

SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

Trade name: **Metabond GT Plus gear oil additive**

Version: 5 Latest revision: 14. 12. 2022 Previous version: 12. 07. 2018 Page: 1/(16)

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

1.1 Product identifier:

Metabond GT Plus gear oil additive

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

Relevant identified uses: lubricating oil for gearboxes, differentials, other special gears, anti-wear, metal surface finishing, lubrication enhancement.

Uses advised against: application other than the above.

1.3 Details of the supplier of the safety data sheet:

Data of supplier:

Metabond Magyarország Kft.
9030 Győr, Szigligeti Ede u. 5.
Tel: +36 96 332738
Mobile: +36 70 2719575
www.metabond.hu

Responsible for SDS:

Metabond Magyarország Kft.
9030 Győr, Szigligeti Ede u. 5.
Tel: +36 96 332738
Mobile: +36 70 2719575
E-mail: metabond@metabond.hu
www.metabond.hu

1.4 Emergency telephone number

Emergency telephone (on workdays: 08-16 h (CET)): +36 96 332738

Health Toxicological Information Service (ETTSZ 1097 Budapest, Albert Flórián st. 2-6.)

Tel.: +36 80 201 199 (0-24 h, free number, can only be called from Hungary).

+36 1 476 6464 (0-24 h, can be called for a normal fee - also from abroad)

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

Hazard Class and Category:

Skin Sens. 1

Aquatic Chronic 3

Hazard statement:

H317

H412

May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.

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2.2 Label elements

Product identification: Trade name: **Metabond GT Plus gear oil additive**

Hazardous components: Polysulfides, di-tert-Bu; Reaction products of bis(4-methylpentan-2-yl) dithiophosphoric acid with phosphorous oxide, propylene oxide and amines, C12-C14 alkyl(branched)

GHS Pictogram:



Signal word: **Warning**

Hazard statement:

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Supplemental hazard information:

-

Precautionary statements – General:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Precautionary statements – Prevention:

P273 Avoid release to the environment.

Precautionary statements – Response:

P302 + P352 IF ON SKIN: Wash with plenty of water

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Precautionary statements – Storage:

-

Precautionary statements – Disposal:

P501 Dispose of contents/container in accordance with national regulation.

Other liabilities for labelling:

Tactile warning of danger: Not required.

Transport classification: see section 14.

2.3 Other hazards

The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC) 1907/2006, at a concentration of 0.1% or more.

The mixture does not contain any substance with endocrine disrupting properties, at a concentration of 0.1% or more.

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SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description: A mixture of additives of petroleum origin and additives dissolved in synthetic base oils.

Component(s) / Hazardous component(s):

Name	EC number	CAS number	Hazard classes and cat.	Hazard statements	Conc. %(m/m)
Polysulfides, di-tert-Bu* REACH Registr. Nr.: 01-2783246473-2	273-103-3	68937-96-2	Skin Sens. 1B Aquatic Chronic 3	H317 H412	max. 35
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil- based REACH Registr. Nr.: 01-2119474889-13	276-738-4	72623-87-1	Asp. Tox. 1 (Note L)	H304	max. 20
4,4'-methylene bis (dibutyldithiocarbamate) REACH Registr. Nr.: 01-2119708416-41	233-593-1	10254-57-6	Aquatic Chronic 4	H413	max. 15
Reaction products of bis(4- methylpentan-2-yl) dithiophosphoric acid with phosphorous oxide, propylene oxide and amines, C12-C14 alkyl(branched)** REACH Registr. Nr.: 01-2119493620-38	931-384-6	-	Acute Tox. 4 Eye Dam. 1 Skin Sens. 1 Aquatic Chronic 2	H302 H318 H317 H411	max. 10
Mineral oil *** REACH Registr. Nr.: no data	-	-	Asp. Tox. 1	H304	max. 4.0
1,3,4-Thiadiazolidine-2,5- dithione, reaction products with hydrogen peroxide and tert- nonanethiol REACH Registr. Nr.: 01-7978035552-9	293-927-7	91648-65-6	Aquatic Chronic 3	H412	max. 2.0
(Z)-N-9-octadecenylpropane-1,3- diamine REACH Registr. Nr.: no data	230-528-9	7173-62-8	Acute Tox. 4 Skin Corr. 1B Eye Dam. 1 STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	H302 H314 H318 H372 H400 (M=10) H410 (M=1)	max. 0.9

