## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**

Performance Plus HD Extended Life OAT (Red)
Prediluted Antifreeze/Coolant – 50/50 Blend

**Product Code**

6457, 640057, 640257

**Product Use**

An Extended Life Antifreeze/Coolant containing an organic acid technology (OAT) corrosion inhibitor package. NAPS free (does not contain nitrite, amine, phosphate, or silicate). Use in heavy duty diesel engine applications. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

**Restrictions on Use**

DO NOT ADD WATER. This antifreeze/engine coolant product is pre-diluted 50/50 with de-ionized water and is ready to use. Further dilution may have a negative impact on product performance.

**MANUFACTURER**
Safety-Kleen Systems, Inc.
42 Longwater Drive
Norwell, MA 02061
www.safety-kleen.com

**SUPPLIER (in Canada)**
Safety-Kleen Canada, Inc.
25 Regan Road
Brampton, Ontario, Canada L7A 1B2

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

**Issue Date**

November 18, 2021

**Supersedes Issue Date**

July 20, 2020

**Original Issue Date**

March 2, 2017

## Section 2 - HAZARDS IDENTIFICATION

**Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States**

Acute Toxicity - Oral - Category 4
Reproductive Toxicity - Category 2
Specific Target Organ Toxicity - Single Exposure - Category 1 ( central nervous system , kidneys )
Specific Target Organ Toxicity - Single Exposure - Category 3
Specific Target Organ Toxicity - Repeated Exposure - Category 2 ( kidneys , liver )

**GHS Label Elements**

**Symbol(s)**

**Signal Word**
Danger
**Hazard Statement(s)**
Harmful if swallowed.
Suspected of damaging fertility or the unborn child.
Causes damage to organs.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
**Precautionary Statement(s)**
**Prevention**
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
This product contains 30-50 ppm (0.003-0.005%) denotonium benzoate bittering agent which has been added to help prevent ingestion by humans and animals.
**Response**
If exposed or concerned: IF exposed or concerned: Get medical advice/attention.
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: Call a POISON CENTER or doctor/physician. Rinse mouth.
**Storage**
Store in a well-ventilated place. Keep container tightly closed. Store locked up.
**Disposal**
Dispose of contents/container in accordance with local/regional/national/international regulations.
**Other hazards**
None known.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| CAS | Component Name | Percent |
|---|---|---|
| 107-21-1 | Ethylene glycol | 40-60 |
| 7732-18-5 | Water (De-ionized) | 40-60 |
| 111-46-6 | Diethylene glycol | <2.5 |
| 16518-26-6 | Benzoic acid, 4-(1,1-dimethylethyl)-, potassium salt | 1.5-3.2 |
| 51126-65-9 | 1H-Benzotriazole, potassium salt | 0.05-0.3 |
| This product contains 30 to 50 ppm denotonium benzoate bittering agent (3734-33-6) which has been added to help prevent ingestion by humans and animals. | | |

## Section 4 - FIRST AID MEASURES

**Inhalation**
IF INHALED: Remove person to fresh air and keep 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. Get medical attention, if needed. Take off contaminated clothing and wash it before reuse.

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician. Rinse mouth.

**Most Important Symptoms/Effects**

**Acute**

Harmful if swallowed. May cause respiratory irritation. Causes damage to organs, central nervous system, kidneys.

This product contains 30-50 ppm (0.003-0.005%) denotonium benzoate bittering agent which has been added to help prevent ingestion by humans and animals.

**Delayed**

Reproductive Effects, kidney damage, liver damage

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information. Ethylene glycol is metabolized by alcohol dehydrogenase to various metabolites including glycoaldehyde, glycolic acid, and oxalic acid. The signs and symptoms in ethylene glycol poisoning are those of metabolic acidosis, central nervous system depression, and kidney damage. The currently recommended medical management of ethylene glycol poisoning includes elimination of ethylene glycol and metabolites, correction of metabolic acidosis, and prevention of kidney injury. As a competitive substrate for alcohol dehydrogenase, ethanol is antidotal when given in the early stages of intoxication because it blocks the formation of nephrotoxic metabolites. A more effective intravenous antidote is 4-methylpyrazole, a potent inhibitor of alcohol dehydrogenase, which effectively blocks the formation of toxic metabolites. Pulmonary edema with hypoxia has been described in a number of patients following ethylene glycol poisoning. Respiratory support with mechanical ventilation and positive end expiratory pressure may be required. There may be cranial nerve involvement in the later stages of toxicity from swallowing ethylene glycol. Effects have been reported presenting bilateral facial paralysis, diminished hearing, and dysphagia.

