



MATERIAL SAFETY DATA SHEET

Review Date: 12/02/2005

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: SNAP™ DOT 3 Brake Fluid

MSDS NUMBER: 613642LU - 1

PRODUCT CODE(S): 714307, 714308, 714312, S262, S890

PRODUCT USE: Brake Fluid

MANUFACTURER

SOPUS Products
P.O. Box 4427
Houston, TX. 77210-4427

TELEPHONE NUMBERS

Spill Information: (877) 242-7400
Health Information: (877) 504-9351
MSDS Assistance Number: (877) 276-7285

SECTION 2

PRODUCT/INGREDIENTS

INGREDIENTS

Brake Fluid

Glycol Ethers

Polyethylene Glycol

Diethylene Glycol

Triethylene Glycol

CAS#

Mixture

25322-68-3

111-46-6

112-27-6

CONCENTRATION

50 - 60 %weight

20 - 30 %weight

5 - 15 %weight

5 - 15 %weight

SECTION 3

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance & Odor: Pale yellow liquid. Ether-like odor.

Health Hazards: Causes severe eye irritation. May be harmful or fatal if swallowed. Do not induce vomiting. May cause aspiration pneumonitis. May cause CNS depression. High-pressure injection under the skin may cause serious damage.

NFPA Rating (Health, Fire, Reactivity): 2, 1, 0

Hazard Rating: Least - 0 Slight - 1 Moderate - 2 High - 3 Extreme - 4

Route(s) of Exposure: Eye, Inhalation, Skin

Inhalation:

In applications where vapors (caused by high temperature) or mists (caused by mixing or spraying) are created, breathing may cause a mild burning sensation in the nose, throat and lungs.

Eye Irritation:

Severely irritating to the eyes causing pain, redness, swelling and blurred vision.

Skin Contact:

May cause slight irritation of the skin. If irritation occurs, a temporary burning sensation and minor redness and/or swelling may result. Release of the material during high-pressure applications may result in injection under the skin causing possible extensive tissue damage which is difficult to heal. Other adverse effects not expected from brief skin contact.

Ingestion:

This material may be harmful or fatal if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis. May be harmful or fatal if swallowed. Contains ethylene glycol and/or diethylene glycol which are toxic when swallowed. A lethal dose for an adult is 1 ml per kilogram or about 4 ounces (1/2 cup). Severe kidney damage can occur as a result of ingestion. May cause Central Nervous System (CNS) depression.

Other Health Effects:

The International Agency for Research on Cancer (IARC) has determined there is sufficient evidence for the carcinogenicity in experimental animals of used gasoline motor oils. Handling procedures and safety precautions in the MSDS should be followed to minimize exposure to the used product.

Refer to Section 11, Toxicological Information, for specific information on the following effects:

Developmental Toxicity, Reproductive Toxicity

Primary Target Organs:

The following organs and/or organ systems may be damaged by overexposure to this material and/or its components:

Kidney, Liver, Reproductive System

Signs and Symptoms:

Irritation as noted above. Aspiration pneumonitis may be evidenced by coughing, labored breathing and cyanosis (bluish skin); in severe cases death may occur. Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness and nausea. In extreme cases, unconsciousness and death may occur. Kidney damage may be indicated by changes in urine output or appearance, pain upon urination or in the lower back or general edema (swelling from fluid retention). Liver damage may be indicated by loss of appetite, jaundice (yellowish skin and eye color), fatigue and sometimes pain and swelling in the upper right abdomen.

Aggravated Medical Conditions:

Pre-existing eye, skin, respiratory, liver and kidney disorders and may be aggravated by exposure to this product.

For additional health information, refer to section 11.

SECTION 4**FIRST AID MEASURES****Inhalation:**

If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

Skin:

Flush exposed area with water and follow by washing with soap if available. If material is injected under the skin, transport to the nearest medical facility for additional treatment. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Eye:

Immediately flush eyes with large amounts of water for at least 30 minutes, by the clock, while holding eyelids open. Transport to nearest medical facility for additional treatment.

Ingestion:

DO NOT take internally. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Get medical attention.

