



Safety Data Sheet

Issue Date: 22-Oct-2012

Revision Date: 22-May-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name WEAREVER DOT 4 Brake Fluid

Other means of identification

SDS # ADV-001

Restrictions on Use:

FOR LABELS FOR THE GENERAL PUBLIC:

If medical advice is needed, have product container or label at hand.

Keep out of reach of children and animals.

Read label before use.

FOR THE INDUSTRIAL WORKER:

Industrial use only.

Details of the supplier of the safety data sheet

Emergency Telephone Number

Company Phone Number 1-800-428-9284

Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Hazard Classification:

OSHA Hazards: Irritant, Harmful by ingestion.

Target Organs:

Kidney, Liver, Central Nervous System, Female Reproductive System, Male Reproductive System, Blood.

GHS Classification:

Acute toxicity, dermal (Category 5)

Acute toxicity, oral (Category 4)

Skin Irritation (Category 2)

Serious eye damage (Category 1)

Specific target organ toxicity – single exposure (Category 3)

Signal Word: WARNING



Hazard Statements:

H303 May be harmful if swallowed.
H313 May be harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H402 Harmful to aquatic life

Precautionary Statements:

P261 Avoid breathing dust / fume/ gas/ mist / vapors / spray.
P271 Use only in well-ventilated area.
P264 Wash thoroughly after handling.
P280 Wear protective gloves.
P280 Wear eye protection / face protection.
P273 Avoid release to the environment.
P312 Call a POISON CENTER or doctor / physician immediately.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice / attention.
P362 Take off contaminated clothing and wash before reuse. /
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310 IF IN EYES: Immediately call a POISON CENTER or doctor / physician.
P304 + P340 IF INHALED: Remove victim to fresh air and kept at rest in position comfortable for breathing.

30-50% of the mixture consists of ingredients of unknown acute toxicity.

HMIS Classification: Health Hazard: 1
 Chronic Health Hazard
 Flammability: 1
 Physical Hazards: 0

NFPA Rating: Health Hazard: 1
 Fire: 1
 Reactivity: 0

Description of Any Other Hazards Not Otherwise Classified: none known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT Name</u>	<u>CAS NUMBER</u>	<u>%wt. or %V</u>
Borate Ester	176022-80-3	30-50
Triethylene Glycol Butyl Ether	143-22-6	10-30
Diethylene Glycol	111-46-6	5-15
Triethylene Glycol	112-27-6	0-10
Polyethylene Glycol Methyl Ether	9004-74-4	0-15
Polyethylene Glycol Butyl Ether	9004-77-7	0-15
Triethylene Glycol Methyl Ether	112-35-6	5-25
Diisopropanolamine	110-97-4	0-1
Diethanolamine	111-42-2	0-1

4. FIRST-AID MEASURES

First Aid Measures

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

SKIN:	Wash with plenty of soap and water. If skin irritation occurs, get medical advice / attention.
INHALATION	Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.
INGESTION	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

NOTES TO PHYSICIANS OR FIRST AIR PROVIDERS: Treatment should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA

Dry chemical, foam, or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak, and disperse vapors.

UNSUITABLE EXTINGUISHING MEDIA

Direct water stream.

SPECIAL FIRE FIGHTING PROCEDURES

Evacuate area. Do not use direct water stream to extinguish fires. Do not release runoff from fire control methods to sewers or waterways.

UNUSUAL FIRE AND EXPLOSION HAZARDS

None known.

HAZARDOUS COMBUSTION PRODUCTS

Carbon monoxide, carbon dioxide, and unidentified organic compounds.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Wear full protective clothing and NIOSH – approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive breathing mode.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Use appropriate personal protective equipment. Avoid breathing vapors, mist or gas. Avoid contact with spilled material. Insure adequate ventilation. Remove all sources of ignition. Use non-sparking tools and equipment.

PROTECTIVE CLOTHING

Standard work uniform. Impervious gloves. Safety glasses. Personnel should increase PPE level as deemed appropriate in any given situation.

EMERGENCY PROCEDURES

SMALL SPILLS

Contain and recover liquid when possible. Collect liquid in appropriate container or absorb with an inert material (such as vermiculite or dry sand) and place in chemical waste container. Do not use combustible materials such as sawdust for the cleanup.

LARGE SPILLS

Containment

Shut off source of leak if safe to do so. Dike far ahead of liquid spill for later disposal. Do not allow material to enter sewers or waterways.

Cleanup

Contain and recover liquid when possible. Collect liquid in appropriate container. Absorb residue with an inert material (such as vermiculite or dry sand) and place in chemical waster container. Do not use combustible materials such as sawdust for the cleanup.

7. HANDLING AND STORAGE**HANDLING PRECAUTIONS**

May be harmful or fatal if swallowed.