## Section 5 - FIRE FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media**

carbon dioxide, alcohol-resistant foam, dry chemical, water spray, water fog, Water or foam may cause frothing.

**Unsuitable Extinguishing Media**

Do not use high-pressure water streams.

**Special Hazards Arising from the Chemical**

Slight fire hazard. Avoid friction, static electricity and sparks.

**Hazardous Combustion Products**

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

**Fire Fighting Measures**

Move container from fire area if it can be done without risk. Keep storage containers cool with water spray. Heated containers may rupture or be thrown into the air. "Empty" containers may retain residue and can be dangerous.

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

## Section 7 - HANDLING AND STORAGE

**Precautions for Safe Handling**

Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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 and clothing. Do not smoke while using this product.

**Conditions for Safe Storage, Including any Incompatibilities**

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

Keep container tightly closed when not in use and during transport. Store in a cool, dry, well-ventilated area. Do not pressurize, cut, heat or weld containers. Empty product containers may contain product residue. Do not reuse empty containers.

**Incompatible Materials**

Acids, bases, oxidizing materials, reactive metals, reducing agents

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Component Exposure Limits**

| **Ethylene glycol** | **107-21-1** |
|---|---|
| Alberta | 100 mg/m3 Ceiling |
| British Columbia | 10 mg/m3 TWA particulate; 100 mg/m3 Ceiling aerosol ; 50 ppm Ceiling vapor; 20 mg/m3 STEL particulate |
| Manitoba | 25 ppm TWA vapor fraction |

| | |
|---|---|
| New Brunswick; Northwest Territories; Nunavut; Saskatchewan | 100 mg/m3 Ceiling aerosol |
| Nova Scotia; Ontario; Prince Edward Island | 25 ppm TWA vapor fraction; 50 ppm STEL vapor fraction ; 10 mg/m3 STEL inhalable particulate matter, aerosol only |
| Quebec | 50 ppm Ceiling mist and vapor ; 127 mg/m3 Ceiling mist and vapor |
| Yukon | 10 mg/m3 TWA particulate ; 100 ppm TWA vapor ; 250 mg/m3 TWA vapor; 10 ppm STEL particulate ; 20 mg/m3 STEL particulate ; 125 ppm STEL vapor ; 325 mg/m3 STEL vapor |
| ACGIH: | 25 ppm TWA vapor fraction; 50 ppm STEL vapor fraction ; 10 mg/m3 STEL inhalable particulate matter, aerosol only |

**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.

**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**

A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

**Skin Protection/Glove Recommendations**

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

**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/or Lab coat or apron.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| **Appearance** | Yellow liquid | **Physical State** | Liquid |
| **Odor** | Mild | **Color** | Yellow |

| | | | |
|---|---|---|---|
| **Odor Threshold** | Not available | **pH** | 8 - 9 |
| **Melting Point** | Not available | **Boiling Point** | 108 °C (226 °F ) |
| **Boiling Point Range** | Not available | **Freezing point** | -36.4 °C (-33.5°F) |
| **Evaporation Rate** | Not available | **Flammability (solid, gas)** | Not available |
| **Autoignition Temperature** | 398 °C (748 °F Ethylene glycol ) | **Flash Point** | 111 °C (232 °F Ethylene glycol ) |
| **Lower Explosive Limit** | 3.2 vol% (Ethylene glycol ) | **Decomposition temperature** | Not available |
| **Upper Explosive Limit** | 15.3 vol% (Ethylene glycol ) | **Vapor Pressure** | Not available |
| **Vapor Density (air=1)** | Not available | **Specific Gravity (water=1)** | 1.065 - 1.091 |
| **Water Solubility** | Complete | **Partition coefficient: n-octanol/water** | Not available |
| **Viscosity** | Not available | **Kinematic viscosity** | Not available |
| **Solubility (Other)** | Not available | **Density** | 8.8 - 9.1 lbs/gal |
| **Physical Form** | Liquid | **Molecular Weight** | Not 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.
**Conditions to Avoid**
Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.
**Incompatible Materials**
Acids, bases, oxidizing materials, reactive metals, reducing agents
**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 kidney damage, liver damage.

