



BRO-PENETRATING OIL

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 06-01-17

Revision date: 25-08-17

Supersedes: 06-01-17 Version: 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : BRO-PENETRATING OIL
Product code : 1373 # ESCLP026
Type of product : Lubricants and additives

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

1.2.1. Relevant identified uses

Main use category : Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributor

SADAPS BARDAHL CORPORATION
BP 50050 MOUVAUX
59589 BONDUES Cedex - France
T 03.10 38 38 38 - F 03.51 08 90 51
industrie@bardahlfrance.com - www.bardahlindustrie.com

Supplier

SADAPS BARDAHL CORPORATION
BP 50050 MOUVAUX
59589 BONDUES Cedex - France
T 03.10 38 38 38 - F 03.51 08 90 51
industrie@bardahlfrance.com - www.bardahlindustrie.com

1.4. Emergency telephone number

Emergency number : +33 (0)1.45.42.59.59

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aspiration hazard, Category 1 H304

Hazardous to the aquatic environment — H412

Chronic Hazard, Category 3

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Danger

Hazardous ingredients : Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand

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	P102 - Keep out of reach of children P260 - Do not breathe vapours P262 - Do not get in eyes, on skin, or on clothing P273 - Avoid release to the environment P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor. P331 - Do NOT induce vomiting P501 - Dispose of contents/container in accordance with local regulations.
EUH-statements	: EUH208 - Contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched). May produce an allergic reaction EUH066 - Repeated exposure may cause skin dryness or cracking

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	(EC-No.) 918-481-9 (REACH-no) 01-2119457273-39	20 - 30	Asp. Tox. 1, H304
Distillates (petroleum), solvent-dewaxed heavy paraffinic substance with national workplace exposure limit(s) (FR) (Note L)	(CAS-No.) 64742-65-0 (EC-No.) 265-169-7 (EC Index-No.) 649-474-00-6 (REACH-no) 01-2119471299-27	15 - 25	Not classified
oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1)	(CAS-No.) 34140-91-5 (EC-No.) 251-846-4 (REACH-no) 01-2119974119-29	<2,5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	(EC-No.) 931-384-6 (REACH-no) 01-2119493620-38	< 1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	(EC-No.) 931-384-6 (REACH-no) 01-2119493620-38	(C >= 9,39) Skin Sens. 1, H317 (10 =<C < 50) Eye Irrit. 2, H319 (50 =<C < 100) Eye Dam. 1, H318

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Remove contaminated clothes. Wash skin with plenty of water. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Not expected to be an irritant to eyes.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways.

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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 : Carbon dioxide. Water spray. Dry powder. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Prevent liquid from entering sewers, watercourses, underground or low areas.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Eliminate every possible source of ignition. Ensure adequate ventilation, especially in confined areas. Keep public away from danger area. Equip cleanup crew with proper protection.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Dike for recovery or absorb with appropriate material. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Recover the product with absorbent material.

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not eat, drink or smoke when using this product.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store in a closed container. Store in a well-ventilated place. Keep out of frost. Keep away from heat.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
France	VME (mg/m ³)	7 (8h)
France	VME (ppm)	5 ppm (8h)
France	VLE (mg/m ³)	14 mg/m ³ (15m)
France	VLE (ppm)	10 ppm (15m)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics		
France	VME (mg/m ³)	1200 mg/m ³
France	VME (ppm)	184 ppm
Norway	Grenseverdier (AN) (mg/m ³)	275 mg/m ³
Norway	Grenseverdier (AN) (ppm)	50 ppm

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8.2. Exposure controls

Hand protection:

In case of repeated or prolonged contact wear gloves. EN 374

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves, Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)		3 (> 0.65)	EN 374

Eye protection:

Eye protection should only be necessary where liquid could be splashed or sprayed. EN 166

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Good ventilation of the workplace required



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 73 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0,86 - 0,87
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: 10,67 mm ² /s 40°C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

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10.4. Conditions to avoid

Heat. Open flame. Sparks. Water, humidity. Freezing.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

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

oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1) (34140-91-5)

LD50 oral rat	> 2000 mg/kg
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LD50 dermal rat	> 2000 mg/kg
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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

LD50 oral rat	> 5000 mg/kg
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LD50 dermal rabbit	> 5000 mg/kg
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LC50 inhalation rat (Dust/Mist - mg/l/4h)	5,53 mg/l/4h
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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

LD50 oral rat	> 5000 mg/kg
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LD50 dermal rabbit	> 5000 mg/kg
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LC50 inhalation rat (mg/l)	4951 mg/m ³ 4 hours
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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 : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1) (34140-91-5)

NOAEL (subchronic, oral, animal/male, 90 days)	1 mg/kg bodyweight
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Aspiration hazard : May be fatal if swallowed and enters airways.

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Viscosity, kinematic	10,67 mm ² /s 40°C
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1) (34140-91-5)

LC50 fish 1	1,34 mg/l LC50-96 h - fish [mg/l]
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EC50 Daphnia 1	1,4 mg/l
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NOEC (acute)	993,2 mg/kg
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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

LC50 fish 1	> 1000 mg/l
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EC50 Daphnia 1	> 1000 mg/l
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EC50 72h algae (1)	> 1000 mg/l
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12.2. Persistence and degradability

oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1) (34140-91-5)

Biodegradation 61 % 28 days

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Biodegradation 80 % 28 days

12.3. Bioaccumulative potential

oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1) (34140-91-5)

Bioconcentration factor (BCF REACH) 70,8

Log Kow 32,91

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

Log Pow > 3

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not discharge into drains or the environment.

Product/Packaging disposal recommendations : Collect all waste in suitable and labelled containers and dispose according to local legislation.

Ecology - waste materials : Do not discharge the product into the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

France

Occupational diseases : RG 84 - Affections engendrées par les solvants organiques liquides à usage professionnel
RG 65 - Lésions eczématiformes de mécanisme allergique
RG 49 - Affections cutanées provoquées par les amines aliphatiques, alicycliques ou les éthanolamines
RG 36 - Affections provoquées par les huiles et graisses d'origine minérale ou de synthèse

Germany

VwVwS Annex reference : Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Distillates (petroleum), solvent-dewaxed heavy paraffinic is listed

SZW-lijst van mutagene stoffen : Distillates (petroleum), solvent-dewaxed heavy paraffinic is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Class for fire hazard : Class III-1

Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H373	May cause damage to organs through prolonged or repeated exposure

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H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
EUH066	Repeated exposure may cause skin dryness or cracking
EUH208	Contains . May produce an allergic reaction

SDS EU (REACH Annex II)

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