

## Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Code: NanoPhos\_120721-003  
 Product name: HDO Heavy Duty Deck Oil  
 UFI: RSRV-S0HH-X00J-W5MD

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

Intended use: Impregnation oil for protection & nutrition of wooden surfaces  
 Solvent-based Alkyd

#### 1.3. Details of the supplier of the safety data sheet

Name: NANOPHOS S.A.  
 Full address: Technological & Cultural Park  
 District and Country: 19 500 Lavrio (Greece)  
 Greece  
 Tel. +30 22920 69312  
 Fax +30 22920 69303

e-mail address of the competent person

responsible for the Safety Data Sheet: iarabatz@NanoPhos.com  
 Supplier: Ioannis Arabatzis

#### 1.4. Emergency telephone number

For urgent inquiries refer to: +30 2107793777

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

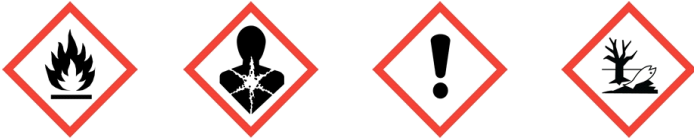
Flammable liquid, category 3	H226	Flammable liquid and vapour.
Specific target organ toxicity - repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

**HDO Heavy Duty Deck Oil**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

Hazard statements:

- H226** Flammable liquid and vapour.
- H372** Causes damage to organs through prolonged or repeated exposure.
- H335** May cause respiratory irritation.
- H317** May cause an allergic skin reaction.
- H336** May cause drowsiness or dizziness.
- H411** Toxic to aquatic life with long lasting effects.
- EUH066** Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

- P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P280** Wear protective gloves/ protective clothing / eye protection / face protection.
- P370+P378** In case of fire: use dry powder or Carbon Dioxide (CO<sub>2</sub>) fire extinguisher to extinguish.
- P273** Avoid release to the environment.
- P391** Collect spillage.
- P321** Specific treatment (see . . . on this label).
- P242** Use non-sparking tools.
- P403+P235** Store in a well-ventilated place. Keep cool.
- P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P270** Do not eat, drink or smoke when using this product.
- P304+P340** IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P264** Wash with plenty of water and soap thoroughly after handling.
- P240** Ground and bond container and receiving equipment.
- P243** Take action to prevent static discharges.
- P241** Use explosion-proof [electrical / ventilating / lighting / . . . ] equipment.
- P272** Contaminated work clothing should not be allowed out of the workplace.
- P103** Read label before use.
- P501** Dispose of contents or container according to local/national/international regulations
- P102** Keep out of reach of children.
- P101** If medical advice is needed, have product container or label at hand.
- P312** Call a POISON CENTRE or a doctor if you feel unwell.
- P403+P233** Store in a well-ventilated place. Keep container tightly closed.
- P362+P364** Take off contaminated clothing and wash it before reuse.
- P260** Do not breathe fume, mist or spray.
- P271** Use only outdoors or in a well-ventilated area.
- P405** Store locked up.

**Contains:** Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)  
 Hydrocarbons, C9, aromatics  
 2-octyl-2H-isothiazol-3-one  
 COBALT BIS 2-ETHYL HEXANOATE  
 BUTANONE OXIME  
 Reaction mass of alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)  
 Restricted to professional users

HDO Heavy Duty Deck Oil

VOC (Directive 2004/42/EC) :

Minimal build woodstains.

VOC given in g/litre of product in a ready-to-use condition : 580,00  
 Limit value: 700,00

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration greater 0.1%.

**SECTION 3. Composition/information on ingredients**

**3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>Hydrocarbons, C9, aromatics</b>		
INDEX -	30 < x < 50	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066
EC 918-668-5		
CAS 64742-95-6		
<b>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</b>		
INDEX -	20 < x < 25	Flam. Liq. 3 H226, STOT RE 1 H372, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066
EC 919-446-0		
CAS 1174921-79-9		
<b>Reaction mass of alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)</b>		
INDEX 607-176-00-3	0 < x < 1	Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC 400-830-7		
CAS -		
<b>CALCIUM BIS 2-ETHYLHEXANOATE</b>		
INDEX -	0 < x < 1	Repr. 2 H361, Eye Dam. 1 H318
EC 205-249-0		
CAS 136-51-6		
<b>2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT</b>		

