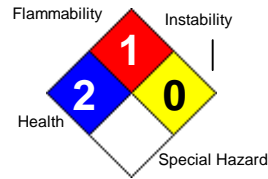




MATERIAL SAFETY DATA SHEET

DOT 4 Brake Fluid

CYCLO INDUSTRIES, INC.
902 SOUTH US HIGHWAY 1
JUPITER, FL 33477



Revision: 01/30/2012
Supersedes Revision: 10/14/2010
Date Created: 10/14/2010

1. Product and Company Identification

Product Code: C-71

Product Name: DOT 4 Brake Fluid

Manufacturer Information

Company Name: CYCLO INDUSTRIES, INC.

Phone Number: (800)843-7813

Fax Number: (561)745-3867

Emergency Contact: First Aid Emergency (800)222-1222

Alternate Emergency Contact: Chemtrec (703) 527-3887 (800)424-9300

Information: First Aid Emergency (Outside U.S.) (312)906-6194

Web site address: www.cyclo.com

Email address: ehs@cyclo.com

2. Hazards Identification

Emergency Overview

DANGER: Harmful if swallowed. Eye & skin irritant.

Potential Health Effects (Acute and Chronic)

This material is irritating to skin, eyes and mucous membranes. Absorption through skin or inhalation of heated vapor and mist may result in central nervous system and adverse reproductive effects. Animal studies indicate high doses may cause adverse reproductive effects.

Signs and Symptoms Of Exposure

No data available.

Medical Conditions Generally Aggravated By Exposure

No data available.

3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration
1. Alkyl Ester	NA	30.0 -50.0 %
2. Triethylene glycol monobutyl ether	143-22-6	10.0 -40.0 %
3. Methoxypoly(ethylene glycol)	9004-74-4	0.0 -20.0 %
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	0.0 -20.0 %
5. Triethylene glycol monoethyl ether	112-35-6	0.0 -20.0 %
6. Polyethylene glycol	25322-68-3	5.0 -15.0 %
7. Inhibitor Package	NA	1.0 -3.0 %

4. First Aid Measures

Emergency and First Aid Procedures

If swallowed, induce vomiting immediately by give two glasses of water and sticking fingers down throat; never give anything to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Vapors or mists from this material can irritate the nose, throat and lungs and cause signs and symptoms of central nervous system depression, depending on the concentration and duration of exposure. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. In case of skin contact, remove contaminated clothing and shoes and launder before reuse. Flush with copious amounts of water. Call



physician immediately if adverse reaction occurs.

5. Fire Fighting Measures

Flash Pt: 135.00 C (275.0 F) Method Used: Pensky-Marten Closed Cup

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data available.

Fire Fighting Instructions

Wear approved positive-pressure self-contained breathing apparatus and protective clothing.

Flammable Properties and Hazards

No data available.

Hazardous Combustion Products

Carbon monoxide. Carbon dioxide.

Suitable Extinguishing Media

Alcohol foam, dry chemical, halon, carbon dioxide, water fog, water. Water fog and foam may cause frothing and spattering.

Unsuitable Extinguishing Media

No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Wear appropriate protective clothing and equipment to prevent skin and eye contact. Avoid all sources of ignition; heat, sparks and open flames. Contain any liquid from leaking containers. Ventilate spill area. Soak up material with absorbent and place in chemical waste container. If clean-up is not immediate, cover spill with plastic or canvas to keep dry. Do not allow enter sanitary drains, sewer or surface and subsurface waters.

7. Handling and Storage

Precautions To Be Taken in Handling

Do not swallow. Use only in a well ventilated area. Avoid open heating or agitation, this may generate vapors or mists. Keep out of the reach of children.

Precautions To Be Taken in Storing

Store in a cool, dry place. Keep container closed when not in use to prevent contact with acidic, basic or oxidizing materials.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Alkyl Ester	NA	No data.	No data.	No data.
2. Triethylene glycol monobutyl ether	143-22-6	No data.	No data.	No data.
3. Methoxypoly(ethylene glycol)	9004-74-4	No data.	No data.	No data.
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	No data.	No data.	No data.
5. Triethylene glycol monoethyl ether	112-35-6	No data.	No data.	No data.
6. Polyethylene glycol	25322-68-3	No data.	No data.	No data.
7. Inhibitor Package	NA	No data.	No data.	No data.

