

B Page 1 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

# Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

# **1.1 Product identifier**

# MoS2-Rostloeser MoS2-Rust Solvent

**1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture:** Rust remover

# Uses advised against:

No information available at present.

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

LIQUI MOLY GmbH Jerg-Wieland-Str. 4 89081 Ulm-Lehr Tel.: (+49) 0731-1420-0 Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

## 1.4 Emergency telephone number Emergency information services / official advisory body:

Telephone number of the company in case of emergencies: +49 (0) 700 / 24 112 112 (LMR) +1 872 5888271 (LMR)

# **SECTION 2: Hazards identification**

	of the substance or mix cording to Regulation (E	
Hazard class	Hazard category	Hazard statement
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
Aerosol	1	H222-Extremely flammable aerosol.
Aerosol	1	H229-Pressurised container: May burst if heated.

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)



Page 2 of 17

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent



#### Danger

H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

P102-Keep out of reach of children.

P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211-Do not spray on an open flame or other ignition source. P251-Do not pierce or burn, even after use. P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

EUH066-Repeated exposure may cause skin dryness or cracking.

Without adequate ventilation, formation of explosive mixtures may be possible. Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

# **SECTION 3: Composition/information on ingredients**

## 3.1 Substances

#### n.a. **3.2 Mixtures**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	918-481-9
CAS	
content %	50-<75
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Asp. Tox. 1, H304
2-Butoxyethanol	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119475108-36-XXXX
Index	603-014-00-0
EINECS, ELINCS, NLP, REACH-IT List-No.	203-905-0
CAS	111-76-2
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 3, H331
	Acute Tox. 4, H302
	Skin Irrit. 2, H315
	Eye Irrit. 2, H319
Specific Concentration Limits and ATE	ATE (oral): 1200 mg/kg
	ATE (as inhalation, Aerosol): 0,5 mg/l/4h
	ATE (as inhalation, Vapours): 3 mg/l



Page 3 of 17

ആ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

Carbon dioxide	Substance for which an EU exposure limit value applies.
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	204-696-9
CAS	124-38-9
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here. Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here. The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

#### Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

#### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Consult doctor immediately.

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

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

Symptomatic treatment.

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media Suitable extinguishing media

Adapt to the nature and extent of fire.

Water jet spray/foam/CO2/dry extinguisher

#### Unsuitable extinguishing media

High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Oxides of sulphur Toxic pyrolysis products. Toxic gases Danger of bursting (explosion) when heated Possible build up of explosive/highly flammable vapour/air mixture.



Page 4 of 17

ആ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

## 5.3 Advice for firefighters

For personal protective equipment see Section 8. In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. According to size of fire Full protection, if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.

#### **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.

Ensure sufficient ventilation, remove sources of ignition. Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Avoid contact with eyes or skin.

#### 6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

#### **6.2 Environmental precautions**

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

#### 6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available. Active substance:

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

#### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## **SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

#### 7.1 Precautions for safe handling

## 7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Keep away from sources of ignition - Do not smoke.

Take measures against electrostatic charging, if appropriate.

Do not use on hot surfaces.

Avoid contact with eyes or skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

#### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Do not store with oxidizing agents. Observe special regulations for aerosols!

Observe special storage conditions.

Keep protected from direct sunlight and temperatures over 50°C.

Store in a well-ventilated place.



Page 5 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

#### Store cool. 7.3 Specific end use(s)

GB

No information available at present.

Observe the instructions for good working practice and the recommendations for risk assessment.

Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

Chemical Name	Hydrocarbons C1	10-C13	n-alkanes, isoalkanes, c	volics. <2% aron	natics		
WEL-TWA: 800 mg/m3	, arocarocito, o		-STEL:	,,,,,			
Monitoring procedures:	-	Draege Draege	er - Hydrocarbons 0,1%/c er - Hydrocarbons 2/a (81 r - KITA-187 S (551 174)	03 581)			
BMGV:		•	, , ,	Other inforr paragraphs	•		RCP-method,
Chemical Name	2-Butoxyethanol						
WEL-TWA: 25 ppm (123 mg/m3) ( ppm (98 mg/m3) (EU)	WEL-TWA), 20	WEL	STEL: 50 ppm (246 n	ng/m3) (WEL-ST	EL, EU)		
Monitoring procedures:	-	DFG M 2002 - NIOSH NIOSH	r - KITA-190 U(C) (548 8 ethNr. 2 (D) (Loesungs EU project BC/CEN/ENT 1403 (ALCOHOLS IV) - 2549 (VOLATILE ORGA 83 (2-Butoxyethanol (But	mittelgemische 3 R/000/2002-16 0 2003 NIC COMPOUN	card 32-2 (2	2004)	
BMGV: 240 mmol butoxyacetic ac	d/mol creatinine in			Other inforr		k (WEL)	
Chemical Name	Carbon dioxide					· /	
WEL-TWA: 5000 ppm (9150 mg/m 5000 ppm (9000 mg/m3) (EU)	13) (WEL-TWA),		STEL: 15000 ppm (2	- / (	EL-STEL)		
Monitoring procedures: BMGV:	- - - - - - - - - - - - - - - - - -	Draege Draege Draege Compu Compu Compu Compu Compu Compu Compu NIOSH	er - Carbon Dioxide 0,1% er - Carbon Dioxide 0,5% er - Carbon Dioxide 1%/a er - Carbon Dioxide 100/a er - Carbon Dioxide 5%/A r - KITA-126 B (549 475) r - KITA-126 SA (549 46 r - KITA-126 SB (548 81 r - KITA-126 SB (548 81 r - KITA-126 SG (550 21 r - KITA-126 SG (550 21 r - KITA-126 SH (549 50 r - KITA-126 UH (549 50 r - KITA-126 UH (549 51 6603 (Carbon dioxide) - ID-172 (Carbon dioxide i	/a (CH 31 401) (CH 25 101) a (81 01 811) c (CH 20 301) 7) 6) 7) 6) 9) 9) 7) 1994	ospheres) nation:	<u>- 1990</u> -	
WEL-TWA: 5 mg/m3 (Mineral oil, e		WEI	STEL:				
working fluids, ACGIH)	inotal grinotal						
Monitoring procedures:	-	Draege	er - Oil Mist 1/a (67 33 03	1)		1	
BMGV:				Other inform	mation:	-	
2-Butoxyethanol							
Env	oosure route / rironmental npartment		Effect on health	Descriptor	Value	Unit	Note



Page 6 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

ആ

	Environment - freshwater		PNEC	8,8	mg/l
	Environment - marine		PNEC	0,88	mg/l
	Environment - sediment, freshwater		PNEC	34,6	mg/kg dw
	Environment - soil		PNEC	2,8	mg/kg dw
	Environment - sewage treatment plant		PNEC	463	mg/l
	Environment - sediment, marine		PNEC	3,46	mg/kg dw
	Environment - sporadic (intermittent) release		PNEC	9,1	mg/l
	Environment - soil		PNEC	2,33	mg/kg
	Environment - oral (animal feed)		PNEC	20	mg/kg
Consumer	Human - inhalation	Long term, local effects	DNEL	123	mg/m3
Consumer	Human - dermal	Short term, systemic effects	DNEL	44,5	mg/kg bw/d
Consumer	Human - inhalation	Short term, systemic effects	DNEL	426	mg/m3
Consumer	Human - oral	Short term, systemic effects	DNEL	13,4	mg/kg bw/d
Consumer	Human - inhalation	Short term, local effects	DNEL	147	mg/m3
Consumer	Human - dermal	Long term, systemic effects	DNEL	38	mg/kg bw/d
Consumer	Human - inhalation	Long term, systemic effects	DNEL	49	mg/m3
Consumer	Human - oral	Long term, systemic effects	DNEL	3,2	mg/kg bw/d
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	89	mg/kg bw/d
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	663	mg/m3
Workers / employees	Human - inhalation	Short term, local effects	DNEL	246	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	75	mg/kg bw/d
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	98	mg/m3

Distillates (petroleum), hydrotreated heavy paraffinic									
Area of application	Exposure route / Effect on health Descriptor Value Unit Not								
	Environmental								
	compartment								
	Environment - oral (animal		PNEC	9,33	mg/kg feed				
	feed)								

Inited Kingdom | WEL-TWA = Workplace Exposure Limit - Long-term exposure limit - 8-hour TWA (= time weighted average) reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 91/322/EEC, 98/24/EC, 200/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU: (8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). | | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:

(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |

BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL)) |

| Other information (EH40/2005 Workplace exposure limits (Fourth Edition 2020)): Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.