**Skin Contact**

May cause skin irritation.

**Eye Contact**

May cause eye irritation.

**Ingestion**

Harmful if swallowed. May cause vomiting and nausea.

**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:

**Ethylene glycol (107-21-1)**

Oral LD50 Rat 4700 mg/kg; Dermal LD50 Rat 10600 mg/kg

**Water (7732-18-5)**

Oral LD50 Rat >90 mL/kg

**Diethylene glycol (111-46-6)**

Oral LD50 Rat 12565 mg/kg; Dermal LD50 Rabbit 11890 mg/kg; Inhalation LC50 Rat >4600 mg/m3 4 h

**Product Toxicity Data**

**Acute Toxicity Estimate**

| | |
|---|---|
| Dermal | > 2000 mg/kg |
| Inhalation - Vapor | > 20 mg/L |
| Oral | > 2000 mg/kg |

**Immediate Effects**

Harmful if swallowed. May cause respiratory irritation. Causes damage to organs, central nervous system, kidney.

**Delayed Effects**

Reproductive Effects, kidney damage, liver damage

**Irritation/Corrosivity Data**

May cause respiratory irritation.

**Respiratory Sensitization**

No information available for the product.

**Dermal Sensitization**

No information available for the product.

**Component Carcinogenicity**

| **Ethylene glycol** | **107-21-1** |
|---|---|
| ACGIH: | A4 - Not Classifiable as a Human Carcinogen |

**Germ Cell Mutagenicity**

No information available for the product.

**Tumorigenic Data**

No information available for the product.

**Reproductive Toxicity**

Suspected of damaging fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

Respiratory system, central nervous system, kidneys

**Specific Target Organ Toxicity - Repeated Exposure**

Kidneys, liver

**Aspiration hazard**

No information available for the product.

**Medical Conditions Aggravated by Exposure**

No information available for the product.

**Additional Data**

No additional information is available.

## Section 12 - ECOLOGICAL INFORMATION

**Component Analysis - Aquatic Toxicity**

| | |
|---|---|
| **Ethylene glycol** | **107-21-1** |
| Fish: | LC50 96 h Oncorhynchus mykiss 41000 mg/L; LC50 96 h Oncorhynchus mykiss 14 - 18 mL/L [static ]; LC50 96 h Lepomis macrochirus 27540 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 40761 mg/L [static ]; LC50 96 h Pimephales promelas 40000 - 60000 mg/L [static ]; LC50 96 h Poecilia reticulata 16000 mg/L [static ] |
| Algae: | EC50 96 h Pseudokirchneriella subcapitata 6500 - 13000 mg/L IUCLID |
| Invertebrate: | EC50 48 h Daphnia magna 46300 mg/L IUCLID |
| **Diethylene glycol** | **111-46-6** |
| Fish: | LC50 96 h Pimephales promelas 75200 mg/L [flow-through ] |
| Invertebrate: | EC50 48 h Daphnia magna 84000 mg/L IUCLID |

**Persistence and Degradability**

No information available for the product.

**Bioaccumulative Potential**

No information available for the product.

**Mobility**

No information available for the product.

## Section 13 - DISPOSAL CONSIDERATIONS

**Disposal Methods**

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

## Section 14 - TRANSPORT INFORMATION

**US DOT Information:**

No Classification assigned.

Additional Information: Bulk Shipments 5000 lbs or greater of ethylene glycol (~1070 gallons blended product): UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Ethylene glycol), RQ, 9, PGIII

**IATA Information:**

**UN#:** Not regulated as a dangerous good.

**TDG Information:**

**UN#:** Not regulated as a dangerous good.

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

| | |
|---|---|
| **Ethylene glycol** | **107-21-1** |
| IBC Code: | Category Y |

## Section 15 - REGULATORY INFORMATION

**Canada Regulations**

**CEPA - Priority Substances List**

| | |
|---|---|
| **Ethylene glycol** | **107-21-1** |
| | Priority Substance List 2 (substance not considered toxic ) |

**Ozone Depleting Substances**

None of this product's components are on the list.

**Council of Ministers of the Environment - Soil Quality Guidelines**

| | |
|---|---|
| **Ethylene glycol** | **107-21-1** |
| Residential and Parkland | 960 mg/kg (dry weight ) |

**Council of Ministers of the Environment - Water Quality Guidelines**

None of this product's components are on the list.