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Name	EC number	CAS number	Hazard classes and cat.	Hazard statements	Conc. %(m/m)
Methyl-1H- benzotriazole REACH Registr. Nr.: no data	249-596-6	29385-43-1	Acute Tox. 4 Repr. 2 Aquatic Chronic 2	H302 H361 H411	max. 0.4
C16-18-(even numbered, saturated and unsaturated)- alkylamines REACH Registr. Nr.: 01-7336349961-4	627-034-4	-	Acute Tox. 4 Asp. Tox. 1 Eye Dam. 1 Skin Corr. 1B STOT SE 3 STOT RE 2 Aquatic Acute 1 Aquatic Chronic 1	H302 H304 H318 H314 H335 H373 H400 (M=10) H410 (M=10)	max. 0.09

* Specific concentration limit: Skin Sens. 1; H317: 46 % ≤ C

** Specific concentration limit:

Skin Sens. 1B; H317: 9.39% < C; Eye Dam. 1 ; H318: 50 % < C

*** Contains one or more of the following:

EC number: 265-157-1, REACH Registr. Nr.: 01-2119484627-25;

EC number: 265-169-7, REACH Registr. Nr.: 01-2119471299-27;

EC number: 265-158-7, REACH Registr. Nr.: 01-2119487077-29;

EC number: 265-159-2, REACH Registr. Nr.: 01-2119480132-48.

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide 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), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

The full text of each relevant H- phrase and Hazard classes and cat. see in Section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures

General information: Never give anything by mouth to an unconscious person, or never induce vomiting.

Inhalation: Remove the affected person to fresh air. If rapid recovery does not occur, obtain medical attention.

Skin contact: Remove contaminated clothing. Wash skin with large amounts of water, use soap. In case of persistent irritation, get medical attention.

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Eye contact: In case of contact, immediately flush eyes with plenty of water for at least 10-15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
In case of a complaint, seek medical advice.

Ingestion: If swallowed, give water. **Do not** induce vomiting. Get medical attention.

Protection of first-aid person: No individual specifications.

4.2 Most important symptoms and effects, both acute and delayed

Prolonged and/or repeated contact may cause irritation on skin or in eyes depending on individual sensitivity.

May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Not required.

SECTION 5 Fire-fighting measures

Fire hazards:

Combustible.

5.1 Extinguishing media

Suitable extinguishing media:

Foam, carbon dioxide, dry chemical powder, water fog (trained personnel only).

Unsuitable extinguishing media:

Full water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

On burning, carbon monoxide, carbon dioxide, various hydrocarbons and soot can be formed.

5.3 Advice for fire-fighters

Special protective equipment:

According to the existing fire-fighting regulations. Respiratory protection.

Further information:

Collect contaminated firefighting water separately. It must not enter the sewage system.

Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: see Section 8.

Danger of slipping on leaked out/spilled product.

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6.2 Environmental precautions:

Confine spills to prevent material from entering sewers, watercourses, drains and into soil
Notify relevant authority.

6.3 Methods and material for containment and cleaning up

On soil: All kind of ignition sources should be removed. Recover free liquid by pumping. Contain spilled liquid with sand, earth or other suitable absorbents. Dispose of according to local regulations.

On water: Confine the spillage. Remove from surface by skimming or suitable absorbents. Notify local authorities according to regulations.

6.4 Reference to other sections

Personal precautions: see section 8.

Waste treatment methods: see section 13.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with lubricants.

Keep away from radiant heat and open flame.

Avoid contact with skin and eyes. Avoid prolonged breathing of oil vapours or mists.

Wash hands before breaks and at end of work.

Take off contaminated clothing and wash it before reuse.

When using do not eat, drink or smoke. Avoid splashing the product.

Handling temperature: not known

7.2 Conditions for safe storage, including any incompatibilities

Storage facilities must comply with regulations for storing of flammable liquids.

Store in dry, well-ventilated place in original, closed containers.