Note to Physician:

Ethylene Glycol (EG) and Diethylene Glycol (DEG) intoxication may initially produce behavioral changes, drowsiness, vomiting, diarrhea, thirst, and convulsions. EG and DEG are nephrotoxic. End stages of poisoning may include renal damage or failure with acidosis. Supportive measures, supplemented with hemodialysis if indicated, may limit the progression and severity of toxic effects. For DIETHYLENE GLYCOL POISONING, the role of intravenous ethanol in the treatment is unclear but it may be of benefit in the view of structural and toxicological similarities to ethylene glycol. Contact a poison control center for further treatment information

SECTION 5**FIRE FIGHTING MEASURES**

Flash Point [Method]: >340 °F/>171.11 °C [Cleveland Open Cup]

Upper Flammability Limit: Not Determined

Lower Flammability Limit: Not Determined

Extinguishing Media:

Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO₂) to extinguish flames. Do not use a direct stream of water.

Fire Fighting Instructions:

Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus. This material is non-flammable.

Unusual Fire Hazards:

Material may ignite when preheated.

SECTION 6**ACCIDENTAL RELEASE MEASURES****Protective Measures:**

May burn although not readily ignitable.

Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8.

Spill Management:

Shut off source of leak if safe to do so. Dike and contain spill.

FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

Reporting:

U.S. regulations require reporting releases of this material to the environment which exceed the reportable quantity to the National Response Center at (800)424-8802.

SECTION 7**HANDLING AND STORAGE**

Precautionary Measures:

Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet. Launder contaminated clothing before reuse. Properly dispose of contaminated leather articles such as shoes or belts that cannot be decontaminated. Avoid heat, open flames, including pilot lights, and strong oxidizing agents. Use explosion-proof ventilation to prevent vapor accumulation. Ground all handling equipment to prevent sparking. Avoid contact with eyes, skin and clothing.

Storage:

Do not store in open or unlabeled containers. Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures.

Container Warnings:

Keep containers closed when not in use. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

SECTION 8	EXPOSURE CONTROLS/PERSONAL PROTECTION
------------------	--

Chemical	Limit	TWA	STEL	Ceiling	Notation
Diethylene Glycol	ACGIH PEL	50 ppmv			Aerosol
Diethylene Glycol	AIHA WEEL	50 ppmm			Aerosol
Polyethylene Glycol	ACGIH WEEL	10 mg/m3			Aerosol
Polyethylene Glycols	AIHA WEEL	10 mg/m3			

Exposure Controls

Provide adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

Personal Protection

Personal protective equipment (PPE) selections vary based on potential exposure conditions such as handling practices, concentration and ventilation. Information on the selection of eye, skin and respiratory protection for use with this material is provided below.

Eye Protection:

Chemical Goggles and Face Shield, or Safety glasses with side shields

Skin Protection:

Use protective clothing which is chemically resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items. The selection(s) should take into account such factors as job task, type of exposure and durability requirements.

Published literature, test data and/or glove and clothing manufacturers indicate the best protection is provided by:
Neoprene, or Nitrile Rubber

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Types of respirator(s) to be considered in the selection process include:

For Mist: Air Purifying, R or P style NIOSH approved respirator.

For Vapors: Air Purifying, R or P style prefilter & organic cartridge, NIOSH approved respirator. Self-contained breathing apparatus for use in environments with unknown concentrations or emergency situations.

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
------------------	---

Appearance & Odor: Pale yellow liquid. Ether-like odor.

Substance Chemical Family: Glycol Ether Blend

Physical State: Liquid

Boiling Point	> 543.2 °F	Flash Point	> 340 °F [Cleveland Open Cup]
Freezing Point	-53 °F	Odor	Ether-like odor.
Specific Gravity	1.038 - 1.04	Stability	Stable
Vapor Pressure	> 0.1		

Odor Threshold: Not Determined

Partition Coefficient: Not Determined

pH: Not Determined

SECTION 10	REACTIVITY AND STABILITY
-------------------	---------------------------------

Stability:

Material is stable under normal conditions.

Materials to Avoid:

Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products:

Thermal decomposition products are highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases will evolve when this material undergoes pyrolysis or combustion. Carbon Monoxide, Carbon Dioxide and other unidentified organic compounds may be formed upon combustion.