Respiratory Equipment (Specify Type)

An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

Eye Protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Protective Gloves

Avoid skin contact. Wear protective gloves. Rubber, neoprene or vinyl.



Other Protective Clothing

Avoid skin contact. Wear protective clothing.

Engineering Controls (Ventilation etc.)

Exhaust ventilation.

Work/Hygienic/Maintenance Practices

Eyewash stations. Showers. Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking and when leaving work.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid
Melting Point: No data.
Boiling Point: 470.00 F (243.3 C)
Autoignition Pt: No data.
Flash Pt: 135.00 C (275.0 F) Method Used: Pensky-Marten Closed Cup
Specific Gravity (Water = 1): 1.047 at 20.0 C (68.0 F)
Vapor Pressure (vs. Air or mm Hg): < .01 MM_HG at 20.0 C (68.0 F)
Vapor Density (vs. Air = 1): 9
Evaporation Rate (vs Butyl Acetate=1): No data.
Solubility in Water: < .5
Percent Volatile: 0.5 % by weight.

Appearance and Odor

Transparent pale yellow liquid with mild, ethereal odor.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability

Heat, sparks and flame. Avoid open heating or agitation, this may generate vapors or mists.

Incompatibility - Materials To Avoid

Contact with oxidizing agents. May form peroxides if in contact with air for long periods and these can explode spontaneously or when heated.

Hazardous Decomposition Or Byproducts

Oxides of carbon and nitrogen.

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Reactions

No data available.

11. Toxicological Information

Some minor components have been shown not to interfere with reproduction, although slightly toxic to the offspring or decreased pup weights were observed in the animal studies. This substance appears to be of low toxicity, except for possible mild irritant effects in humans. A high dose may produce central nervous system depression, but there are no reports of adverse health effects from occupational exposure.

Chronic Toxicological Effects

No data available.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Alkyl Ester	NA	n.a.	n.a.	n.a.	n.a.
2. Triethylene glycol monobutyl ether	143-22-6	n.a.	n.a.	n.a.	n.a.



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Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
3. Methoxypoly(ethylene glycol)	9004-74-4	n.a.	n.a.	n.a.	n.a.
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	n.a.	n.a.	n.a.	n.a.
5. Triethylene glycol monoethyl ether	112-35-6	n.a.	n.a.	n.a.	n.a.
6. Polyethylene glycol	25322-68-3	n.a.	n.a.	n.a.	n.a.
7. Inhibitor Package	NA	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

Low to moderate toxicity is expected to aquatic and terrestrial organisms. There is limited information available on environmental fate and effects. Due caution should be exercised to avoid the accidental release of this material to aquatic and terrestrial environments. This mixture is not expected to bioconcentrate in significant amounts.

13. Disposal Considerations

Waste Disposal Method

Disposal should be made in accordance with federal, state and local regulations.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Not-Restricted

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name Not-Restricted

Additional Transport Information

No data available.

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Alkyl Ester	NA	No	No	No	No
2. Triethylene glycol monobutyl ether	143-22-6	No	No	Yes-Cat. N230	No
3. Methoxypoly(ethylene glycol)	9004-74-4	No	No	No	No
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	No	No	No	No
5. Triethylene glycol monoethyl ether	112-35-6	No	No	Yes-Cat. N230	No
6. Polyethylene glycol	25322-68-3	No	No	No	No
7. Inhibitor Package	NA	No	No	No	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. Alkyl Ester	NA	No	No	No	No
2. Triethylene glycol monobutyl ether	143-22-6	No	No	Inventory	No
3. Methoxypoly(ethylene glycol)	9004-74-4	No	No	Inventory	No
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	No	No	Inventory	No
5. Triethylene glycol monoethyl ether	112-35-6	No	No	Inventory	No
6. Polyethylene glycol	25322-68-3	No	No	Inventory	No
7. Inhibitor Package	NA	No	No	No	No

Hazardous Components (Chemical Name)	CAS #	CA TAC, Title 8	MA Oil/HazMat	MI CMR, Part 5	NC TAP
1. Alkyl Ester	NA	No	No	No	No
2. Triethylene glycol monobutyl ether	143-22-6	No	No	No	No



