FRSC Chemical Solutions

SAFETY DATA SHEET

1. Identification

Product identifier Motor Medic Heavy Duty Brake Fluid - DOT 3

Other means of identification

SDS number M4412

Part No. M4412, M4432, M4434, M4440, M4449

Tariff code 3819.00.0010

Recommended use Brake Fluid

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name
Address
RSC Chemical Solutions
600 Radiator Road
Indian Trail, NC 28079

United States

Telephone Customer Service: (704) 821-7643

Technical: (704) 684-1811

Website www.rscbrands.com E-mail sds@rscbrands.com

Emergency phone number Emergency Telephone: (303) 623-5716

Emergency Contact: RMPDC (877-740-5015)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Acute toxicity, dermal Category 5
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Harmful if swallowed. May be harmful in contact with skin. Causes skin irritation. Causes serious

eye damage.

Precautionary statement

Prevention Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear

protective gloves. Wear eye/face protection.

Response If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If

in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Rinse mouth. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before

reuse.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Material name: Motor Medic Heavy Duty Brake Fluid - DOT 3

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-(2-butoxyéthoxy) Éthanol		112-34-5	5 - < 10
Diethyleneglycol		111-46-6	5 - < 10
Polyethyleneglycol		25322-68-3	5 - < 10
Diethylene Glycol Methyl Ether		111-77-3	1 - < 3
Diethylenglykolmonoethylether		111-90-0	1 - < 3
Other components below reportable le	vels		70 - < 80

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. Get medical advice/attention

if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated

clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Get medical advice/attention if you feel unwell.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

General information

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

Specific methods
General fire hazards

Powder. Alcohol resistant foam. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Provide adequate ventilation. Do not get this material in contact with eyes. Avoid contact with eyes,

skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Keep out of the reach of children. Store away from

incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.
US. Workplace Environmental Ex	posure Level (WEEL) Guides		
Components	Туре	Value	Form
Diethyleneglycol (CAS 111-46-6)	TWA	10 mg/m3	
Diethylenglykolmonoethylet her (CAS 111-90-0)	TWA	140 mg/m3	
,		25 ppm	
Polyethyleneglycol (CAS 25322-68-3)	TWA	10 mg/m3	Particulate.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye

wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Liquid.

Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Form

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash

work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid. Clear.

Physical state Liquid.

Color Light yellow to amber

Odor Mild

Odor threshold Not available. pH 10 - 11.5

Melting point/freezing point -90.58 °F (-68.1 °C) estimated Initial boiling point and boiling 446.72 °F (230.4 °C) estimated

range

Flash point > 275.0 °F (> 135.0 °C)

Evaporation rate < 0.01 BuAc

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

(%)

Flammability limit - upper

Flammability limit - lower

Not available.

Not available.

(%)

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%)

Vapor pressure 0.01 hPa estimated

Vapor density Not available. Relative density Not available.

Solubility(ies)

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 442 °F (227.78 °C) estimated

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Density 8.33 - 9.02 lbs/gal **Explosive properties** Not explosive.

Flammability class Combustible IIIB estimated

Not oxidizing. Oxidizing properties Percent volatile 23.19 % estimated

Specific gravity 1 - 1.07

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

May be harmful in contact with skin. Causes skin irritation. Skin contact

Causes serious eye damage. Eye contact

Harmful if swallowed. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause

redness and pain.

Information on toxicological effects

Harmful if swallowed. May be harmful in contact with skin. Acute toxicity

Components **Test Results**

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)