SECTION 11	TOXICOLOGICAL INFORMATION
-------------------	----------------------------------

Acute Toxicity

TEST	Result	OSHA Classification	Material Tested
Dermal LD50	>2 g/kg(Rabbit)	Non-Toxic	Based on components(s)
Oral LDLo	1.0 g/kg(Human)	Non-Toxic	Based on components(s)

Carcinogenicity Classification

Chemical Name	NTP	IARC	ACGIH	OSHA
Brake Fluid	No	Not Reviewed	No	No

Developmental Toxicity	Oral exposure of pregnant rats to maternally toxic levels of diethylene glycol has produced developmental effects in the offspring.
Gastrointestinal System	Ingestion may cause abdominal discomfort, nausea, vomiting and diarrhea.
Kidney	Kidney damage has occurred in experimental animals orally exposed to diethylene glycol monopropyl ether. Kidney damage has also been reported in rodents following repeated oral or dermal exposure to diethylene glycol monoethyl ether containing low concentrations of ethylene glycol. Kidney damage, bladder stones and bladder tumors have occurred in rats following prolonged and repeated oral exposure to diethylene glycol. These effects may have been attributable to contamination of the diethylene glycol with ethylene glycol or other chemicals. Diethylene glycol is not listed as carcinogenic by IARC, OSHA or NTP.
Liver	Fatty changes and slight liver damage has been observed in rats following repeated oral exposure to diethylene glycol monoethyl ether containing ethylene glycol.
Reproductive Toxicity	Exposing mating pairs of mice to diethylene glycol in drinking water at levels slightly toxic to the females affected measures of their reproductive performance.
Reproductive System	An increase in testicular weight and testicular edema was reported in rats following repeated dietary ingestion of diethylene glycol monoethyl ether.

SECTION 12	ECOLOGICAL INFORMATION
-------------------	-------------------------------

Environmental Impact Summary:

There is no ecological data available for this product.

SECTION 13	DISPOSAL CONSIDERATIONS
-------------------	--------------------------------

RCRA Information:

Under RCRA, it is the responsibility of the user of the material to determine, at the time of the disposal, whether the material meets RCRA criteria for hazardous waste. This is because material uses, transformations, mixtures, processes, etc. may affect the classification. Refer to the latest EPA, state and local regulations regarding proper disposal.

SECTION 14	TRANSPORT INFORMATION
-------------------	------------------------------

US Department of Transportation Classification

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

International Air Transport Association

Not regulated under IATA rules.

International Maritime Organization Classification

Not regulated under International Maritime Organization rules.

SECTION 15	REGULATORY INFORMATION
-------------------	-------------------------------

Federal Regulatory Status

OSHA Classification:

Product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

WHMIS Classification: Class D2A

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

Comprehensive Environmental Release, Compensation & Liability Act (CERCLA):

Glycol Ethers

RQ 5000 lbs Reportable Spill => 50000 lbs or
5997.36 gal

Ozone Depleting Substances (40 CFR 82 Clean Air Act):

This material does not contain nor was it directly manufactured with any Class I or Class II ozone depleting substances.

Superfund Amendment & Reauthorization Act (SARA) Title III:

There are no components in this product on the SARA 302 list.

SARA Hazard Categories (311/312):

Immediate Health	Delayed Health	Fire	Pressure	Reactivity
YES	YES	NO	NO	NO

SARA Toxic Release Inventory (TRI) (313):

Glycol Ethers

Toxic Substances Control Act (TSCA) Status:

All component(s) of this material is(are) listed on the EPA/TSCA Inventory of Chemical Substances.