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Hazardous Components (Chemical Name)	CAS #	CA TAC, Title 8	MA Oil/HazMat	MI CMR, Part 5	NC TAP
3. Methoxypoly(ethylene glycol)	9004-74-4	No	No	No	No
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	No	No	No	No
5. Triethylene glycol monoethyl ether	112-35-6	No	No	No	No
6. Polyethylene glycol	25322-68-3	No	No	No	No
7. Inhibitor Package	NA	No	No	No	No

Hazardous Components (Chemical Name)	CAS #	NJ EHS	NY Part 597	PA HSL	SC TAP
1. Alkyl Ester	NA	No	No	No	No
2. Triethylene glycol monobutyl ether	143-22-6	No	No	No	No
3. Methoxypoly(ethylene glycol)	9004-74-4	No	No	No	No
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	No	No	No	No
5. Triethylene glycol monoethyl ether	112-35-6	No	No	No	No
6. Polyethylene glycol	25322-68-3	No	No	No	No
7. Inhibitor Package	NA	No	No	No	No

Hazardous Components (Chemical Name)	CAS #	WI Air
1. Alkyl Ester	NA	No
2. Triethylene glycol monobutyl ether	143-22-6	No
3. Methoxypoly(ethylene glycol)	9004-74-4	No
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	No
5. Triethylene glycol monoethyl ether	112-35-6	No
6. Polyethylene glycol	25322-68-3	No
7. Inhibitor Package	NA	No

International Regulatory Lists

Hazardous Components (Chemical Name)	CAS #	Canadian DSL	Canadian NDSL	Taiwan TCSCA
1. Alkyl Ester	NA	No	No	No
2. Triethylene glycol monobutyl ether	143-22-6	Yes	No	No
3. Methoxypoly(ethylene glycol)	9004-74-4	Yes	No	No
4. Poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-	9004-77-7	Yes	No	No
5. Triethylene glycol monoethyl ether	112-35-6	Yes	No	No
6. Polyethylene glycol	25322-68-3	Yes	No	No
7. Inhibitor Package	NA	No	No	No

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

Sec.302:	EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
Sec.304:	EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
Sec.313:	EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
Sec.110:	EPA SARA 110 Superfund Site Priority Contaminant List

TSCA (Toxic Substances Control Act) Lists:

Inventory:	Chemical Listed in the TSCA Inventory.
5A(2):	Chemical Subject to Significant New Rules (SNURS)
6A:	Commercial Chemical Control Rules



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8A:	Toxic Substances Subject To Information Rules on Production
8A CAIR:	Comprehensive Assessment Information Rules - (CAIR)
8A PAIR:	Preliminary Assessment Information Rules - (PAIR)
8C:	Records of Allegations of Significant Adverse Reactions
8D:	Health and Safety Data Reporting Rules
8D TERM:	Health and Safety Data Reporting Rule Terminations
12(b):	Notice of Export

Other Important Lists:

CWA NPDES:	EPA Clean Water Act NPDES Permit Chemical
CAA HAP:	EPA Clean Air Act Hazardous Air Pollutant
CAA ODC:	EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
CA PROP 65:	California Proposition 65
CA TAC:	California AB 1807 - Toxic Air Contaminants
CA Title 8:	California Hazardous Substances List: Title 8, Sec. 339
MI CMR:	Michigan Critical Materials Register
MI Part 5:	Michigan DEQ WRP Part 5 Pollutants List
NC TAP:	North Carolina Toxic Air Pollutants
NJ EHS:	New Jersey Environmental Hazardous Substances List
NY Part 597:	New York Part 597 List of Hazardous Substances
PA HSL:	Pennsylvania Hazardous Substances List
SC TAP:	South Carolina Toxic Air Pollutants
WI Air:	Wisconsin Reportable Air Contaminants

International Regulatory Lists:

Canadian DSL:	Canada Domestic Substances List
Canadian NDSL:	Canada Non-Domestic Substances List
Taiwan TCSCA:	Taiwan Toxic Chemical Substances Control Act of 1986

16. Other Information

Company Policy or Disclaimer

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