

Material Name: PERFORMANCE PLUS BRAKE FLUID ID: 82527

* * * Section 1 - Chemical Product and Company Identification * * '

Product Code: Prefix 93P

Product Use: Brake fluid. If this product is used in combination with other products, refer to the Material Safety Data

Sheet for those products. **Synonyms:** Not available.

Safety-Kleen Systems, Inc. Phone: 1-800-669-5740

5360 Legacy Drive Building 2, Suite 100 Plano, TX 75024

lano, TX 75024 Emergency # 1-800-468-1760

Issue Date www.safety-kleen.com

December 14, 2011 **Supersedes Issue Date**

December 11, 2008

Original Issue Date

November 16, 1993

PREPARED BY: Product MSDS Coordinator APPROVED BY: MSDS Task Force

* * * Section 2 - Hazardous Identification * * *

EMERGENCY OVERVIEW

Appearance

Clear to amber, mild ether odor.

Signal Word

CAUTION!

Health Hazards

May be harmful if inhaled.

May cause allergic respiratory reaction.

May be harmful or fatal if swallowed.

May irritate the eyes and skin.

Contains material which may cause central nervous system effects.

POTENTIAL HEALTH EFFECTS

Inhalation (Breathing)

This product is not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Piperazine, a minor component, has demonstrated human effects of respiratory tract sensitization.

Eyes

May cause irritation. Vapors may be irritating to the eye and surrounding tissue.

Skin

May cause skin irritation. Not likely to be absorbed through the skin in harmful amounts.

Ingestion (Swallowing)

May be harmful or fatal if swallowed. May cause throat irritation, nausea, vomiting, central nervous system effects as noted under INHALATION (BREATHING), unconsciousness, coma, and death. Aspiration hazard: breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Medical Conditions Aggravated by Exposure

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

Page 1 of 6 Rev. 12/11

Material Name: PERFORMANCE PLUS BRAKE FLUID

Chronic

Prolonged or repeated inhalation can cause toxic effects as noted under INHALATION (BREATHING) as well as kidney, liver, central nervous system, blood, and spleen damage. Animal studies for some glycol ethers have demonstrated adverse reproductive effects including testicular atrophy and sperm damage. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

ID: 82527

Cancer Information

No known carcinogenicity. For more information, see SECTION 11: CARCINOGENICITY.

Environmental Hazards

Product is not expected to be harmful to aquatic life.; Product is not expected to be harmful to aquatic life. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

* * * Section 3 - Composition / Information on Ingredients * * *

| CAS | Component | Percent |
|---------------|--|---------|
| 9004-77-7 | Poly[oxy-1,2-ethanediyl), a-butyl-w-hydroxyl | 60-90 |
| Not Available | Mixture of glycol ethers, polyglycols, glycols, oxidation and corrosion inhibitors | 10-40* |
| 110-85-0 | Piperazine | .1-1* |

^{*} 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.

* * * Section 4 - First Aid Measures * * *

Inhalation (Breathing)

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

Eyes

If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

Skin

Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the individual as a medical emergency.

Ingestion (Swallowing)

Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

Notes to Physicians

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

* * * Section 5 - Fire Fighting Measures * * *

Hazardous Combustion Products

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

Conditions of Flammability

Sparks or flame. Product may burn, but does not ignite readily.

Extinguishing Media

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

Page 2 of 6 Rev. 12/11

Material Name: PERFORMANCE PLUS BRAKE FLUID

Protective Equipment For Firefighting

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

ID: 82527

Fire Fighting Equipment/Instructions

Keep storage containers cool with water spray.

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

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

Fire and Explosion Hazards

Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.

* * * Section 6 - Accidental Release Measures * * *

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. Do not allow product to enter sewer or waterways.

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 * * *

Handling Procedures

Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of 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, and shoes.

Shipping and Storing

Keep container tightly closed when not in use and during transport. Store at temperatures below 60°C (140°F). 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.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Exposure Guidelines

Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits 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.

Personal Protective Equipment: Respiratory

Use NIOSH-certified, full-face, air-purifying respirators with organic vapor cartridges respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air-purifying respirators is limited. 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.

Personal Protective Equipment: Eyes/Face

Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

Personal Protective Equipment: Skin

Where skin contact is likely, wear chemical impervious gloves such as neoprene; use of polyvinyl chloride (PVC) 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.

