Wagner Brake: MSDS, Dot 3 - Premium Brake Fluid (H-128)

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Dot 3-Premium Brake Fluid (H-128)

Glycol ether blend

NA - Mixture

NA - Mixture

Wagner Electric Corporation/Wagner Brake Subsidiary

6565 Wells Ave.

St. Louis, MO 63133

(314)977-0300 Emergency Phone: CHEMTREC 1-800-424-9300

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	% WEIGHT	PEL-OSHA	TLV-ACGIH	LD 50/LC 50 ROUTE/SPECIES
Diethylene glycol CAS No.: 111-46-6 RTECS No.: 36305	17-20	None Established	None Established	LD50: 12565 mg/kg oral/rat
Triethylene glycol monobutyl ether CAS No.: 143-22-6 RTECS No.: 34982	15-30	None Established	None Established	LD50: 5300 mg/kg oral/rat
Diethylene glycol monopropyl ether CAS No.: 6881-94-3 RTECS No.: No Data	8-11	None Established	None Established	No Data
Polyethylene glycol CAS No.: 25322-68-3 RTECS No.: 65901	6-9	None Established	None Established	LDLo: 22 gm/kg iv/rat
Diethylene glycol monobutyl ether CAS No.: 112-34-5 RTECS No.: 34980	5-7	None Established	None Established	LD50: 5660 mg/kg oral/rat
Triethylene glycol methyl ether CAS No.: 112-35-6 RTECS No.: 35245	4-12	None Established	None Established	LD50: 11300 mg/kg oral/rat
Polyethylene glycol hexyl ether CAS No.: 112-59-4 RTECS No.: 35194	6-11	None Established	None Established	LD50: 4829 mg/kg oral/rat

Triethylene glycol ethyl ether CAS No.: 112-50-5 RTECS No.: 35157	3-8	None Established	None Established	LD50: 7750 mg/kg oral/rat
Diethylene glycol ethyl ether CAS No.: 111-90-0 RTECS No.: 35155	1-7	None Established	None Established	LD50: 6600 mg/kg oral/mouse
Triethylene glycol CAS No.: 112-27-6 RTECS No.: 86532	0-3	None Established	None Established	LD50: 17 g/kg oral/rat
Ethylene glycol CAS No.: 107-21-1 RTECS No.: 363305	0-3	None Established	50 ppm (ceiling)	LD50: 4700 mg/kg oral/rat
Diethylene Glycol Methyl Ether CAS No.: 111-77-3 RTECS No.: KL6125000	0-3	None Established	None Established	LD50: 5500 mg/kg oral/rat

3 & 4. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

POTENTIAL HEALTH EFFECTS

EYE: Contact may cause severe irritation with associated redness, swelling, pain, and tears. Conjunctivitis and/or diminished sensation may occur.

SKIN: Skin contact may cause irritation and redness. Toxic quantities may be absorbed through the skin depending on extent and duration of contact.

INGESTION: Accidental ingestion of this product is toxic and can be fatal. Ingestion may adversely affect the lungs, liver, kidneys, meninges, brain and cause central nervous system depression or excitation and metabolic abnormalities. Lethal kidney damage has followed ingestion of ethylene glycol. Hepatotoxicity is common following ingestion ofdiethylene glycol.

INHALATION: The higher glycol ethers have relatively low volatility however heating or agitating may create airborne fumes or mists. Inhalation of these fumes and mists may cause respiratory irritation and toxicity. Ethylene glycol is extremely toxic in particulate form via inhalation.

SIGNS AND SYMPTOMS: The following signs and symptoms represent an overview of the possible effects associated with overexposure to this product. The symptoms cited are representative and do not necessarily include all possible symptoms. Onset of symptoms can occur minutes to hours following exposure. Exposure may produce watery eyes, general anesthesia, headache, nausea, vomiting, diarrhea, abdominal pain, drunkeness, ataxia, rapid or slurred speech, heartarrhythmias, muscle incoordination, convulsions, lower back pain, drowsiness, edema, slow pulse, tremor, changes in urine flow, coma and/or death.