Keep away from strong oxidizing agents.

Storage temperature: max. 40°C.

7.3 Specific end use(s)

Lubricating oil for gearboxes, differentials, other special gears, anti-wear, metal surface finishing, lubrication enhancement.

SECTION 8 Exposure controls / personal protection

8.1 Control parameters:

Mineral oil mist: TWA: **5 mg/m³**; STEL: 10 mg/m³, for oil mist, vapour excluded (ACGIH).

Method of testing, recommended: NIOSH 5026

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8.2 Exposure controls

Engineering control measures:

Not required.

Personal protection:

- | | |
|----------------------------|--|
| (a) Eye/face protection | Protective goggles, if splashes may occur (EN 166). |
| (b) Skin protection | |
| (i) Hand protection | Oil resistant gloves (EN 374, Breakthrough time > 480 min, PK power level: 6; PR flow rate: 0).
Note: Manufacturer's directions for use and the conditions of application should be observed. |
| (ii) Other | Protective clothing (oil resistant). |
| (c) Respiratory protection | Under normal conditions not required. In case of vapor formation respiratory protection with particle-filter is recommended. |
| (d) Thermal hazards | No data. |

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|--|--|
| a) Physical state: | liquid |
| b) Colour: | brown, bright |
| c) Odour: | characteristic, not unpleasant |
| d) Melting point/freezing point (Pour point): | not available |
| e) Boiling point or initial boiling point and boiling range: | not available |
| f) Flammability: | combustible |
| g) Lower and upper explosion limit: | not explosive |
| h) Flash point (COC) (EN ISO 2592): | typ. 130°C |
| i) Auto-ignition temperature: | not available |
| j) Decomposition temperature: | not available |
| k) pH: | not applicable |
| l) Kinematic viscosity | |
| at 40°C: | typ. 48.2 mm ² /s (DIN 51562) |
| at 100°C: | not available |

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- m) Solubility
Solubility in water: practically insoluble in water
Solubility in other solvents: gasoline, kerosene, toluene, etc.
- n) Partition coefficient n-octanol/water (log value): not available
- o) Vapour pressure at 20°C: negligible
- p) Density and/or relative density at 20°C (DIN 51757): 0.936 g/cm³
- q) Relative vapour density: not available
- r) Particle characteristics: not available

9.2 Other information
not available

SECTION 10 Stability and reactivity

- 10.1 Reactivity: Dangerous reactivity not known.
- 10.2 Chemical stability: No decomposition if stored and handled properly.
- 10.3 Possibility of hazardous reactions: Not known.
- 10.4 Conditions to avoid: Direct heat or ignition sources.
- 10.5 Incompatible materials: Strong oxidizing agents.
- 10.6 Hazardous decomposition products: No dangerous decomposition products are formed under normal conditions. Hazardous combustion products: See Section 5.

SECTION 11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity: Based on available data, the classification criteria are not met.

Oral:	LD ₅₀ (rat)	> 2000 mg/kg	(based on components)
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg	(based on components)

Components:

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (CAS: 72623-87-1):

Oral:	LD ₅₀ (rat)	> 5 000 mg/kg	OECD 401
Dermal:	LD ₅₀ (rabbit)	> 2 000 mg/kg	OECD 402
Inhalation (dust, fog):	LC ₅₀ (rat)	> 5.53 mg/L/4 h	OECD 403

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4,4'-methylene bis (dibutyldithiocarbamate) (CAS: 10254-57-6):

Oral:	LD ₅₀ (rat)	16 000 mg/kg	OECD 401
Dermal:	LD ₅₀ (rabbit)	> 2 000 mg/kg	OECD 402

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation: May cause an allergic skin reaction.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
STOT-single exposure: Based on available data, the classification criteria are not met.
STOT-repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

The mixture does not contain any substance with endocrine disrupting properties, at a concentration of 0.1% or more.