Page 7 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU: (13) = The substance can cause sensitisation of the skin and of the respiratory tract (2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE).

# 8.2 Exposure controls 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

ആ

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

#### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: With danger of contact with eyes. Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection: Solvent resistant protective gloves (EN ISO 374). If applicable Protective nitrile gloves (EN ISO 374). Minimum layer thickness in mm: 0,4 Permeation time (penetration time) in minutes:

> 480 The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: If OES or MEL is exceeded. Filter A P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

# 8.2.3 Environmental exposure controls

No information available at present.

## **SECTION 9: Physical and chemical properties**



Page 8 of 17

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

#### 9.1 Information on basic physical and chemical properties

Physical state: Colour: Odour: Melting point/freezing point: Boiling point or initial boiling point and boiling range: Flammability: Lower explosion limit: Upper explosion limit: Flash point: Auto-ignition temperature: Decomposition temperature: pH: Kinematic viscosity: Solubility: Partition coefficient n-octanol/water (log value): Vapour pressure: Density and/or relative density: Relative vapour density: Particle characteristics:

#### 9.2 Other information

No information available at present.

Aerosol. Active substance: liquid. Grey Test petrol There is no information available on this parameter. There is no information available on this parameter. Does not apply to aerosols. There is no information available on this parameter. There is no information available on this parameter. Does not apply to aerosols. Does not apply to aerosols. There is no information available on this parameter. n.a. <=20,5 mm2/s (40°C) There is no information available on this parameter. Does not apply to mixtures. There is no information available on this parameter. 0,819 g/ml (Active substance) Does not apply to aerosols.

Does not apply to aerosols.

## **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

Pressure increase will result in danger of bursting.
10.2 Chemical stability
Stable with proper storage and handling.
10.3 Possibility of hazardous reactions
No dangerous reactions are known.
10.4 Conditions to avoid
Heating, open flame, ignition sources
Pressure increase will result in danger of bursting.
10.5 Incompatible materials
Avoid contact with strong oxidizing agents.
10.6 Hazardous decomposition products

No decomposition when used as directed.

**SECTION 11: Toxicological information** 

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

Possibly more information on health effects, see Section 2.1 (classification).

WI032-R0Slidesei						
MoS2-Rust Solvent						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:	ATE	>20	mg/l/4h			Vapours, calculated value
Acute toxicity, by inhalation:	ATE	>5	mg/l/4h			Aerosol, calculated value
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.



Page 9 of 17	
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II	
Revision date / version: 04.03.2024 / 0027	
Replacing version dated / version: 12.11.2023 / 0026	
Valid from: 04.03.2024	
PDF print date: 08.03.2024	
MoS2-Rostloeser	
MoS2-Rust Solvent	

œ

Reproductive toxicity:			n.d.a.
Specific target organ toxicity -			n.d.a.
single exposure (STOT-SE):			
Specific target organ toxicity -			n.d.a.
repeated exposure (STOT-RE):			
Aspiration hazard:			n.d.a.
Symptoms:			n.d.a.

