

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.07.2022

Version: 2 (replaces version 1)

Revision: 14.07.2022

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

- **1.1 Product identifier**
- **Trade name:** **METALON® C2 Hochleistungs-Schmierstoff**
- **UFI:** 3RXS-301N-P00X-7NTH
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Anti-Wear Friction Fighter for metallic surfaces
Use pattern : Professional use only
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
BOHA AG
Baselstrasse 6A
4243 Dittingen
Tel. + 41 (0)61 761 16 16
www.boha.ch
E.-Mail: info@metalon.ch
- **Further information obtainable from:** E-Mail: info@metalon.ch
- **1.4 Emergency telephone number:**
Tox Info Suisse: 145/24 h
Emergency phone number: + 41 44 151 51 51 (24h/7d)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**
Distillates (petroleum), hydrotreated light naphthenic
Distillates (petroleum), solvent-dewaxed light paraffinic
- **Hazard statements**
H332 Harmful if inhaled.
H304 May be fatal if swallowed and enters airways.
- **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.

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P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Other hazards which do not result in classification: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be slightly irritating to skin, eyes and respiratory system.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 64742-53-6 EINECS: 265-156-6 Index number: 649-466-00-2	Distillates (petroleum), hydrotreated light naphthenic ⚠ Asp. Tox. 1, H304 ⚠ Acute Tox. 4, H332	30.0-60.0%
CAS: 64742-56-9 EINECS: 265-159-2 Index number: 649-469-00-9	Distillates (petroleum), solvent-dewaxed light paraffinic ⚠ Asp. Tox. 1, H304	5.0-10.0%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:**

Supply fresh air; consult doctor in case of complaints.

If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

If breathing is difficult, give oxygen by qualified medical personnel only.

· **After skin contact:**

If skin irritation continues, consult a doctor.

Immediately rinse with water.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

Never give anything by mouth to an unconscious person.

· **Most important symptoms and effects, both acute and delayed**

Harmful by inhaled. Aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal. May cause slight eye irritation. Symptoms may include stinging and tearing. May cause slight skin irritation. Symptoms may include mild redness and swelling. May cause respiratory irritation. Symptoms may include upper respiratory tract, coughing, and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

· **4.3 Indication of any immediate medical attention and special treatment needed**

Symptomatically: Aspiration hazard.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Carbon Monoxide and Carbondioxide
Burning may produce irritating, toxic and obnoxious fumes.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear fully protective suit.
Wear self-contained respiratory protective device.
Firefighters must use standard protective equipment including flame retardant coat , helmet with face shield, gloves, rubber boots and in enclosed spaces (SCBA).
Special firefighting measures.
Firefighters should wear proper protective equipment.
Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.
- **Additional information**
Cool endangered receptacles with water spray.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective clothing.
Avoid contact with eyes and skin.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Send for recovery or disposal in suitable receptacles.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Stop spill or leak at source if safety possible. Dyke for water control.
Only use non-sparking tools and equipment in the clean-up process
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep away from heat and direct sunlight.
Do not inhale mist or vapors.
Avoid contact with eyes and skin.
Ensure good ventilation/exhaustion at the workplace.
Keep receptacles tightly sealed.
- **Information about fire - and explosion protection:**
Protect from heat.
Keep away from flames.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.

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- **Information about storage in one common storage facility:**
Store away from oxidising agents.
Do not store together with acids.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Keep container tightly sealed.
Keep away from incompatible materials. The storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel.
Inspect periodically for damage or leaks.
No smoking in the area.
- **Storage class:** 10/12 CH/(TRGS510) liquids
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
Use general or local exhaust ventilation to maintain air concentrations recommended exposure limits.
- **Appropriate engineering controls** Use appropriate local exhaust ventilation.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Respiratory protection:**
Use suitable respiratory protective device when high concentrations are present.
Respiratory protection according to EN 141.
- **Hand protection**
Chemical resistant gloves (EN 374)



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
For the mixture of chemicals mentioned below the penetration time has to be at least 240 minutes (Permeation according to EN 16523-1:2015: Level 6).
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**
Goggles recommended during refilling

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according to EN 166.

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state	Fluid
· Colour:	Amber coloured
· Odour:	Mild
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	Undetermined.
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	>175 °C (DIN 51755)
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity at 20 °C	11.92 mm ² /s
· Dynamic:	Not determined.
· Solubility	
· water:	Insoluble.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	1 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.

· 9.2 Other information

· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· VOC (EC)	0.00 %
· VOC (CH)	0.00 %
· Change in condition	
· Evaporation rate	Not determined.

· Information with regard to physical hazard classes

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void

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- | | |
|--|------|
| · Self-heating substances and mixtures | Void |
| · Substances and mixtures, which emit flammable gases in contact with water | Void |
| · Oxidising liquids | Void |
| · Oxidising solids | Void |
| · Organic peroxides | Void |
| · Corrosive to metals | Void |
| · Desensitised explosives | Void |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Not normally reactive.
- **10.2 Chemical stability** Material is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid**
Avoid excessive heat, sparks and open flame. Avoid contact with incompatible materials. Do not use in areas without adequate ventilation.
- **10.5 Incompatible materials:** oxidizing agents; acids.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Harmful if inhaled.

- **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Inhalative	LC50/4 h	>3.63 mg/l (rat)
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64742-53-6 Distillates (petroleum), hydrotreated light naphthenic

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>2.18 mg/l (rat)

64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h Inhalative	>4 mg/l (rat)

- **Skin corrosion/irritation**
Based on available data, the classification criteria are not met.
Direct skin contact may result in little or no irritation.
- **Serious eye damage/irritation**
Based on available data, the classification criteria are not met.
May cause mild transient irritation.
- **By Inhalation:**
If the product is heated or mists formed, inhalation may cause irritation of the nose, throat and respiratory tract.
- **By ingestion:**
Aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal. Ingestion may irritate the digestive tract and cause nausea, vomiting, and diarrhea. Ingesting large amounts may cause defects in the central nervous system (e.g. dizziness, headache).
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.

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- **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** May be fatal if swallowed and enters airways.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

64742-53-6 Distillates (petroleum), hydrotreated light naphthenic

NOEL 21 d	10 mg/l (daphnia magna)
LC50 (96h)	>100 mg/l (Fish)
EC50 48 h	>10,000 mg/l (daphnia magna)
NOEC 72 h	>100 mg/l (Algen/Algues)

64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic

NOEC 72 h	>100 mg/l (Algen/Algues)
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- **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential**

64742-53-6 Distillates (petroleum), hydrotreated light naphthenic

Log POW	3.9-6 -
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- **12.4 Mobility in soil** No further relevant information available.

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Hand over to hazardous waste disposers.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

13 02 08*	other engine, gear and lubricating oils
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· **DETEC Ordinance on Lists for the Movement of Waste (SR 814.610.1)**

13 02 08 * other engine, gear and lubricating oils

classification: hazardous waste

· **Uncleaned packaging:**

· **Recommendation:**

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

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Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN3082
· 14.2 UN proper shipping name · ADR · IMDG, IATA	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetradecane, chloro derivs.) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetradecane, chloro derivs.)
· 14.3 Transport hazard class(es) · ADR, IATA	
	
· Class · Label	9 Miscellaneous dangerous substances and articles. 9
· IMDG	
	
· Class · Label	9 Miscellaneous dangerous substances and articles. 9
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Special marking (ADR): · Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category · Tunnel restriction code	3 (-)

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· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRADECANE, CHLORO DERIVS.), 9, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** *Danger*

- **Hazard-determining components of labelling:**

*Distillates (petroleum), hydrotreated light naphthenic
Distillates (petroleum), solvent-dewaxed light paraffinic*

- **Hazard statements**

*H332 Harmful if inhaled.
H304 May be fatal if swallowed and enters airways.*

- **Precautionary statements**

*P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

- **REGULATION (EU) 2019/1148**

- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

- **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

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· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **Regulation Switzerland (CH)**

Major Accidents Ordinance MAO SR 814.012.: Threshold quantities 20000 kg

Annex 5 ChemO: No Groupe.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** product safety department

· **Date of previous version:** 11.04.2022

· **Version number of previous version:** 1

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Asp. Tox. 1: Aspiration hazard – Category 1

· *** Data compared to the previous version altered.**

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