STORAGE REQUIREMENTS

Store in a cool, dry, ventilated area. Separate from acids, bases and oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING CONTROLS**

Controls should be such that adequate ventilation is provided.

VENTILATION

Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work place by controlling it at its source.

RESPIRATORY PROTECTION

Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA / NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (e.g. cleaning spills, reactor vessels, or storage tanks), wear an SCBA. ***WARNING! Air purifying respirators do not protect workers in oxygen-deficient atmospheres!*** If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

EYE PROTECTION

Wear protective eyeglasses or chemical safety goggles, per OSHA eye and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.

SKIN PROTECTON

Wear chemically protective gloves, boots, aprons and gauntlets to prevent prolonged or repeated skin contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Make emergency eyewash stations, safety / quick drench showers and washing facilities available in work areas.

WORK HYGIENE PRACTICES

Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material especially before eating, drinking or smoking, using the toilet, or applying cosmetics. Separate contaminate work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Discard belts and shoes that cannot be cleaned.

EXPOSURE GUIDELINES:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		USA WEEL
	TWA	STEL	TWA	STEL	TWA	STEL	
	Borate Ester	None established	None established	None established	None established	None established	
Triethylene Glycol Butyl Ether	None established	None established	None established	None established	None established	None established	None established
Diethylene Glycol	None established	None established	None established	None established	None established	None established	10 mg/m ³
Triethylene Glycol	None established	None established	None established	None established	None established	None established	None established
Polyethylene Glycol Methyl Ether	None established	None established	None established	None established	None established	None established	10 mg / m3
Polyethylene Glycol Butyl Ether	None established	None established	None established	None established	None established	None established	None established
Triethylene Glycol Methyl Ether	None established	None established	None established	None established	None established	None established	10 mg / m3
Diisopropano lamine	None established	None established	None established	None established	None established	None established	25 ppm
Diethanolami ne	3 ppm	None established	2 mg/m ³	None established	None established	None established	None established

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Appearance and Color: Yellow to Amber
Odor: Mild
Flash Point: >275°F (>135°C)
Upper / Lower Flammability or Explosive Limits Not available
Auto Ignition Temperature: Not available
Decomposition Temperature: Not available
Vapor Pressure: Not available
Odor Threshold: Not available
Vapor Density (air=1) > 1
pH: 10.0 – 11.5
Relative Density: 8.33 – 9.02 lb/gal
Specific Gravity (H2O=1 AT 4 C): 1.000 – 1.070
Melting Point / Freeze Point: Not available
Water Solubility: Soluble
Other Solubilities: Not available
Initial Boiling Point And Boiling Range: 480°F (248.9°C), boiling range not available
Evaporation Rate (BuAc = 1): <0.01
Partition Coefficient: n-OCTANOL / WATER Not available
Viscosity: Not available
Refractive Index: Not available
Formula Weight: Mixture

10. STABILITY AND REACTIVITY

REACTIVITY – None under normal handling.

STABILITY - Stable at room temperature in closed containers under normal storage and handling conditions.

CONDITIONS TO AVOID (STABILITY): None known.

INCOMPATIBILITY (MATERIAL TO AVOID) - None known.

HAZARDOUS DECOMPOSITION BY-PRODUCTS - Thermal oxidative decomposition can produce carbon monoxide, carbon dioxide and unknown organic compounds.

HAZARDOUS POLYMERIZATION - Hazardous polymerization will not occur.

CONDITIONS TO AVOID (POLYMERICATION) - Hazardous polymerization will not occur.

HAZARDOUS POLYMERICATION BY-PRODUCT - Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

SIGN AND SYMPTOMS OF OVEREXPOSURE: Swallowing larger amounts may cause nausea and vomiting, abdominal discomfort or diarrhea. May cause dizziness and drowsiness.

ACUTE EFFECTS:

EYE CONTACT	Causes serious eye damage.
SKIN CONTACT	Causes skin irritation.
INHALATION	At room temperature, exposure to vapor is minimal due to low volatility. Mist may cause irritation of the upper respiratory tract.
Ingestion	Toxic or fatal if ingested. For diethylene glycol, a component of this mixture, a lethal dose can be as little as two ounces. Symptoms of diethylene glycol poisoning include severe abdominal cramping, diarrhea, vomiting sweating, confusion, cardiac abnormalities, neurological abnormalities, infrequent urination, intoxication or CNS depression. If left untreated, product will metabolize to cause metabolic acidosis, renal failure, hyperkalemia, hyponatremia, paralysis, cardiac failure or death. See medical attention immediately for poisoning. If ingested, DO NOT wait for symptoms to develop before getting treatment.

TARGET ORGAN EFFECTS – May cause respiratory irritation, drowsiness or dizziness.

