

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SDS ID: 82884

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

SAFETY-KLEEN MIL-PRF-680, TYPE II

Product Code

14426

Synonyms

Parts washer solvent, Stoddard solvent, petroleum, petroleum distillates, naphtha solvents, mineral spirits.

Product Use

Cleaning and degreasing metal parts. This product complies with the requirements of MIL-PRF-680, TYPE II Degreasing Solvent. It is included on the MIL-PRF-680 Products List. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use

None known.

MANUFACTURER/SUPPLIER

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IMPORTER/DISTRIBUTOR

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Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with Schedule 1 of Hazardous Product Regulations (HPR)(SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200.

Flammable Liquids - Category 4

Aspiration Hazard - Category 1

Acute Toxicity - Inhalation - Vapor - Category 4

Specific target organ toxicity - Single exposure - Category 3

GHS Label Elements

Symbol(s)



Signal Word Danger Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SDS ID: 82884

Hazard Statement(s)

Combustible liquid.

Harmful if inhaled.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Precautionary Statement(s)

Prevention

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective gloves and eye/face protection.

Response

In case of fire: Use Class B/C or Class A/B/C fire extinguisher, carbon dioxide, regular foam, or dry chemical for extinction. IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Other Hazards

None known.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent	
64742-48-9	Naphtha (petroleum), hydrotreated heavy	<100	
68551-17-7	Alkanes, C10-13-iso-	<100	
68551-19-9	Alkanes, C12-14-iso-	<100	

Component Related Regulatory Information

Concentration ranges are used to express batch-to-batch variability in the production of the mixture.

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if irritation develops or persists.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Ingestion

IF SWALLOWED: Aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Call a poison control center or doctor immediately for treatment advice.

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Most Important Symptoms/Effects

Acute

Aspiration hazard, central nervous system depression.

Delayed

May cause damage to central nervous system, lung damage (from aspiration).

Indication of any immediate medical attention and special treatment needed

IF exposed: Call a POISON CENTER or doctor/physician. Treat symptomatically and supportively.

Treatment may vary with condition of victim and specifics of incident.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Class B/C or Class A/B/C fire extinguisher. Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Combustible liquid and vapor. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Run-off to sewer may create a fire hazard. Heated containers may rupture or be thrown into the air. Empty containers may retain product residue including flammable/explosive vapors. Product may be sensitive to static discharge, which could result in fire or explosion.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.

Fire Fighting Measures

Keep away from sources of ignition - No Smoking. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Stay away from the ends of tanks. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Stay upwind and keep out of low areas. Dike for later disposal.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment. SEE SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

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 water 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

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

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Section 7 - HANDLING AND STORAGE

Precautions for Safe 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, shoes. Do not smoke while using this product.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place.

Keep container tightly closed.

Keep cool.

Store locked up.

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: TRANSPORTATION INFORMATION for Packing Group information.

Incompatible Materials

Acids, alkalis, oxidizing agents, reducing agents, or halogens.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Naphtha (petroleum), hydrotreated heavy	64742-48-9	
ACGIH:	100 ppm TWA (related to Stoddard solvent)	
NIOSH:	350 mg/m3 TWA (related to Stoddard solvent) 1800 mg/m3 Ceiling 15 min (related to Stoddard solvent) 20000 mg/m3 IDLH (related to Stoddard solvent)	
OSHA (US):	500 ppm TWA; 2900 mg/m3 TWA (related to Stoddard solvent)	
Alberta	100 ppm TWA; 572 mg/m3 TWA (related to Stoddard solvent)	
British Columbia	290 mg/m3 TWA (related to Stoddard solvent); 580 mg/m3 STEL (related to Stoddard solvent)	
Manitoba, Nova Scotia, Prince Edward Island	100 ppm TWA (related to Stoddard solvent)	
New Brunswick	100 ppm TWA; 525 mg/m3 TWA (related to Stoddard solvent)	
Northwest Territories, Nunavut, Saskatchewan	100 ppm TWA (related to Stoddard solvent) 125 ppm STEL (related to Stoddard solvent)	
Ontario	525 mg/m3 TWA (140°C Flash aliphatic solvent) (related	

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	to Stoddard solvent)		
Quebec	100 ppm TWAEV ; 525 mg/m3 TWAEV (related to Stoddard solvent)		
Yukon	100 ppm TWA; 575 mg/m3 TWA (related to Stoddard solvent) 150 ppm STEL; 720 mg/m3 STEL (related to Stoddard solvent)		

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

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 applicable exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.

Individual Protection Measures, such as Personal Protective Equipment Eye/face protection

Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.

Respiratory Protection

Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. 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.

Glove Recommendations

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. To avoid prolonged or repeated contact with products where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits or other protective clothing.

