



B-1 Engine Treatment

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : B-1 Engine Treatment
Product code : 10208
Other means of identification : 1019-JCC, 1020, 1020-BS, 10208

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Lubricant additive
Recommended use : Lubricants, Greases and Release Products

1.3. Details of the supplier of the safety data sheet

Bardahl Manufacturing Corporation
1400 NW 52nd Street
Seattle, WA 98107
T 206-783-4851 - F 206-784-3219
jackie.leung@bardahl.com - www.bardahl.com

1.4. Emergency telephone number

Emergency number : 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Reproductive toxicity, Additional category, Effects on or via lactation : May cause harm to breast-fed children
Hazardous to the aquatic environment — Acute Hazard, Category 3 : Harmful to aquatic life
Hazardous to the aquatic environment — Chronic Hazard, Category 3 : Harmful to aquatic life with long lasting effects

2.2. Label elements

GHS-US labelling

Hazard statements (GHS-US) : May cause harm to breast-fed children
Harmful to aquatic life
Harmful to aquatic life with long lasting effects
Precautionary statements (GHS-US) : Obtain special instructions before use
Do not breathe mist, vapours
Avoid contact during pregnancy/while nursing
Wash hands thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid release to the environment
If exposed or concerned: Get medical advice/attention
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	GHS-US classification
150 Neutral Base Oil substance with OEL values	(CAS No) 64742-58-1	>= 80	Not classified
Chlorinated paraffin	(CAS No) 63449-39-8	1 - 5	Lact., H362 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Petroleum Hydrocarbon substance with OEL values	(CAS No) 64742-52-5	1 - 5	Not classified
Antimony dialkyldithiocarbamate substance with OEL values	(CAS No) Confidential	0.1 - 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention.
 First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
 First-aid measures after skin contact : Wash skin with plenty of water.
 First-aid measures after eye contact : Rinse eyes with water as a precaution.
 First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
 Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Do not breathe mist, vapours.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
 Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Obtain special instructions before use. Avoid contact during pregnancy/while nursing. Do not breathe mist, vapours.
 Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

150 Neutral Base Oil (64742-58-1)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
Not applicable		
Chlorinated paraffin (63449-39-8)		
Not applicable		
Petroleum Hydrocarbon (64742-52-5)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (Mineral oil, pure, highly and severely refined; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction)
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³
Antimony dialkyldithiocarbamate (Confidential)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Hand protection : Protective gloves.
Eye protection : Safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : amber
Odour : characteristic
Odour threshold : No data available
pH : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : >= 200 °C COC minimum
Relative evaporation rate (butylacetate=1) : No data available
Flammability (solid, gas) : Not applicable.
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 0.854 g/cm³ typical
Solubility : No data available
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : 61.1 cSt @ 40 C typical
Viscosity, dynamic : No data available

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Explosive limits : No data available
Explosive properties : No data available
Oxidising properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

150 Neutral Base Oil (64742-58-1)	
LD50 oral rat	> 5000 mg/kg
Chlorinated paraffin (63449-39-8)	
LD50 oral rat	> 5000 mg/kg (Rat)
Petroleum Hydrocarbon (64742-52-5)	
LD50 oral rat	> 30000 mg/kg (Rat)
LD50 dermal rat	8000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg
ATE US (dermal)	8000.000 mg/kg bodyweight
Antimony dialkyldithiocarbamate (Confidential)	
LD50 oral rat	16400 mg/kg
ATE US (oral)	500.000 mg/kg bodyweight
ATE US (gases)	4500.000 ppmv/4h
ATE US (vapours)	11.000 mg/l/4h
ATE US (dust,mist)	1.500 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : May cause harm to breast-fed children.
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Harmful to aquatic life with long lasting effects.

Chlorinated paraffin (63449-39-8)	
EC50 Daphnia 1	102 mg/l (EC50; 24 h)
LC50 fish 2	> 300 mg/l (LC50; 96 h; Salmo gairdneri)

12.2. Persistence and degradability

Chlorinated paraffin (63449-39-8)	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
ThOD	1.36 g O ₂ /g substance
BOD (% of ThOD)	0

Petroleum Hydrocarbon (64742-52-5)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

Chlorinated paraffin (63449-39-8)	
Log Pow	> 6
Bioaccumulative potential	Bioaccumable.

Petroleum Hydrocarbon (64742-52-5)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not applicable

TDG

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

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Not listed on the United States TSCA (Toxic Substances Control Act) inventory

150 Neutral Base Oil (64742-58-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Chlorinated paraffin (63449-39-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Petroleum Hydrocarbon (64742-52-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Antimony dialkyldithiocarbamate (Confidential)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Revision date : 11/03/2016

Full text of H-statements:

H302	Harmful if swallowed
H332	Harmful if inhaled
H362	May cause harm to breast-fed children
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard

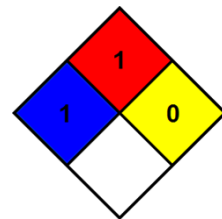
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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HMIS III Rating

Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	: B B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product