXPOSURE LIMITS:** See Section 2.

#### **SIGNS AND SYMPTOMS OF EXPOSURE**

**ACUTE:** *Eyes:* Contact with liquid or exposure to vapor may cause irritation, tearing and burns.

*Skin:* Contact removes skin oils, possibly leading to irritation and dermatitis. Dipropylene glycol monomethyl ether is a skin absorption hazard.

*Inhalation (Breathing):* High concentrations of vapor or mist may be irritating to the respiratory tract, may cause nausea and vomiting, may cause dizziness, impaired coordination, anesthesia and other central nervous system effects or in more severe cases inebriation or unconsciousness. When in contact with mucous membranes, liquid aromatic hydrocarbons may cause vasodilation and chemical pneumonitis with pulmonary edema, hemorrhaging, and tissue necrosis. Naphthalene poisoning may affect eyes.



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**Ingestion (Swallowing):** Harmful or fatal if swallowed. May cause irritation of the throat, nausea, vomiting, abdominal pain, symptoms of central nervous system depression and myocardial injury. Monoethanolamine may cause mucosal burns of the mouth and esophagus. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

**CHRONIC:** Prolonged or repeated eye contact may cause tissue injury or skin contact may cause drying and cracking or dermatitis. Repeated or prolonged exposure to monoethanolamine may cause inflammatory and ulcerative changes in the mouth and possibly bronchial and gastrointestinal disturbances. Cataracts and corneal ulcerations have been reported in humans following repeated or prolonged exposure to naphthalene.

### **MEDICAL CONDITIONS**

#### **AGGRAVATED BY EXPOSURE:**

Individuals with pre-existing liver, kidney, respiratory, central nervous system or skin disorders may have increased susceptibility to the effects of exposure.

#### **CARCINOGENICITY:**

IARC classifies chemicals by their carcinogenic risk, including agents that are known, probable or possible carcinogens. NTP classifies chemicals as either known carcinogens or for which there is a limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. ACGIH recognizes two categories of carcinogens, confirmed or suspected human carcinogens.

Methylene chloride, perchloroethylene and 1,4-dichlorobenzene are listed by IARC as possible carcinogens. Methylene chloride, perchloroethylene and 1,4-dichlorobenzene are classified by NTP as having limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. Methylene chloride is recognized by ACGIH as a suspected human carcinogen.

Also see Section 9.

#### **OTHER POTENTIAL HEALTH HAZARDS:**

The following information is required by Canadian WHMIS regulations. Irritancy is covered in Signs and Symptoms of Exposure in Section 4. There is no known human sensitization, toxicologically synergistic product or teratogenicity associated with this material. N-methyl-2-pyrrolidone and methylene chloride have demonstrated experimental effects for reproductive toxicity and mutagenicity.

## SECTION 5 -- FIRE AND EXPLOSION HAZARD DATA

#### **EMERGENCY RESPONSE GUIDE NUMBER:**

60  
Reference Emergency Response Guidebook (DOT 5800.5)

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

Decomposition and combustion products may be toxic. Heated containers may rupture, explode or be thrown into the air. Vapors are heavier than air and may travel great distances to ignition source and flash back. Not sensitive to mechanical impact. Material may be sensitive to static discharge, which could result in fire or explosion.

#### **FIRE FIGHTING PROCEDURES:**

NFPA 704 Rating 2-2-0 (Health-Fire-Reactivity)  
Keep storage containers cool with water spray. Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection.

#### **EXTINGUISHING MEDIA:**

Carbon dioxide, regular foam, dry chemical, water spray.

#### **CONDITIONS OF FLAMMABILITY:**

Heat, sparks or flame.

#### **FLASH POINT:**

150°F (65°C) (approximately) Tag Closed Cup

#### **AUTOIGNITION TEMPERATURE:**

Not available.

#### **FLAMMABLE LIMITS IN AIR:**

**LOWER:** 0.8 Vol. %                      **UPPER:** 7.0 Vol. %

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**HAZARDOUS COMBUSTION PRODUCTS:**

Burning may produce carbon monoxide, nitrogen oxides, irritating smoke and fumes.

**SECTION 6 -- REACTIVITY DATA**

**STABILITY:**

Stable under normal temperatures and pressures, and not reactive with water.

**INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID):**

Avoid acids, oxidizing agents, heat, sparks or flame. Oleic acid can react with perchlorates and perchloric acid to form explosive products.

**HAZARDOUS POLYMERIZATION:**

Not known to occur under normal temperatures and pressures.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

None under normal temperatures and pressures.

**SECTION 7 -- PREVENTIVE MEASURES**

**PRECAUTIONS FOR SAFE USE AND HANDLING**

**HANDLING PRECAUTIONS:**

Keep away from heat, sparks or flame. Avoid contact with eyes, skin, clothing or shoes. Use in well ventilated area and avoid breathing vapor or mist.