## HDO Heavy Duty Deck Oil

INDEX -	0 < x < 3	Repr. 2 H361
EC 245-018-1		
CAS 22464-99-9		
<b>BUTANONE OXIME</b>		
INDEX 616-014-00-0	0 < x < 1	Carc. 2 H351, Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Sens. 1 H317
EC 202-496-6		LD50 Dermal: 1100 mg/kg
CAS 96-29-7		
<b>2-octyl-2H-isothiazol-3-one</b>		
INDEX 613-112-00-5	0,0015 < x < 0,25	Acute Tox. 2 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1
EC 247-761-7		Skin Sens. 1A H317: ≥ 0,0015%
CAS 26530-20-1		STA Oral: 100 mg/kg, LD50 Dermal: 311 mg/kg, LC50 Inhalation vapours: 0,58 mg/l/4h, STA Inhalation vapours: 3 mg/l
<b>COBALT BIS 2-ETHYL HEXANOATE</b>		
INDEX -	0,1 < x < 3	Repr. 2 H361fd, Eye Irrit. 2 H319, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412
EC 205-250-6		
CAS 136-52-7		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

**INGESTION:** Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

**INHALATION:** Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

**5.3. Advice for firefighters****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

**6.3. Methods and material for containment and cleaning up**

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7. Handling and storage****7.1. Precautions for safe handling**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

**7.2. Conditions for safe storage, including any incompatibilities**

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

**SECTION 8. Exposure controls/personal protection**

8.1. Control parameters

Regulatory References:

ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum i pentru modificarea i completarea hotărârii guvernului nr. 1.093/2006
GBR	United Kingdom TLV-ACGIH	EH40/2005 Workplace exposure limits (Fourth Edition 2020) ACGIH 2022

**Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)**

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral								330
Inhalation				71 mg/m3				330 mg/m3
Skin				26 mg/kg bw/d				44 mg/kg bw/d

**2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT**

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
TLV	ROU	5	10	în Zr
WEL	GBR	5	10	As Zr
TLV-ACGIH		5	10	

**BUTANONE OXIME**

Predicted no-effect concentration - PNEC

Normal value in fresh water 0,256 mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			2 mg/m3	2,7 mg/m3			3,33 mg/m3	9 mg/m3
Skin		1,5 mg/kg bw/d		0,78 mg/kg bw/d		2,5 mg/kg bw/d		1,3 mg/kg bw/d

**COBALT BIS 2-ETHYL HEXANOATE**

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
WEL	GBR	0,1		As Co
TLV-ACGIH		0,02		INHAL Co

**Legend:**

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

**8.2. Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

**HAND PROTECTION**

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

**SKIN PROTECTION**

Wear category III professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

**SECTION 9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

## HDO Heavy Duty Deck Oil

Properties	Value	Information
Appearance	liquid	
Colour	transparent	
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	23 < T < 60 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not applicable	
Kinematic viscosity	6500 ±1000mm <sup>2</sup> /sec	Temperature: 40 °C
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	not available	
Relative vapour density	not available	
Particle characteristics	not applicable	

**9.2. Other information**

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

**SECTION 10. Stability and reactivity****10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**BUTANONE OXIME**

Decomposes under the effect of heat.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT**

SADT = 210°C/410°F.



**10.3. Possibility of hazardous reactions**

The vapours may also form explosive mixtures with the air.

BUTANONE OXIME

Reacts violently with: strong oxidising agents,acids.

Above the flash point (69°C/156°F), explosive mixtures can form with air.

**10.4. Conditions to avoid**

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

**10.5. Incompatible materials**

BUTANONE OXIME

Incompatible with: oxidising substances,strong acids.

**10.6. Hazardous decomposition products**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

BUTANONE OXIME

May develop: nitric oxide,carbon oxides.

**SECTION 11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

## HDO Heavy Duty Deck Oil

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

LD50 (Dermal):	> 3400 mg/kg rabbit
LD50 (Oral):	> 15000 mg/kg rat

CALCIUM BIS 2-ETHYLHEXANOATE

LD50 (Dermal):	> 2000 mg/kg Rat - Wistar
LD50 (Oral):	2043 mg/kg Rat - Fischer 344

2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT

LD50 (Dermal):	> 2000 mg/kg Rat - Wistar
LD50 (Oral):	> 5000 mg/kg Rat - Sprague-Dawley
LC50 (Inhalation vapours):	> 4,3 mg/l/4h Rat

BUTANONE OXIME

LD50 (Dermal):	1100 mg/kg
LD50 (Oral):	100 mg/kg Rabbit

2-octyl-2H-isothiazol-3-one

LD50 (Dermal):	311 mg/kg
LD50 (Oral):	318 mg/kg
STA (Oral):	100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LC50 (Inhalation vapours):	0,58 mg/l/4h
STA (Inhalation vapours):	3 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