Medical Surveillance: If overexposure is suspected, kidney function tests and nervous system examination may be advisable.

CARCINOGENICITY: NTP: No IARC: No OSHA: No

Other: Experimental tumorigenic, carcinogenic andneoplastic data exist for diethylene glycol. Experimental mutagenic data exists for ethylene glycol.

REPRODUCTIVE EFFECTS: Experimentalteratogenic and reproductive data exist fordiethylene glycol and ethylene glycol.

EYE CONTACT: Remove contact lenses at once, flush eyes with water for 15 minutes. Seek medical attention.

SKIN CONTACT: Wash thoroughly with soap and water and remove contaminated clothing. If extensive contact has occurred seek medical attention.

INHALATION: Remove to fresh air. If breathing is difficult administer oxygen. If breathing has stopped, give artificial respiration. Seek medical attention.

OTHER: If accidental ingestion occurs, seek medical attention immediately.

EXTINGUISHING MEDIA: Water spray, dry chemical, foam, carbon dioxide

FIRE AND EXPLOSION HAZARDS: Vapors may be flammable when exposed to heat, sparks, or flames. Apply water spray and/or foam gently to surface of liquid to avoid frothing from water turning to steam below the liquid surface. Frothing may be violent. Do not use direct stream.

FIRE FIGHTING EQUIPMENT: Firefighters should wear a NIOSH/MSHA approved fullfacepiece, self-contained breathing apparatus operated in positive pressure mode and full turnout gear.

5. ACCIDENTAL RELEASE MEASURES

Absorb small spills with suitable sorbent material and place in tightly closed containers for later disposal. For large spills, isolate hazard area and deny entry to unauthorized or unprotected personnel. Dike well ahead of spill with suitablsorbent material. Clean-up personnel should wear appropriate protective clothing including respiratory protection.

6. HANDLING AND STORAGE

Store in cool, well ventilated area away from oxddizers and ignition sources. Do not eat, drink or smoke in areas where this product is being used or stored. Avoid skin contact with this product. Wash hands thoroughly after handling and before breaks and meals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Under normal working conditions at or below the PEL, none is required. For concentrations of ethylene glycol to 500 ppm, a NIOSH-MSHA-approved respirator with organic vapor cartridge should be worn. For high or unknown concentrations, a NIOSH-MSHA-approved self-contained breathing apparatus operated in positive pressure mode should be worn.

SKIN PROTECTION: Appropriate gloves and impervious clothing, (apron, shoes, long sleevesetc) are advisable when direct contact is anticipated.

EYE PROTECTION: Splash proof goggles should be worn when the possibility of contact exists

PERSONNEL SAMPLING PROCEDURE:

Air sampling for total particulates: Polyvinyl chloride filter, 5.0 um pore size (NIOSH 0500)

Air sampling for ethylene glycol: Glass fiber filter and silica gel (NIOSH 5500)

ENGINEERING CONTROLS: When product is heated or agitated, enclosed processes or local exhaust ventilation as necessary to prevent exposure should be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

	Clear, light amber liquid
	Mild
	440 °F
	No Data
	No Data
	Soluble
	1.03 - 1.04
	No Data
	9.5 - 10.5
	No Data
	No Data

[illegible]

Reactivity data was unavailable for this product as a whole. General reactivity data for separate components is cited. Data provided is for information. It is not expressed nor implied that this data will predict the reactivity of this product as a whole.

STABILITY: Avoid heat. Some polyethyleneglycols have a solvent action on certain plastics.

INCOMPATIBILITY: Explosive hydrogen gas is released whendiethylene glycol is mixed with sodium hydroxide at high temperatures. Diethylene glycol, diethylene glycol monobutyl ether, triethylene glycol monobutyl ether, ethylene glycol, and triethylene glycol monoethyl ether may react with oxidizing materials such as permanganates anddichromates when exposed to heat or flames.