**PERSONAL HYGIENE:**

Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products. Clean contaminated clothing, shoes and protective equipment before reuse. Discard contaminated clothing, shoes or protective equipment if they cannot be thoroughly cleaned.

**SHIPPING AND STORING PRECAUTIONS:**

Keep container tightly closed when not in use and during transport. Do not pressurize, cut, heat, weld, grind or expose containers to flame or other sources of ignition. Empty product containers may contain product residue. See Section 9 for Packing Group information.

**SPILL PROCEDURES:**

Remove all ignition sources. Do not touch or walk through spilled material; stop leak if you can do it without risk. Wear protective equipment specified in Section 7, CONTROL MEASURES. Ventilate area and avoid breathing vapor or mist. For large spills, isolate area and deny entry; dike far ahead of liquid spill for later disposal. Contain away from surface waters and sewers. If possible, contain as a liquid for possible re-refining or sorb with compatible sorbent material and shovel with a non-sparking tool into closable container for disposal. See Emergency Response Guidebook (DOT P 5800.5) Guide Number 60 for more information.

**WASTE DISPOSAL METHODS:**

Dispose in accordance with federal, state, provincial and local regulations. Contact Safety-Kleen regarding recycling or proper disposal.

**CONTROL MEASURES**

**EYE PROTECTION:**

Where there is likelihood of eye contact, wear chemical goggles and faceshield. Do NOT wear contact lenses.

**PROTECTIVE GLOVES:**

Use Neoprene or equivalent gloves to prevent contact with skin. Do NOT use Latex or equivalent gloves.

**RESPIRATORY PROTECTION:**

Use NIOSH/MSHA-approved respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limit. A self-contained breathing apparatus (SCBA) and full protective equipment is required for large spills or fire emergencies. Selection and use of respiratory protective equipment should be in accordance in the U.S.A. with OSHA General Industry Standard 29 CFR 1910.134 and in Canada with CSA Standard Z94.4-M1982.

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**ENGINEERING CONTROLS:**

Provide process enclosure or local ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where explosive mixtures may be present, systems safe for such locations should be used.

**OTHER PROTECTIVE EQUIPMENT:**

Where spills and splashes are possible, wear appropriate solvent-resistant boots, apron or other protective clothing. Clean water should be available in work areas for flushing the eyes and skin.

### SECTION 8 -- PHYSICAL DATA

**PHYSICAL STATE, APPEARANCE AND ODOR:**

Liquid, clear, brown

**ODOR THRESHOLD:**

Not available

**SPECIFIC GRAVITY:**

0.95 (water = 1)

**DENSITY:**

7.9 lbs/gal

**VAPOR DENSITY:**

4.4 (air = 1)

**VAPOR PRESSURE:**

11 mm Hg at 77°F (25°C)

**BOILING POINT:**

210 to 439°F (99 to 226°C)

**FREEZING POINT:**

Less than 10°F (-12°C)

**pH:**

11

**VOLATILE ORGANIC COMPOUNDS: (US EPA DEFINITION)**

85.2 WT%; 6.7 lbs/gal; 809 g/l

**EVAPORATION RATE:**

1.0 (butyl acetate = 1)

**SOLUBILITY IN WATER:**

Complete

**COEFFICIENT OF WATER/OIL DISTRIBUTION:**

Not available

**MOLECULAR WEIGHT:**

127

### SECTION 9 -- OTHER REGULATORY INFORMATION

**TRANSPORTATION INFORMATION**

**DOT PROPER SHIPPING NAME:** CORROSIVE LIQUIDS, N.O.S. (contains Monoethanolamine)

**DOT CLASS:** Class 8

**DOT ID NUMBER:** UN1760, Packing Group III

**TDG CLASSIFICATION:** Corrosive Liquids, N.O.S. (contains monoethanolamine)  
Class 8, UN1760, Packing Group III

**SARA TITLE III:**

Product contains toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Toxic constituents are listed with an asterisk in Section 2 of this Material Safety Data Sheet.

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

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

**WHMIS CLASSIFICATION:**

Class B3, Combustible Liquids;  
Class D2A, Infectious and Toxic Materials, Other Toxic Effects, Very Toxic Material;  
Class D2B, Infectious and Toxic Materials, Other Toxic Effects, Toxic Material

**CALIFORNIA:**

This product contains detectable amounts of benzene CAS No. 71-43-2, 1,4-dichlorobenzene CAS No. 106-46-7, methylene chloride CAS No. 75-09-2, perchloroethylene CAS No. 127-18-4 and trichloroethylene CAS No. 79-01-6. These materials are listed by the State of California as known carcinogens.

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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 expressed 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 material as supplied to the user.