CHRONIC EFFECTS – No data available.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE – Pre-existing skin, eye and respiratory disorders may be aggravated by exposure to this product. Impaired kidney function from pre-existing disorders may be aggravated by exposure to this product.

ACUTE TOXICITY VALUES

Borate Ester

ORAL LD50 (rat): data unavailable
DERMAL LD50 (rabbit): data unavailable
INHALATION LC50 (state animal): data unavailable

Triethylene Glycol Butyl Ether

ORAL LD50 (rat): 5,300 mg/kg
DERMAL LD50 (rabbit): 3,505 mg/kg
INHALATION LC50 (state animal): data unavailable

Diethylene Glycol

ORAL LD50 (rat): 12,565 mg/kg
DERMAL LD50 (rabbit): 11,890 mg/kg
INHALATION LC50 (state animal): data unavailable

Triethylene Glycol

ORAL LD50 (rat): 17,000 mg/kg
DERMAL LD50 (rabbit): 22,500 mg/kg
INHALATION LC50 (state animal): data unavailable

Diethylene Glycol Monobutyl Ether

ORAL LD50 (rat): 5,660 mg/kg
DERMAL LD50 (rabbit): 2,700 mg/kg
INHALATION LC50 (state animal): data unavailable

Polyethylene Glycol Methyl Ether

ORAL LD50 (rat): 39,800 mg/kg
DERMAL LD50 (rabbit): >20,000 mg/kg
INHALATION LC50 (state animal): data unavailable

Polyethylene Glycol Butyl Ether

ORAL LD50 (rat): >2,000 mg/kg
DERMAL LD50 (rabbit): >2,000 mg/kg
INHALATION LC50 (state animal): data unavailable

Triethylene Glycol Methyl Ether

ORAL LD50 (rat): 11,842 mg/kg
DERMAL LD50 (rabbit): 7,441 mg/kg
INHALATION LC50 (state animal): data unavailable

Diisopropanolamine

ORAL LD50 (rat): 4,765 mg/kg
DERMAL LD50 (rabbit): data unavailable
INHALATION LC50 (state animal): data unavailable

Diethanolamine

ORAL LD50 (rat): 710 mg/kg
DERMAL LD50 (rabbit): 12,200 mg/kg
INHALATION LC50 (state animal): data unavailable

LISTED CARCINOGEN**NATIONAL TOXICOLOGY PROGRAM REPORT ON CARCINOGENS**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC LISTED AS POTENTIAL CARCINOGEN

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA LISTED AS POTENTIAL CARCINOGEN

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

12. ECOLOGICAL INFORMATION**DATA FROM TOXICITY TESTS ON AQUATIC AND/OR TERRESTRIAL ORGANISMS:**

Borate Ester: data unavailable

Triethylene Glycol Butyl Ether: data unavailable

Diethylene Glycol

Fish: LC50 – Pimephales promelas (fathead minnow) – 75,200 mg/l – 96h

LC50 – Carassius auratus (goldfish) – 5,000 mg/l – 24h

Daphnia: EC50 – Daphnia magna (Water flea) - >10,000 mg/l – 24h

Triethylene Glycol

Fish: LC50 – Leuciscus idus (Golden orfe) - >100 mg/l – 96h

Daphnia: EC50 – Daphnia magna (Water flea) – 46,500 mg/l – 48h

Polyethylene Glycol Methyl Ether

Fish: LC50 – Pimephales promelas (fathead minnow) – 10,000 mg/l – 96h

Polyethylene Glycol Butyl Ether: data unavailable

Triethylene Glycol Methyl Ether: data unavailable

Diisopropanolamine

Fish: LC50 – Carassius auratus (goldfish) – 1,100 mg/l – 24h

Diisopropanolamine

Fish: LC50 – Pimephales promelas (fathead minnow) – 1,460 mg/l – 96h

Daphnia: EC50 – Daphnia magna (Water flea) – 55 mg/l – 48h

ENVIRONMENTAL FATE: data unavailable

BIOACCUMULATION POTENTIAL: data unavailable

POTENTIAL TO MOVE FROM SOIL TO GROUNDWATER: data unavailable

OTHER ADVERSE ENVIRONMENTAL EFFECTS: Harmful to aquatic life.

13. DISPOSAL CONSIDERATIONS

CONTAINERS TO USE: No specific recommendations.

RECOMMENDED DISPOSAL METHODS: Whatever cannot be saved for recovery or recycling should be disposed of in an approved waste facility in accordance with Federal, State/Provincial and Local requirements.

PHYSICAL AND CHEMICAL PROPERTIES THAT MAY AFFECT DISPOSAL ACTIVITIES: No specific information available.

WHENEVER POSSIBLE, MATERIAL SHOULD NOT BE ALLOWED TO ENTER SEWAGE DISPOSAL SYSTEMS.