Page 3 of 6 Rev. 12/11

Material Name: PERFORMANCE PLUS BRAKE FLUID

Personal Protective Equipment: Personal Hygiene

Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, and/or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with this product.

Other Personal Protective Equipment

Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance/Odor: Clear to amber liquid, mild pH: 7-11.5

odor.

Boiling Point: 430°F (211°C) (minimum) **Melting Point:** Not available.

Solubility (H2O): Complete. Specific Gravity: 1.029 @ 60°F (15.5°C) (water

= 1)

ID: 82527

Density: 8.6 LB/US gal (1030g/l). Octanol/H2O Coeff.: Not available. Evaporation Rate: Not available. Molecular Weight: Not available. Odor Threshold: Not available. Auto Ignition: Not available.

LFL: 1.5% Flash Point: 272°F (133°C) PMCC

UFL: Not available. **Vapor Pressure:** Not available.

* * * Section 10 - Chemical Stability & Reactivity Information * * '

Stability

Stable under normal temperatures and pressures.

Incompatibility

Avoid acids, oxidizing agents, or reactive metals.

Reactivity

Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

Hazardous Decomposition Products

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

Conditions To Avoid

Avoid sparks or flame.

* * * Section 11 - Toxicological Information * * *

Component Analysis - LD50/LC50

Piperazine (110-85-0)

Oral LD50 Rat 1900 mg/kg; Dermal LD50 Rabbit 4000 mg/kg

Page 4 of 6 Rev. 12/11

Material Name: PERFORMANCE PLUS BRAKE FLUID

Acute Effects

This product is not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs). May cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Piperazine, a minor component, has demonstrated human effects of respiratory tract sensitization. May cause eye and skin irritation. Not likely to be absorbed through the skin in harmful amounts. May be harmful or fatal if swallowed. Ingestion may cause throat irritation, nausea, vomiting, central nervous system effects (as noted under inhalation), unconsciousness, coma, and death. Aspiration hazard: breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

ID: 82527

Repeated Dose Effects

Prolonged or repeated inhalation may cause toxic effects as described in the Acute Effects subsection as well as kidney, liver, central nervous system, blood, and spleen damage. Animal studies for some glycol ethers have demonstrated adverse reproductive effects including testicular atrophy and sperm damage. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis),

Piperazine has demonstrated human effects of respiratory tract sensitization.

Minor components have demonstrated animal effects of teratogenicity.

Carcinogenicity

Component Carcinogenicity

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

Target Organ Effects

Contains material which may cause central nervous system, liver, kidney, blood, and spleen damage.

Toxicologically Synergistic Products

Based on best current information, there are no known toxicologically synergistic products associated with this product.

Section 12 - Ecological Information

Ecotoxicity

Not expected to be harmful to aquatic life.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Piperazine (110-85-0)

Duration/Test/Species

Concentration/Conditions/Notes >10000 mg/L [static]

96 Hr LC50 Lepomis macrochirus

Persistence/Degradability

No additional information available.

Bioaccumulation/Accumulation

No additional information available.

Mobility in Environmental Media

No additional information available.

Other Adverse Effects

No additional information available.

Section 13 - Disposal Considerations

Disposal Instructions

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.

US EPA Waste Number & Descriptions

This product, if discarded, is not expected to be a characteristic or listed hazardous waste. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

Page 5 of 6 Rev. 12/11

ID: 82527

Material Name: PERFORMANCE PLUS BRAKE FLUID

* * * Section 14 - Transportation Information * * *

Emergency Response Guide Number

Not applicable Reference .North American Emergency Response Guidebook

DOT Shipping Name: Not regulated **TDG** Shipping Name: Not regulated

* * * Section 15 - Regulatory Information * * '

SARA Sections 311/312

This product is not for sale or use in the USA.

SARA 302/304

This product is not for sale or use in the USA.

SARA Section 313

This product is not for sale or use in the USA.

CERCLA

This product is not for sale or use in the USA.

TSCA

This product is not for sale or use in the USA.

California

This product is not for sale or use in the State of California.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Canadian Environmental Protection Act (CEPA)

All the components of this product are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

* * * Section 16 - Other Information * * *

Label/Other Information

Not available.

Revision Information

Regulatory update and reformat.

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, or 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 supplier to the user.

End of Sheet 82527

Page 6 of 6 Rev. 12/11