SECTION 12 Ecological information

12.1 Toxicity Harmful to aquatic life with long lasting effects.

Components:

Polysulfides, di-tert-Bu (CAS: 68937-96-2)

Daphnia magna:	EC ₅₀	63 mg/l	48 h
Algae:	EC ₅₀	> 100 mg/l	72 h
Microorganisms (activated sludge):	EC ₅₀	> 10 000 mg/l	0.1 days

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (CAS: 72623-87-1)

Fish:	LL ₅₀	> 100 mg/l	96 h (OECD 203)
Crustaceans:	EL ₅₀	> 10 000 mg/l	48 h (OECD 202)
Crustaceans:	NOEL	> 10 000 mg/l	96 h (OECD 202)
Crustaceans:	LL ₅₀	> 10 000 mg/l	96 h (OECD 202)
Crustaceans:	NOEL	10 mg/l	21 days (OECD 211)
Algae:	NOEL	> 100 mg/l	72 h (OECD 201)
Microorganisms (sewage sludge):	NOEL	> 1.93 mg/l	0,1 h (DIN 38412)

4,4'-methylene bis (dibutyldithiocarbamate) (CAS: 10254-57-6):

Algae:	EC ₅₀	> 0.0325 mg/l	72 h
Daphnia:	EC ₅₀	> 0.052 mg/l	48 h
Microorganisms:	EC ₅₀	> 1 000 mg/l	3 h

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Fish:	LC ₅₀	> 0.06 mg/l	96 h
Algae:	NOEC	0.0325 mg/l	72 h
Daphnia:	NOEC	0.052 mg/l	48 h
Fish:	NOEC	0.06 mg/l	96 h
Microorganisms:	NOEC	1 000 mg/l	3 h
Daphnia:	NOEC	0.247 mg/l	21 days

Reaction products of bis(4-methylpentan-2-yl) dithiophosphoric acid with phosphorous oxide, propylene oxide and amines, C12-C14 alkyl (branched) (EC: 931-384-6)

Fish (Oncorhynchus mykiss):	LC ₅₀	24 mg/L	96 h
Fish (Fat-headed carp):	LC ₅₀	8.5 mg/L	96 h
Fish (Pimephales promelas):	LC ₅₀	8.5 mg/L	96 h
Daphnia magna:	EC ₅₀	91.4 mg/L	48 h
Daphnia magna:	EC ₅₀	0.66 mg/L	21 days
Daphnia magna:	NOEC	0.12 mg/L	21 days
Algae (Selenastrum capricornutum):	EC ₅₀	6.4 mg/L	96 h
Algae (Selenastrum capricornutum):	NOEC	10.7 mg/L	96 h
Microorganisms (activated sludge):	EC ₅₀	2.433 mg/L	0,1 day

Mineral oil (CAS: -):

Fish (Fat-headed carp):	LC ₅₀	> 100 mg/l	96 h
Daphnia magna:	EC ₅₀	> 10 000 mg/l	48 h
Daphnia magna:	EC ₅₀	> 10 mg/l	21 days
Daphnia magna:	NOEC	> 10 mg/l	21 days
Algae (Scenedesmus quadricauda):	EC ₅₀	> 100 mg/l	72 h

1,3,4-Thiadiazolidine-2,5- dithione, reaction products with hydrogen peroxide and tert-nonanethiol (CAS: 91648-65-6):

Fish (Fat-headed carp):	LC ₅₀	> 1 000 mg/l	96 h
Daphnia magna:	EC ₅₀	41 mg/l	48 h
Algae (Selenastrum capricornutum):	EC ₅₀	100 mg/l	72 h
Algae (Selenastrum capricornutum):	NOEC	> 100 mg/l	72 h
Microorganisms (Pseudomonas putida):	EC ₅₀	> 8 000 mg/l	0.7 days

(Z)-N-9-octadecenylpropane-1,3-diamine (CAS: 7173-62-8):

Fish (Zebrafish):	LC ₅₀	> 0.1- 1 mg/l	96 h
Daphnia magna:	EC ₅₀	> 0.01 – 0.1 mg/l	48 h
Daphnia magna:	NOEC	> 0.001 – 0.01 mg/l	21 days
Algae:	EC ₅₀	> 0.01 – 0.1 mg/l	72 h

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Methyl-1H- benzotriazole (CAS: 29385-43-1):

