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
Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 200
Richardson, TX 75080
www.safety-kleen.com

IMPORTER/DISTRIBUTOR
Safety-Kleen Canada, Inc.
25 Regan Road
Brampton, Ontario, Canada L1A 1B2

Phone: 1-800-669-5740
Emergency Phone #: 1-800-468-1760

Issue Date
February 17, 2017

Supersedes Issue Date
September 3, 2014

Original Issue Date
January 22, 2002

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
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

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9</td>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>&lt;100</td>
</tr>
<tr>
<td>68551-17-7</td>
<td>Alkanes, C10-13-iso-</td>
<td>&lt;100</td>
</tr>
<tr>
<td>68551-19-9</td>
<td>Alkanes, C12-14-iso-</td>
<td>&lt;100</td>
</tr>
</tbody>
</table>

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

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

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

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Clear, colorless liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>-60 °C (-76 °F Maximum )</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>191 - 209 °C (376 - 408 °F )</td>
</tr>
<tr>
<td>Boiling Point Range</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt;0.1 (Butyl acetate = 1 )</td>
</tr>
<tr>
<td>Autoignition</td>
<td>335 °C (635°F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Clear, colorless</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>61 °C (142 °F Minimum )</td>
</tr>
</tbody>
</table>
Temperature: Approximate

**Lower Explosive Limit**: 0.7 vol% (Approximate)

**Upper Explosive Limit**: 5.3 vol% (Approximate)

**Vapor Density (air=1)**: 5 (Approximate Air = 1)

**Vapor Pressure**: 0.6 mmHg @ 68 °F

**Specific Gravity (water=1)**: 0.77 at 15.6 °C

**Partition coefficient: n-octanol/water**: Not available

**Water Solubility**: (Insoluble)

**Viscosity**: Not available

**Density**: 6.4 lb/gal (US)

**Molecular Weight**: Not available

**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
- 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).
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:

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

<table>
<thead>
<tr>
<th>Naphtha (petroleum), hydrotreated heavy</th>
<th>64742-48-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish:</td>
<td>LC50 96 h Pimephales promelas 2200 mg/L</td>
</tr>
</tbody>
</table>

Persistence and Degradability
This material is believed not to biodegrade.
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
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated</td>
<td>64742-48-9</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**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](http://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.

<table>
<thead>
<tr>
<th>Naphtha (petroleum), hydrotreated</th>
<th>64742-48-9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 % (related to Stoddard solvent)</td>
</tr>
</tbody>
</table>

**Component Analysis - Inventory**

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

<table>
<thead>
<tr>
<th>US</th>
<th>CA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>DSL</td>
</tr>
</tbody>
</table>

**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 Lists™ - 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)
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.