**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

| | |
|---|---|
| **Ethylene glycol** | **107-21-1** |
| SARA 313: | 1 % de minimis concentration |
| CERCLA: | 5000 lb final RQ ; 2270 kg final RQ |

Chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

| CAS-No. | Name | Percent by Weight |
|---|---|---|
| 107-21-1 | Ethylene glycol | 40-60 |

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

Acute toxicity; Reproductive Toxicity; Specific Target Organ Toxicity

**U.S. State Regulations**

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

| Component | CAS | CA | MA | MN | NJ | PA |
|---|---|---|---|---|---|---|
| **Ethylene glycol** | **107-21-1** | Yes | Yes | Yes | Yes | Yes |
| **Diethylene glycol** | **111-46-6** | No | No | Yes | No | Yes |

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)**

WARNING! This product can expose you to chemicals including Ethylene glycol , which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| **Ethylene glycol** | **107-21-1** |
|---|---|
| Repro/Dev. Tox | developmental toxicity , 6/19/2015 (ingested ) |

**Component Analysis - Inventory**

**Ethylene glycol (107-21-1)**

| US | CA | AU | CN | EU | JP - ENCS | JP - ISHL | KR KECI - Annex 1 | KR KECI - Annex 2 |
|---|---|---|---|---|---|---|---|---|
| Yes | DSL | Yes | Yes | EIN | Yes | Yes | Yes | No |

| KR - REACH CCA | MX | NZ | PH | TH-TECI | TW | VN (Draft) |
|---|---|---|---|---|---|---|
| No | Yes | Yes | Yes | Yes | Yes | Yes |

**Water (7732-18-5)**

| US | CA | AU | CN | EU | JP - ENCS | JP - ISHL | KR KECI - Annex 1 | KR KECI - Annex 2 |
|---|---|---|---|---|---|---|---|---|
| Yes | DSL | Yes | Yes | EIN | Yes | No | Yes | No |

| KR - REACH CCA | MX | NZ | PH | TH-TECI | TW | VN (Draft) |
|---|---|---|---|---|---|---|
| No | Yes | Yes | Yes | Yes | Yes | Yes |

**Diethylene glycol (111-46-6)**

| US | CA | AU | CN | EU | JP - ENCS | JP - ISHL | KR KECI - Annex 1 | KR KECI - Annex 2 |
|---|---|---|---|---|---|---|---|---|
| Yes | DSL | Yes | Yes | EIN | Yes | Yes | Yes | No |

| KR - REACH CCA | MX | NZ | PH | TH-TECI | TW | VN (Draft) |
|---|---|---|---|---|---|---|
| No | Yes | Yes | Yes | Yes | Yes | Yes |

**Benzoic acid, 4-(1,1-dimethylethyl)-, potassium salt (16518-26-6)**

| US | CA | AU | CN | EU | JP - ENCS | JP - ISHL | KR KECI - Annex 1 | KR KECI - Annex 2 |
|---|---|---|---|---|---|---|---|---|
| Yes | DSL | No | No | EIN | Yes | Yes | No | No |

| KR - REACH CCA | MX | NZ | PH | TH-TECI | TW | VN (Draft) |
|---|---|---|---|---|---|---|
| No | No | Yes | Yes | No | Yes | No |

**1H-Benzotriazole, potassium salt (51126-65-9)**

| US | CA | AU | CN | EU | JP - ENCS | JP - ISHL | KR KECI - Annex 1 | KR KECI - Annex 2 |
|---|---|---|---|---|---|---|---|---|
| Yes | NSL | No | Yes | EIN | Yes | Yes | No | No |

| KR - REACH CCA | MX | NZ | PH | TH-TECI | TW | VN (Draft) |
|---|---|---|---|---|---|---|
| No | No | Yes | No | No | Yes | Yes |

## Section 16 - OTHER INFORMATION

**NFPA Ratings**

Health: 2 Fire: 1 Instability: 0

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

**Summary of Changes**

2022-07: Update to product name.

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; KR REACH CCA - Korea Registration and Evaluation of Chemical Substances Chemical Control Act; 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; MX – Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL – Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TH-TECI - Thailand - FDA Existing Chemicals Inventory (TECI); TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time

Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); 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.