SPECIAL PRECAUTIONS FOR LANDFILL OR INCINERATION ACTIVITIES: No specific information available.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (49 CFR 172.101)

PROPER SHIPPING NAME: DOT 4 Brake Fluid

SHIPPING SYMBOLS: Not Applicable

HAZARD CLASS: Non-hazardous liquid

UN/NA NUMBER: Not determined

PACKING GROUP: Not applicable

LABELS REQUIRED: Not applicable

SPECIAL PROVISIONS (172.102): Not applicable

PACKAGING AUTHORIZATIONS

A) EXCEPTIONS: Not Applicable

B) NON-BULK PACKAGING: Not Applicable

C) BULK PACKAGING: Not Applicable

QUANTITY LIMITATIONS

A) PASSENGER, AIRCRAFT OR RAILCAR: No limit

B) CARGO AIRCRAFT ONLY: No limit

VESSEL STOWAGE REQUIREMENTS

A) VESSEL STOWAGE: None

B) OTHER: None

IATA

Not Dangerous Goods

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (Toxic Substance Control Act): all components are listed on the TSCA Inventory.

CERCLA (Comprehensive Response Compensation and Liability Act): None. However, this product contains various ethylene glycols and glycol ethers which are each included as a broad category on the CERCLA Hazardous Substance list.

SARA TITLE III (Superfund Amendments and Reauthorization Act): No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

311/312 HAZARD CATEGORIES:

Immediate Hazard: yes

Delayed Hazard: yes

Fire Hazard: no

Pressure Hazard: no

Reactivity Hazard: no

313 REPORTABLE INGREDIENTS:

Diethanolamine

CAS Number: 111-42-2

CLEAN WATER ACT (CWA): None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

CLEAN AIR ACT (CAA): None of the chemicals in the product are listed as Hazardous Act.

STATE REGULATIONS:

California: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts:

1,1'-Iminodipropan-2-ol

CAS Number: 110-97-4

Diethanolamine

CAS Number: 111-42-2

New Jersey:

Triethylene glycol monobutyl ether

CAS Number: 143-22-6

Diethylene glycol

CAS Number: 111-46-6

2,2'-(Ethylenedioxy) diethanol

CAS Number: 112-27-6

Methoxypolyethylene glycol

CAS Number: 9004-74-4

1,1'-Iminodipropan-2-ol

CAS Number: 110-97-4

Diethanolamine

CAS Number: 111-42-2

Pennsylvania:

Triethylene glycol monobutyl ether

CAS Number: 143-22-6

Diethylene glycol

CAS Number: 111-46-6

2,2'-(Ethylenedioxy) diethanol

CAS Number: 110-97-4

1,1'-Iminodipropan-2-ol
Diethanolamine

CAS Number: 110-97-4
CAS Number: 111-42-2

INTERNAL REGULATIONS:

Persistent Organic Pollutants (United Nations): not listed
Initial List of Prior Informed Consent Chemicals (United Nations): not listed
Ozone Depleting Substance (Montreal Protocol): not listed
Greenhouse Gases (Intergovernmental Panel on Climate Change): not listed

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES: This material contains components not listed on the Australian Inventory of Chemical Substances: Borate Ester, CAS Number 176022-80-3; Polyethylene Glycol Butyl Ether, CAS Number 9044-77-7.

CANADA: DOMESTIC SUBSTANCES LIST: This material contains components not listed on the Canadian Domestic Substances List: Borate Ester, CAS Number 176022-80-3; Polyethylene Glycol Butyl Ether, CAS Number 9044-77-7.

CANADA WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS): Class 2B: Toxic Material at >1%.

CANADIAN ENVIRONMENTAL PROTECTION AGENCY TOXICS LIST: None of the components of this mixture are listed

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES: This material contains components not listed on the Canadian Domestic Substances List: Borate Ester, CAS Number 176022-80-3; Polyethylene Glycol Methyl Ether, CAS Number 9004-74-4; Polyethylene Glycol Butyl Ether, CAS Number 9044-77-7.

NEW ZEALAND: This material contains components not listed on the New Zealand Chemical Inventory: Borate Ester, CAS Number 176022-80-3; Polyethylene Glycol Butyl Ether, CAS Number 9044-77-7.

PHILLIPPINE INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES: This material contains components not listed on the Philippine Inventory of Chemicals and Chemical Substances: Borate Ester, CAS Number 176022-80-3; Polyethylene Glycol Methyl Ether, CAS Number 9004-74-4; Polyethylene Glycol Butyl Ether, CAS Number 9044-77-7.

16. OTHER INFORMATION

Issue Date: 22-Oct-2012
Revision Date: 22-May-2015
Revision Note: New format

Disclaimer

This product is FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. DO NOT TAKE INTERNALLY.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet