MATERIAL SAFETY DATA SHEET

Date of Issue/Revision: 08/12/2018

Revision No. 02 According to Regulation (EU) no 1907/2006 1 of 3
Art. No: OLO-9020

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

1.1 Product Name CARBOXYLATE BASE VANADIUM INHIBITOR

1.2 Relevant identified uses for the substance/formulation

Vanadium Inhibitor (Corrosion Inhibitor)

2 Hazards Identification

2.1 Classification of the substance/formulation

The product is not classified as dangerous to health.
The product is classified as DANGEROUS for the environment with R52153 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Effects

Low acute toxicity. Repeated or long exposure to skin may lead to irritation in consequence of defatting.

2.3 Environment

The product contains substance(s) that are toxic to aquatic organisms and not easily biodegradable.

2.4 Other effects

The product will create a slippery surface if spilled.

2.5 Substances to be indicated on Label

-

2.6 R-Phrases

-

2.7 S-Phrases

-

3 Composition/information on ingredients

3.1 Mixtures

Hazardous Ingredients	*EEC No CAS No*	*Classification ((EC) 1272/2008)*	*Classification*	*Content*
Magnesium Carboxylate	Not classified	Not classified	Not classified	15%
Ethoxylated fatty acid mono ester	Polymer	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	Xi; R38, R41, N; R52/53	10%
Petro-Alkane	Solvent	Eye Dam. 1; H318	Xi; R41	≦40%

4 First Aid Measures

4.1 Description of first aid measures

Inhalation Remove patient to fresh air and seek medical attention if breathing becomes difficult.

Skin Contact Wash off contamination with soap and water. Seek medical attention if irritation persists. Remove all contaminated clothing which should be laundered before reuse.

Eye Contact Immediately wash eye thoroughly with excess water. Seek medical attention if irritation persists.

Ingestion Give immediately a couple of glasses of milk or water to drink if the patient is conscious. Keep at rest and seek medical advice directly. DO NOT INDUCE VOMITING!

4.2 Most important symptoms and effects, both acute and delayed

Inhalation Inhalation of vapours may cause headache, nausea, vomiting and an altered state of consciousness.

Skin Contact Repeated or prolonged exposure may dry out the skin.

Eye Contact May cause slight but transient eye irritation.

Ingestion Ingestion (swallowing) of this material may result in an altered state of consciousness and loss of coordination.

5 Firefighting Measures

5.1 Extinguishing Media

Extinguishing Media Treat as an oil fire. Use alcohol-resistant foam, dry chemical powder or carbon dioxide. Water spray/mist may be used.

Unsuitable Ext. Media Water jet.

Special Protective Equipment Self-contained breathing apparatus should be worn when fighting fires. Prevent contaminated water
From reaching sewage and water courses. Contaminated water should be transferred to a suitable container for further treatment. Obtain advice from local authorities.

Special Exposure Hazards The product is not flammable but it may sustain combustion.

6 Accidental release measures

6.1 Personal protection, protective equipment and emergency procedures

Use appropriate protection equipment., i.e. Goggles, neoprene alt. nitrile, rubber gloves and full working clothes recommended. Eye wash station recommended.

6.2 Environmental precautions

Prevent the product from entering sewers, rivers or other water courses. Don´t flush with water.
In case of soil contamination, remove contaminated soil and treat in accordance with local regulations.

6.3 Environmental Cleanup procedures

Contain with sand, earth or another suitable inert material. Prevent the product from reaching sewage and water courses.
Transfer as much as possible to a suitable container for (preferably) reuse or disposal. In case of large spillage advise the local authority. Adsorb remainder and small spillage (max 50 litres) with inert material for disposal.

7 Handling and Storage

7.1 Precautions for safe handling

Normal handling precautions applicable to industrial chemicals. Avoid the formation of aerosols/mist. Avoid spillage on floor. In case of spillage. Beware, risk of slipping.

7.2 Conditions for safe storage, including any incompatibilities

Store between 5 and 65°C. Protect from freezing.

No incompatibilities known.

7.3 Materials to Avoid

None known

7.4 Specific end user

No information.

8 Exposure controls/personal protection

8.1 Control Parameters

Occupational Limits	No exposure limits have been established for the product. Exposure Limit Values Data for Ingredients: Mineral cii; TLV-TWA: 5mg/m° (ACGIH 1998)

8.2 Exposure Controls

Respiratory Protection	Not applicable under normal conditions of use. However, good ventilation should be provided in working areas.
Hand Protection	Neoprene or nitrile rubber gloves recommended.
Eye Protection	Goggles. Eyewash station recommended.
Skin Protection	Full working clothes recommended.

9 Physical and chemical properties

(these values are typical for the product and should not be considered as data sheet specifications)

9.1 Information on important physical and chemical properties

Appearance	Cream Viscous liquid	Hydrolytic stability	Excellent
Odour	Slight Odour	Vapour Density	No Information
Boiling Point	>100˚ C	Solubility	Insoluble in water. Soluble in organic solvents.
Flash Point	>62˚ C	Viscosity	≦60 cST at 40˚C
Freezing Point	<-10˚C	Density at 20˚C	Ca 1,25-1,30 g/ml
Flammability	No Information	Partition Coefficient: n-octanol/water	Distillate component: >6 (estimated value)
Explosive Properties – Upper and Lower Limits	No Information	Evaporation rate	No Information

9.2 Other Information

DMSO extractible compounds according to IP346: <3%.

10 Stability and reactivity

10.1 Hazardous Decomposition

None known under normal conditions.

10.2 Conditions to Avoid

Extremes of temperature may adversely affect the viscosity and stability of this product.

10.3 Materials that are Incompatible

Incompatible with strong oxidizing agents.

10.4 Reactivity

Stable under recommended conditions. Product is stable under normal conditions and no hazardous reactions or polymerizations will occur.

10.5 Chemical Stability during Storage

Stable when stored under recommended conditions.

11 Toxicological Information

11.1 Information on toxicological effects

Summary of the health effects for the product

Eye Contact	May cause transient redness and pain.
Sensitization Data	The product is not expected to be a skin sensitizer.
Acute Toxicity	L050 (oral,rat): >2000 mg/kg.
Health Effects Inhalation	Not applicable under normal conditions of use and normal temperatures. Inhalation of vapours may cause headache, nausea, vomiting and an altered state of consciousness.
Health Effects Ingestion	May cause nausea and eventually vomiting and diarrhoea also an altered state of consciousness and loss of coordination.
Skin Contact	Repeated or long exposure can lead to transient redness and skin dryness.

Remarks The product has not been tested completely therefore is some toxicological data not available.
The classification is based on the calculation procedure according to Directive 1999/45/EC.

12 Ecological Information

12.1 Persistence and degradability
The product contains substances that are not readily biodegradable.

12.2 Bioaccumulative potential
The product contains substances that are not a potential to bioaccumulate.

12.3 Mobility in Soil
No tests made. The product is insoluble in water and therefore not expected to effect any subsoil water/water courses. Any transport to air is unlikely.

Aquatic Toxicity FISH:LC50(96h):>1-10mg/l.*
DAPHNIA:EC50(48h):>1-10mg/I.*
ALGAE:EC50(72h):>1-10mg/I.*

13 Disposal Considerations

13.1 Product Disposal
May be disposed of by incineration. Obtain advice from local authorities.

13.2 Packaging Disposal
Empty and carefully cleaned containers can be recycled, otherwise forwarded to destruction.

13.3 Waste Category
Hazardous Waste (Council Directive 91/689/EEC)

14 Transport Information
Information regarding ADR/RID (Road/Rail), IMDG (Sea), ICAO/IATA (Air)

14.1 Summary
Not classified as dangerous for transport.

14.2 UN-ID Number
-

14.3 Transport Hazard class(es)
ADR/RID (Road/Rail) -
IMDG (Sea) -
IATA/ICAO (Air) -

14.4 Packing Group
-

14.5 Environmental Hazards

Environmental Hazards -
Marine Pollutant -

14.6 Proper Shipping Name

-

15 Regulatory Information

15.1 EEC Classification

Classified as DANGEROUS for the environment according to existing Council Symbol Directive(EC). EU Regulation (EC) no. 1907/2006 (REACH). Directive 1999/45/EC.

15.2 Substance(s) to be indicated on label

Mg-Carboxylates, Ethoxylated fatty acid mono ester

15.3 R-Phrases

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

15.4 S-Phrases

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

16 Other Information

The information in this Safety Data Sheet only concerns the above mentioned product as supplied and may not be valid if used with other product(s) or in any process. It remains the user´s own responsibility to make sure that the information is appropriate and complete for his special use of this product.

Text of the R-phrases (risk phrases) mentioned in section no 3 of this Safety Data Sheet
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R52/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.