Fish (Fat-headed carp):	LC ₅₀	25.5 mg/l	96 h
Fish (Zebrafish):	LC ₅₀	65 mg/l	96 h
Fish (Cyprinodon variegatus):	LC ₅₀	55 mg/l	96 h
Daphnia galeata:	EC ₅₀	8.58 mg/l	48 h
Daphnia magna:	EC ₅₀	87.4 mg/l	48 h
Acartia tonsa:	LC ₅₀	55 mg/l	48 h
Daphnia magna:	EC ₁₀	5.93 mg/l	21 days
Daphnia magna:	NOEC	18.4 mg/l	21 days
Daphnia magna:	EC ₅₀	> 37.6 mg/l	21 days
Algae (Scenedesmus quadricauda):	EC ₅₀	62 mg/l	72 h
Algae:	EC ₅₀	53 mg/l	72 h
Algae:	NOEC	30 mg/l	72 h
Algae:	EC ₅₀	2.86 mg/l	72 h
Microorganisms (activated sludge):	EC ₅₀	330 mg/l	0.1 days

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines (EC: 627-034-4)

Fish (Fat-headed carp):	LC ₅₀	0.11 mg/l	96 h
Fish (Rainbow trout):	LC ₅₀	1.3 mg/l	96 h
Fish (Bullhead carp):	LC ₅₀	0.9 mg/l	96 h
Daphnia magna:	EC ₅₀	0.011 mg/l	48 h
Daphnia magna:	EC ₅₀	0.27 mg/l	21 days
Daphnia magna:	NOEC	0.013 mg/l	21 days
Algae:	EC ₅₀	0.12 mg/l	72 h
Algae:	NOEC	0.01 mg/l	72 h
Microorganisms (activated sludge):	EC ₅₀	15.5 mg/l	0.1 days

12.2 Persistence and degradability

Biodegradability: Hydrocarbons are inherently degradable.

Polysulfides, di-tert-Bu (CAS: 68937-96-2) 13% (28 days, OECD 301 B)

Not easily degradable

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (CAS: 72623-87-1)

not easily biodegradable. (OECD 301 B)

Reaction products of bis(4-methylpentan-2-yl) dithiophosphoric acid with phosphorous oxide, Activated sludge: 3.6% (28 days, OECD TG 301 B)

Not easily degradable.

propylene oxide and amines, C12-C14 alkyl 7.4% (28 days, OECD TG 301 B)

(branched) (EC: 931-384-6)

Not easily degradable.

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4,4'-methylene bis (dibutyldithiocarbamate) 21% (28 days, OECD 301 B)
(CAS: 10254-57-6) Not easily degradable.

Mineral oil (CAS: -) 31% (28 days, OECD TG 301 B)
Not easily degradable.

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol (CAS: 91648-65-6) 2% (28 days, OECD TG 301 C)
Not easily degradable.

Methyl-1H- benzotriazole (CAS: 29385-43-1) 4% (28 days, OECD TG 301 F)
Not easily degradable.

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines (EC: 627-034-4) 44% (28 days, OECD 301 D) Easily degradable.
66% (28 days, OECD 301 B) Easily degradable.

12.3 Bioaccumulative potential

Polysulfides, di-tert-Bu (CAS: 68937-96-2) No data available.
Log Kow: 6 (measured value)

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (CAS: 72623-87-1) Bioaccumulation is possible.

4,4'-methylene bis (dibutyldithiocarbamate) (CAS: 10254-57-6): Log Pow: 8.42
BCF: 10,86 (low potential)

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol (CAS: 91648-65-6) Log Kow: 9.4 (measured value)

Methyl-1H- benzotriazole (CAS: 29385-43-1) Log Kow: 1.079 – 1.083 (25°C)

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines (EC: 627-034-4) BCF: 500 (measured value)
Log Kow: 4.33 (25°C)

12.4 Mobility in soil

Mobility in water: Absorbs in soil.
Floats on water.

12.5 Results of PBT and vPvB assessment

Does not contain PBT and vPvB substances, at a concentration of 0.1% or more.

12.6 Endocrine disrupting properties

The mixture does not contain any substance with endocrine disrupting properties, at a concentration of 0.1% or more.