This product may be subject to export notification under TSCA Section 12(b); Contains: Ethanol, 2-(2-butoxyethoxy)-

Other Chemical Inventories:

Component(s) of this material is (are) listed on the Australian AICS, Canadian DSL, European EINECS,

State Regulation

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

New Jersey Right-To-Know Chemical List:

Glycol Ethers (2265/3138)

50 - 60 %weight

Special Hazard

Pennsylvania Right-To-Know Chemical List:

Diethylene Glycol (111-46-6)

5 - 15 %weight

Environmental Hazard

Ethanol, 2,2'-[1,2-ethanediylbis(oxy)]bis- (112-27-6)	5 - 15 %weight	Environmental Hazard
Glycol Ethers (143-22-6)	50 - 60 %weight	Environmental Hazard

SECTION 16 OTHER INFORMATION

Revision#: 1
Revision Date: 12/02/2005
Review Date: 12/02/2005
Revisions since last change (discussion): This Material Safety Data Sheet (MSDS) has been newly reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998). We encourage you to take the opportunity to read the MSDS and review the information contained therein.

SECTION 17 LABEL INFORMATION

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT. THIS LABEL COMPLIES WITH THE REQUIREMENTS OF THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FOR USE IN THE WORKPLACE. THIS LABEL IS NOT INTENDED TO BE USED WITH PACKAGING INTENDED FOR SALE TO CONSUMERS AND MAY NOT CONFORM WITH THE REQUIREMENTS OF THE CONSUMER PRODUCT SAFETY ACT OR OTHER RELATED REGULATORY REQUIREMENTS.

PRODUCT CODE(S): 714307, 714308, 714312, S262, S890

SNAP™ DOT 3 Brake Fluid

WARNING!

CAUSES SEVERE EYE IRRITATION. MAYBE HARMFUL OR FATAL IF SWALLOWED. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. HIGH-PRESSURE INJECTION UNDER SKIN MAY CAUSE SERIOUS DAMAGE.

MAY CAUSE DAMAGE TO: Kidney, Liver, Reproductive System
Refer to Section 11, Toxicological Information, for specific information on the following effects:
Developmental Toxicity, Reproductive Toxicity

Precautionary Measures:
Avoid prolonged or repeated contact with eyes, skin and clothing. Avoid breathing of vapors, fumes, or mist. Do not take internally. Use only with adequate ventilation. Keep container closed when not in use. Wash thoroughly after handling.

FIRST AID

Inhalation: If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.
Skin Contact: Flush exposed area with water and follow by washing with soap if available. If material is injected under the skin, transport to the nearest medical facility for additional treatment. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.
Eye Contact: Immediately flush eyes with large amounts of water for at least 30 minutes, by the clock, while holding eyelids open. Transport to nearest medical facility for additional treatment.
Ingestion: DO NOT take internally. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips

to prevent aspiration of liquid into lungs. Get medical attention.

FIRE

In case of fire, Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO2) to extinguish flames. Do not use a direct stream of water.

SPILL OR LEAK

Dike and contain spill.

FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

CONTAINS: Glycol Ethers, Mixture; Polyethylene Glycol, 25322-68-3; Diethylene Glycol, 111-46-6; Triethylene Glycol, 112-27-6

NFPA Rating (Health, Fire, Reactivity): 2, 1, 0

TRANSPORTATION

US Department of Transportation Classification

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

Name and Address

SOPUS Products
P.O. Box 4427
Houston, TX 77210-4427

ADMINISTRATIVE INFORMATION	
MANUFACTURER ADDRESS:	SOPUS Products, P.O. Box 4427, Houston, TX. 77210-4427

THE INFORMATION CONTAINED IN THIS DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AT THIS TIME, AND IS BELIEVED TO BE ACCURATE BASED UPON THAT : IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT, FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PRODUCT PERFORMANCE INFORMATION, AND NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE PRODUCT, UNDERLYING DATA OR THE INFORMATION CONTAINED HEREIN. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE, AND ARE ENCOURAGED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, YOU SHOULD CONSULT WITH YOUR LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. WE WILL NOT PROVIDE ADVICE ON SUCH MATTERS, OR BE RESPONSIBLE FOR ANY INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN. THE UNDERLYING DATA, AND THE INFORMATION PROVIDED HEREIN AS A RESULT OF THAT DATA, IS THE PROPERTY OF SOPUS PRODUCTS AND IS NOT TO BE THE SUBJECT OF SALE OR EXCHANGE WITHOUT THE EXPRESS WRITTEN CONSENT OF SOPUS PRODUCTS.

44209-29809-100R-12/02/2005