Protective Materials

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, gloves, and lab coat or apron.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance Clear, colorless liquid Physical State Liquid

Odor	Odorless	Color	Clear, colorless
Odor Threshold	Not available	рН	Not available
Melting Point	-60 °C (-76 °F Maximum)	Boiling Point	191 - 209 °C (376 - 408 °F)
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	<0.1 (Butyl acetate = 1)	Flammability (solid, gas)	Not available
Autoignition	335 °C (635°F	Flash Point	61 °C (142 °F Minimum)

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Temperature Approximate)

Lower Explosive Limit 0.7 vol% (Approximate) **Decomposition temperature** Not available

Upper Explosive Limit 5.3 vol% (Approximate) **Vapor Pressure** 0.6 mmHg @ 68 °F

Vapor Density (air=1) 5 (Approximate Air = 1) **Specific Gravity (water=1)** 0.77 at 15.6 °C

Water Solubility (Insoluble) Partition coefficient: n-

octanol/water

Viscosity Not available Solubility (Other) Not available

Density 6.4 lb/gal (US) Volatile Organic Compounds (As regulated)

100 WT%; 6.4 LB/US gal; 770 g/l as per 40 CFR Part

51.100(s).

VOC Vapor Pressure: <1.0 mm Hg @ 20°C

Molecular Weight Not available. Product may or may not be considered photochemically

reactive (100% by weight). Consult your state or local air district regulations for location specific information.

Other Information

No additional information is available.

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize under normal temperature and pressure conditions.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition Avoid contact with incompatible materials.

Incompatible Materials

Acids, alkalis, oxidizing agents, reducing agents, or halogens.

Hazardous decomposition products

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

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

May cause irritation, nausea, headache, dizziness, disorientation, tremors, loss of coordination, lung damage, brain damage, convulsions, coma.

Skin Contact

May cause irritation of the skin.

Eye Contact

May cause eye irritation.

Ingestion

Aspiration hazard. May cause headache, drowsiness, dizziness, loss of coordination, lung damage (from aspiration).

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Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

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Naphtha (petroleum), hydrotreated heavy (64742-48-9)

Oral LD50 Rat >6000 mg/kg (no deaths occurred); Dermal LD50 Rabbit >3160 mg/kg; Inhalation LC50 Rat >8500 mg/m3 4 h

Product Toxicity Data

Acute Toxicity Estimate

No data available.

Immediate Effects

Central nervous system depression, lung damage (from aspiration), respiratory tract irritation, skin irritation. May cause eye irritation.

Delayed Effects

May cause respiratory system damage, central nervous system damage.

Irritation/Corrosivity Data

May cause skin irritation, respiratory tract irritation. May cause eye irritation.

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

No information available for the product.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA

Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

Tumorigenic Data

No information available for the product.

Reproductive Toxicity

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

Specific Target Organ Toxicity - Single Exposure

Central nervous system

Specific Target Organ Toxicity - Repeated Exposure

Central nervous system

Aspiration hazard

Lung aspiration hazard if swallowed.

Medical Conditions Aggravated by Exposure

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

Additional Data

No additional information is available.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life.

Component Analysis - Aquatic Toxicity

Naphtha (petroleum), hydrotreated heavy	64742-48-9				
Fish:	LC50 96 h Pimephales promelas 2200 mg/L				

Persistence and Degradability

This material is believed not to biodegrade.

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Bioaccumulative Potential

This material is believed not to bioaccumulate.

Mobility

Expected to have high mobility in soil.

Other Toxicity

No additional information is available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of in accordance with all applicable federal, state and local regulations. This product, if discarded, is not expected to be a characteristic or listed hazardous waste. 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 applicable to the disposal of this product. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: COMBUSTIBLE LIQUID, N.O.S.

Hazard Class: Combustible liquid

UN/NA #: NA1993 Packing Group: III

Required Label(s): Combustible liquid

Additional information: Non-Bulk Packages (<119 Gallons)(Shipments via vessel and aircraft must use bulk

package shipping description):

IATA Information:

Additional information: Not regulated.

IMDG Information:

Additional information: Not regulated.

TDG Information:

Additional information: Not regulated as dangerous goods.

International Bulk Chemical Code

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C) 2016 reporting categories

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactivity: No

SARA Section 311/312 (40 CFR 370 Subparts B and C) 2017 reporting categories

Flammable; Specific Target Organ Toxicity; Aspiration Hazard

U.S. State Regulations

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The following components appear on one or more of the following state hazardous substances lists:

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Component	CAS	CA	MA	MN	NJ	PA
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Yes	Yes	Yes	Yes	Yes

WARNING! This product can expose you to chemicals including benzene, p-dichlorobenzene, ethylbenzene, and naphthalene which are known to the State of California to cause cancer and benzene and toluene which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.gov.

Canada Regulations

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Naphtha (petroleum), hydrotreated heavy	64742-48-9			
	1 % (related to Stoddard solvent)			

Component Analysis - Inventory

Naphtha (petroleum), hydrotreated heavy (64742-48-9), Alkanes, C10-13-iso- (68551-17-7), Alkanes, C12-14-iso- (68551-19-9)

US	CA
Yes	DSL

Section 16 - OTHER INFORMATION

NFPA Ratings

Health: 1 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Summary of Changes

Updated: 1/30/2017 Additional component

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP -Classification, Labelling, and Packaging; CPR - Controlled Products Regulations; DOT - Department of Transportation; DSL - Domestic Substances List; EPA - Environmental Protection Agency; F - Fahrenheit; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIstsTM - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NDSL - Non-Domestic Substance List (Canada); NFPA -National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR -New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; RCRA - Resource Conservation and Recovery Act; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG -Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; WHMIS - Workplace Hazardous Materials Information System (Canada)

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Other Information

Disclaimer:

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, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplied to the user.

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