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12.7 Other adverse effects

Heavy metal content:	None.
PCT, PCB and other chlorinated hydrocarbons:	None.
Environmental effects:	Large spills may be hazardous to the environment.
Water hazard class (German):	WGK 2 (Classification by AwSV)

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product disposal:

Wastes of the product or used oil should be treated as hazardous waste.

Waste Identification Code: 13 02 05*

Mineral-based non-chlorinated engine, gear and lubricating oils.

Recommended waste treatment method: incineration

Disposal must be in compliance with national and local regulations.

Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations.

Waste Identification Code: 15 01 10*

Packaging containing residues of or contaminated by dangerous substances.

Wastewater:

Quality of wastewater emitted to natural water must comply with national and local regulations.

Care should be taken in any case to ensure compliance with EC, national and local regulations. It is the responsibility of the user to know all relevant national and local regulations.

SECTION 14 Transport information

Land transport:

Road/ Railway	ADR/RID:	Not classified.
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14.1.	UN number or ID number:	Not classified.
14.2.	UN proper shipping name:	Not classified.
14.3.	Transport hazard class(es):	Not classified.
14.4.	Packing group:	Not classified.
14.5.	Environmental hazards:	Not classified.

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14.6. Special precautions for user: Not classified.

Waterways:
Inland waterways/ Sea transport ADN/IMDG: Not apply to the product.

Air transport: ICAO / IATA: Not apply to the product.

SECTION 15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety data sheet has been prepared according to Regulation (EC) No 1907/2006 (mod.: 2020/878/EU) and to Regulation (EC) 1272/2008.
Seveso category: not classified.
- 15.2 Chemical safety assessment.
not available

SECTION 16 Other information

The information given in this data sheet is based on our best knowledge at the time of publication. The information is related only to this product and is intended to assist its safe transport, handling and use. The given physical and chemical parameters describe the product only for the purpose of safety requirements and therefore should not be construed as guaranteeing any specific property of the product or as being part of a product specification or any contract.

The manufacturer or supplier shall not take responsibility for any damages from the use other than recommended or other misuse of the product. It is the responsibility of the user to keep regulatory precautions and observe recommendations for safe use of the product.

Classification for mixtures and used evaluation method according to regulation 1272/2008/EC (CLP)

Skin Sens. 1	H317	calculation method
Aquatic Chronic 3	H412	calculation method

The full text of each relevant H- phrase and Hazard classes and cat. in Section 3.:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.

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H318	Causes serious eye damage.
H361	Suspected of damaging fertility or the unborn child.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Acute Tox. 4	Acute toxicity Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Liq. 3	Flammable liquid Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Repr. 2	Reproductive toxicity Category 2
Skin Sens. 1, 1B	Respiratory/skin sensitization Category 1, 1B
STOT RE 1	Specific target organ toxicity — repeated exposure Category 1
STOT RE 2	Specific target organ toxicity – repeated exposure Category 2
STOT SE 3	Specific target organ toxicity – single exposure Category 3
Aquatic Acute 1	Hazardous to the aquatic environment, Acute Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, Chronic Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, Chronic Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, Chronic Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment, Chronic Category 4

Legend:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BOD	Biological Oxygen Demand
Bw	Body Weight
C&L	Classification and Labelling
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging

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CMR	Carcinogenic, Mutagenic or toxic to Reproduction
COD	Chemical Oxygen Demand
CSA	Chemical Safety Assessment
CSR	Chemical Safety Report
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
ECHA	European Chemicals Agency
Ec _x	Effective Concentration x%
ErC50	EC50 in terms of reduction of growth rate
Ed _x	Effective Dose x%
EC	European Community
EC number	European Community number
ELINCS	European List of Notified Chemical Substances
ES	Exposure Scenario
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC _x	Lethal Concentration x%
LD _x	Lethal Dose x%
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest Observed Effect Level
NOEC	No observed effect concentration
NOEL	No observed effect level
NLP	No-Longer Polymer
NOAEL	No Observed Adverse Effect Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts/million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International carriage of Dangerous Goods by Rail
SVHC	Substance of Very High Concern
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bio-accumulative

Revision Indicators:

Section	Subject of change	Date	Version
1-16	Revision modification according to 2020/878/EU Full revision due to composition change	14. 12. 2022	5