

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 3/9/2016 Revision date: 10/1/2021 Supersedes: 6/12/2020 Version: 1.6

SECTION 1: Identification	
1.1. Identification	
Product form Product name Product code	: Mixture : B2 Oil Treatment : 2115
1.2. Recommended use and restrictions on	use
Use of the substance/mixture	: Engine oil additive
1.3. Supplier	
Bardahl Manufacturing Corporation 1400 NW 52nd Street P.O. Box Seattle, King, WA 98107 USA T 206-783-4851 - F 206-784-3219 <u>www.bardahl.com</u> Contact: Jackie Leung	
1.4. Emergency telephone number	
Emergency number	: 800-424-9300
SECTION 2: Hazard(s) identification 2.1. Classification of the substance or mixt GHS-US classification	ure
Serious eye damage/eye irritation, Category 2	Causes serious eye irritation.
2.2. GHS Label elements, including precaut	tionary statements
GHS US labelling Hazard pictograms (GHS US)	
Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US)	 Warning Causes serious eye irritation. Wash hands, forearms and face thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
2.3. Other hazards which do not result in cl	assification
No additional information available	

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/information on ingredients 3.1. Substances Not applicable 3.2. Mixtures **Product identifier** Name % **GHS-US classification** Zinc alkyldithiophosphate CAS-No.: 68457-79-4 1 – 5 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411 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 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 cautiously with water for several minutes. Remove contact lenses, if present and easy to · do. Continue rinsing. If eye irritation persists: Get medical advice/attention. First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact

: Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures 5.1. Suitable (and unsuitable) extinguishing media Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide. 5.2. Specific hazards arising from the chemical Hazardous decomposition products in case of fire : Toxic fumes may be released. 5.3. Special protective equipment and precautions for fire-fighters 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. Avoid contact with skin and eyes.		
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".		

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6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containment	nt and cleaning up
Methods for cleaning up Other information	Take up liquid spill into absorbent material.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 stora	age
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, in	cluding any incompatibilities

Storage conditions

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

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
B2 Oil Treatment
No additional information available
Zinc alkyldithiophosphate (68457-79-4)
No additional information available
8.2. Appropriate engineering controls
Appropriate engineering controls: Ensure good ventilation of the work station.Environmental exposure controls: Avoid release to the environment.
8.3. Individual protection measures/Personal protective equipment
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

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Personal protective equipment symbol(s):



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
рН	: No data available
Melting point	: Not applicable
Freezing point	No data available
Boiling point	: No data available
Flash point	: 200 °C minimum per COC method.
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	: 0.873 g/cm³ typical
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 525 mm²/s @ 100 C typical
Viscosity, dynamic	: No data available
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).

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10.5. Incompatible materials

No additional information available

Symptoms/effects after eye contact

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 (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified Skin corrosion/irritation : Not classified Serious eye damage/irritation Causes serious eye irritation. ÷ Respiratory or skin sensitisation : Not classified Germ cell mutagenicity ÷ Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure Not classified : Aspiration hazard : Not classified : 525 mm²/s @ 100 C typical Viscosity, kinematic

	Evo	irritation.
		inniauon.

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.
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations	
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

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SECTION 14: Transport information	
In accordance with DOT / TDG / IMDG / IATA	
14.1. UN number	
DOT NA No UN-No. (TDG) UN-No. (IMDG) UN-No. (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.2. UN proper shipping name	
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: Not applicable
TDG Transport hazard class(es) (TDG)	: Not applicable
IMDG Transport hazard class(es) (IMDG)	: Not applicable
IATA Transport hazard class(es) (IATA)	: Not applicable
14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user DOT No data available	
TDG No data available	
IMDG No data available	
IATA No data available	
14.7. Transport in bulk according to Anne	ex II of MARPUL 73/78 and the IBC Code
Not applicable	

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Zinc alkyldithiophosphate	68457-79-4	Present	Active	

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	1
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NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
Hazard 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 - Safety glasses, Gloves
Outstand Obstant (ODO) 1104	

Safety Data Sheet (SDS), USA

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.