COBALT BIS 2-ETHYL HEXANOATE

LD50 (Dermal):	> 2000 mg/kg Rat - Wistar
LD50 (Oral):	3129 mg/kg Rat - Sprague-Dawley

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Causes damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: 6500 mm<sup>2</sup>/sec

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**SECTION 12. Ecological information**

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity**

2-octyl-2H-isothiazol-3-one

LC50 - for Fish 0,047 mg/l/96h

EC50 - for Crustacea 0,32 mg/l/48h

EC10 for Algae / Aquatic Plants 0,031 mg/l/72h

CALCIUM BIS 2-ETHYLHEXANOATE

LC50 - for Fish > 100 mg/l/96h *Oryzias latipes*

EC50 - for Crustacea 910 mg/l/48h *Daphnia magna*

EC50 - for Algae / Aquatic Plants 49,3 mg/l/72h *Desmodesmus subspicatus*

COBALT BIS 2-ETHYL HEXANOATE

LC50 - for Fish 275 mg/l/96h *Fundulus heteroclitus*

2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT

LC50 - for Fish > 100 mg/l/96h *Danio rerio*

EC50 - for Algae / Aquatic Plants 49,3 mg/l/72h *Desmodesmus subspicatus*

**12.2. Persistence and degradability**

2-octyl-2H-isothiazol-3-one

NOT rapidly degradable

CALCIUM BIS 2-ETHYLHEXANOATE

Solubility in water > 10000 mg/l

Rapidly degradable

COBALT BIS 2-ETHYL HEXANOATE

Solubility in water > 10000 mg/l

Rapidly degradable

2-ETHYLHEXANOIC ACID, ZIRCONIUM SALT

Solubility in water < 0,1 mg/l

Rapidly degradable

BUTANONE OXIME

## HDO Heavy Duty Deck Oil

Solubility in water 1000 - 10000 mg/l  
Entirely degradable

**12.3. Bioaccumulative potential**

## CALCIUM BIS 2-ETHYLHEXANOATE

Partition coefficient: n-octanol/water 2,96

## BUTANONE OXIME

Partition coefficient: n-octanol/water 0,63

BCF 0,5

**12.4. Mobility in soil**

## BUTANONE OXIME

Partition coefficient: soil/water 0,55

**12.5. Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7. Other adverse effects**

Information not available

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information****14.1. UN number or ID number**

ADR / RID, IMDG, IATA: 1263

**14.2. UN proper shipping name**

HDO Heavy Duty Deck Oil

ADR / RID: PAINT RELATED MATERIAL  
 IMDG: PAINT RELATED MATERIAL  
 IATA: PAINT RELATED MATERIAL

**14.3. Transport hazard class(es)**

ADR / RID: Class: 3 Label: 3  
 IMDG: Class: 3 Label: 3  
 IATA: Class: 3 Label: 3



**14.4. Packing group**

ADR / RID, IMDG, IATA: III

**14.5. Environmental hazards**

ADR / RID: Environmentally Hazardous  
 IMDG: Marine Pollutant  
 IATA: NO



For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
	Special provision: 163, 367, 650		
IMDG:	EMS: F-E, <u>S-E</u>	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Passengers:	Maximum quantity: 60 L	Packaging instructions: 355
	Special provision:	A3, A72, A192	

**14.7. Maritime transport in bulk according to IMO instruments**

Information not relevant

**SECTION 15. Regulatory information**

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

Seveso Category - Directive 2012/18/EU: P5c-E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC (Directive 2004/42/EC):

Minimal build woodstains.

## 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

## HDO Heavy Duty Deck Oil

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Carc. 2</b>	Carcinogenicity, category 2
<b>Repr. 2</b>	Reproductive toxicity, category 2
<b>Acute Tox. 2</b>	Acute toxicity, category 2
<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>STOT RE 1</b>	Specific target organ toxicity - repeated exposure, category 1
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1A</b>	Skin sensitization, category 1A
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H226</b>	Flammable liquid and vapour.
<b>H351</b>	Suspected of causing cancer.
<b>H361</b>	Suspected of damaging fertility or the unborn child.
<b>H361fd</b>	Suspected of damaging fertility. Suspected of damaging the unborn child.
<b>H330</b>	Fatal if inhaled.
<b>H301</b>	Toxic if swallowed.
<b>H311</b>	Toxic in contact with skin.
<b>H312</b>	Harmful in contact with skin.
<b>H372</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

## LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)



## HDO Heavy Duty Deck Oil

- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

## GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
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  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2019/521 (XII Atp. CLP)
  16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
  17. Regulation (EU) 2019/1148
  18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
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  21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
  22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

## Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety

laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 08 / 09 / 10 / 11 / 12 / 14 / 15 / 16.