Acute Dermal

LD50 Rabbit 2700 mg/kg

Components	Species	Test Results
Inhalation		
Liquid		
LC50	Rat	> 29 ppm
Oral	0 :	0000
LD50	Guinea pig	2000 mg/kg
	Mouse	2400 mg/kg
	Rabbit	2200 mg/kg
	Rat	4500 mg/kg
Diethylene Glycol Methyl Ethe	er (CAS 111-77-3)	
Acute .		
Dermal	Rabbit	GEAD mailed
LD50	Rabbit	6540 mg/kg
Oral LD50	Guinea pig	4160 mg/kg
LDOU	Guillea pig	4.16 g/kg
	Mouse	4. 16 g/kg 8222 mg/kg
	Rabbit	7.19 g/kg
D: (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Rat	5500 mg/kg
Diethyleneglycol (CAS 111-46	5-6)	
<u>Acute</u> Dermal		
LD50	Rabbit	11890 mg/kg
Oral	· (ass)	. 1000 mg/kg
LD50	Cat	3300 mg/kg
	Dog	9000 mg/kg
	Guinea pig	8700 mg/kg
	Mouse	13.3 g/kg
	Rabbit	26.9 g/kg
	Rat	12565 mg/kg
Diethylenglykelmeneethylethe		12303 Hig/kg
Diethylenglykolmonoethylethe <u>Acute</u>	er (CAS 111-90-0)	
<u>Acute</u> Dermal		
LD50	Guinea pig	5900 mg/kg
	Mouse	6000 mg/kg
	Rabbit	8476 mg/kg
	Rat	6000 mg/kg
Oral		out mg ng
LD50	Guinea pig	3000 mg/kg
	Mouse	6.58 g/kg
	Rabbit	3620 mg/kg
	Rat	1920 mg/kg
		1020 119119
* Estimates for product m	nay be based on additional component da	ata not shown.
Skin corrosion/irritation	Causes skin irritation.	

Serious eye damage/eye Causes serious eye damage.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

This product is not expected to cause skin sensitization. Skin sensitization

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) 1300 mg/l, 96 hours

Diethylene Glycol Methyl Ether (CAS 111-77-3)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) 7500 mg/l, 96 hours

Diethyleneglycol (CAS 111-46-6)

Aquatic

Fish LC50 Western mosquitofish (Gambusia affinis) > 32000 mg/l, 96 hours

Diethylenglykolmonoethylether (CAS 111-90-0)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) > 10000 mg/l, 96 hours

Polyethyleneglycol (CAS 25322-68-3)

Aquatic

Fish LC50 Atlantic salmon (Salmo salar) > 1000 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-(2-butoxyéthoxy) Éthanol 0.56 Diethylenglykolmonoethylether -0.54

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

^{*} Estimates for product may be based on additional component data not shown.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5) Listed. Diethylene Glycol Methyl Ether (CAS 111-77-3) Listed. Diethylenglykolmonoethylether (CAS 111-90-0) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
2-(2-butoxyéthoxy) Éthanol	112-34-5	5 - < 10	
Diethylene Glycol Methyl Ether	111-77-3	1 - < 3	
Diethylenglykolmonoethylether	111-90-0	1 - < 3	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5) Diethylene Glycol Methyl Ether (CAS 111-77-3)

Diethylenglykolmonoethylether (CAS 111-90-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)

Diethylene Glycol Methyl Ether (CAS 111-77-3)

Diethylenglykolmonoethylether (CAS 111-90-0)

Material name: Motor Medic Heavy Duty Brake Fluid - DOT 3

US. Massachusetts RTK - Substance List

Diethylene Glycol Methyl Ether (CAS 111-77-3)

US. New Jersey Worker and Community Right-to-Know Act

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5) Diethylene Glycol Methyl Ether (CAS 111-77-3) Diethylenglykolmonoethylether (CAS 111-90-0)

US. Pennsylvania Worker and Community Right-to-Know Law

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5) Diethylene Glycol Methyl Ether (CAS 111-77-3)

Diethyleneglycol (CAS 111-46-6)

Diethylenglykolmonoethylether (CAS 111-90-0)

US. Rhode Island RTK

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5) Diethylene Glycol Methyl Ether (CAS 111-77-3) Diethylenglykolmonoethylether (CAS 111-90-0)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

 Issue date
 04-13-2015

 Revision date
 01-11-2016

Version # 03

United States & Puerto Rico

HMIS® ratings Health: 1

Flammability: 1 Physical hazard: 0

NFPA ratings Health: 1

Flammability: 1 Instability: 0

NFPA ratings



Disclaimer

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.

Yes

Product and Company Identification: Product Uses