HAZARDOUS DECOMPOSITION PRODUCTS: No Data

HAZARDOUS POLYMERIZATION: Will not occur.

[illegible]

INGESTION: Lethal doses (LDLo) of 398 mg/kg to 16 g/kg have been reported for ethylene glycol in man. It has been estimated that the single oral dose of diethylene glycols resulting in lethality in humans is approximately 1 ml/kg.

SKIN: Experimental data in animals show mild to severe skin irritation associated with exposure to glycol ethers.

EYE: Limited data was available. Eye effects for various ingredients were described as mild to severe without further qualification. Triethylene glycol monobutyl ether may damage the eyes.

INHALATION: ATCLo of 10000 mg/m³ was reported for human inhalation of ethylene glycol. Cyanosis, excitement and general anesthetic behavior were exhibited. AnLCLo of 130 mg/m³ /2H was reported for mouse inhalation ofdiethylene glycol.

CHRONIC: Long-term exposure todiethylene glycol has resulted in tumors in laboratory animals, (oral/rat).

[illegible]

SUB-CHRONIC: Rats dosed orally withtriethylene glycol monoethyl ether (141 mg/kg/26W-I) exhibitedleucocyte and platelet count changes and biochemical effects. Rats in an inhalation experiment withdiethylene glycol mono-n-butyl ether (5 mg/m³ /24H/17 W-C) exhibited changes in the brain and coverings and blood. Mice orally dosed with ethylene glycol (546 gm/kg/13 W-C) exhibited adverse effects of the liver, kidney, ureter, and bladder as well as weight loss or decreased weight gain. Rabbit inhalation of ethylene glycol (12 mg/m³ /8H/90-D-I) resulted in various effects including corneal damage and death in the multiple dose data field.

OTHER: Many glycol ethers have dangerous human reproductive effects. Experimental mutation data exist fotriethylene glycol and ethylene glycol.

[illegible]

ENVIRONMENTAL FATE: Ethers generally do not absorb light in the UV spectrum and are resistant to hydrolysis. Direcphotolysis in the atmosphere and hydrolysis in water and soil are probably not significantdegradative processes for the ethers in this product. Environmental fate data forglycols present in this product was unavailable. It is indicated that important fate processes fordiethylene glycol mono-butyl ether may includebiodegradation in soil and water and reactions withphotochemically produced hydroxyl radicals in the atmosphere.

14. DISPOSAL CONSIDERATIONS

Recycle, reclaim and dispose of in accordance with applicable local, state and federal regulations. Dispose per 40 CFR Part 261 and 262.

15. TRANSPORT INFORMATION

TRANSPORTATION AND HAZARDOUS MATERIALS DESCRIPTION
.D.O.T.: Not classified.

16. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION RULE. 29 CFR 1910.1200:
This product is not considered hazardous under the criteria of this rule.
CERCLA/SUPERFUND, 40 CFR 117, 302:
This product contains glycol ethers and ethylene glycol, Reportable Quantity (RQ) Substances and if 1000+ pounds are released, notification to the National Response Center in Wash.,D.C.: (1-800-424-8802) is required.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of theSuperfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered under applicable definitions, to meet the following categories:

Immediate Health Hazard
Delayed Health Hazard

SARA 313 INFORMATION:
This product contains the following substances subject to the reporting requirements of section 313 of Title III of thSuperfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS NUMBER
ethylene glycol	107-21-1
glycol ethers[1]	Not Applicable

[1] Includes mono- and di-ethers of ethylene glycol, diethylene glycol and triethylene glycol. Polymers are excluded from the glycol ether category.

SARA 302 (EHS): None

CALIFORNIA PROPOSITION 65: This product does not contain a chemical known to the State of California to cause cancer.

CANADIAN WHMIS: D2B

16. OTHER INFORMATION

Reason for issue: Update to New Format
Approval Date: 10/95
Supersedes Date: 12/94