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	Analogous
			5.5		Toxicity)	conclusion
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute	Analogous
					Dermal Toxicity)	conclusion
Acute toxicity, by inhalation:	LC50	>4951	mg/m3/4h	Rat	OECD 403 (Acute	Analogous
Notice toxicity, by initial dion.	2000	24001	ing/ino/-in	Nut	Inhalation Toxicity)	conclusion,
					initial attorn ( ) ( ) ( )	Vapours
Skin corrosion/irritation:					OECD 404 (Acute	Not irritant,
Skin conosion/initiation.					Dermal	Analogous
					Irritation/Corrosion)	conclusion
Serious eye damage/irritation:					OECD 405 (Acute Eye	Not irritant,
					Irritation/Corrosion)	Analogous
						conclusion
Respiratory or skin					OECD 406 (Skin	Not sensitizising
sensitisation:					Sensitisation)	Analogous
						conclusion
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative,
					Mammalian	Analogous
					Chromosome	conclusion
					Aberration Test)	
Germ cell mutagenicity:					OECD 474 (Mammalian	Negative,
					Erythrocyte	Analogous
					Micronucleus Test)	conclusion
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
6 ,				typhimurium	Reverse Mutation Test)	5
Carcinogenicity:				71	OECD 453 (Combined	Negative,
					Chronic	Analogous
					Toxicity/Carcinogenicity	conclusion
					Studies)	
Reproductive toxicity:					OECD 414 (Prenatal	Negative,
					Developmental Toxicity	Analogous
					Study)	conclusion
Specific target organ toxicity -					OECD 408 (Repeated	Negative,
repeated exposure (STOT-RE):					Dose 90-Day Oral	Analogous
repeated exposure (STOT-RE).					Toxicity Study in	conclusion
					Rodents)	CONCIUSION
Assisting horouge					Rodents)	Vaa
Aspiration hazard:						Yes
Symptoms:						unconsciousnes
						, headaches,
						dizziness,
						mucous
						membrane
						irritation

2-Butoxyethanol								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	ATE	1200	mg/kg					
Acute toxicity, by dermal route:	LD50	2275	mg/kg	Rabbit	OECD 402 (Acute			
					Dermal Toxicity)			
Acute toxicity, by inhalation:	ATE	3	mg/l			Vapours		
Acute toxicity, by inhalation:	ATE	0,5	mg/l/4h			Aerosol		



B Page 10 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Carbon dioxide						
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	<69	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
						difficulties, respiratory distress, drowsiness, unconsciousnes, , annoyance, coughing, headaches, gastrointestinal disturbances, insomnia, mucous membrane irritation, dizziness, nausea
dermal: Symptoms:					Study)	acidosis, ataxia breathing
Specific target organ toxicity - repeated exposure (STOT-RE),	NOAEL	>150	mg/kg bw/d	Rabbit	OECD 411 (Subchronic Dermal Toxicity - 90-day	
Aspiration hazard:			bw/d			No
Reproductive toxicity:	NOAEL	720	mg/kg		(Carcinogenicity Studies)	
Carcinogenicity: Carcinogenicity:	NOAEC	125	ppm	Rat	OECD 451 (Carcinogenicity Studies) OECD 451	Negative Negative
Germ cell mutagenicity:				Det	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contac
Serious eye damage/irritation:				Rabbit	ON) OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Skin corrosion/irritation:				Rabbit	Regulation (EC) 440/2008 B.4 (DERMAL IRRITATION/CORROSI	Skin Irrit. 2, Product remove fat.



# B Page 11 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

Symptoms: Unconsciousness , blisters by skincontact, vomiting, frostbite, annoyance, palpitations, itching, headaches, cramps, ear noises, dizziness

# 11.2. Information on other hazards

MoS2-Rostloeser						
MoS2-Rust Solvent						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply
						to mixtures.
Other information:						No other
						relevant
						information
						available on
						adverse effects
						on health.

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Other information:						Repeated
						exposure may
						cause skin
						dryness or
						cracking.

Carbon dioxide						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						No

## **SECTION 12: Ecological information**

Possibly more information on environmental effects, see Section 2.1 (classification).

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	•						n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and							n.d.a.
degradability:							
12.3. Bioaccumulative							n.d.a.
potential:							
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT							n.d.a.
and vPvB assessment							
12.6. Endocrine							Does not apply
disrupting properties:							to mixtures.
12.7. Other adverse							No information
effects:							available on
							other adverse
							effects on the
							environment.



# B Page 12 of 17

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

Other information:				DOC-elimination degree(complexi ng organic substance)>=
Other information:	AOX	0	%	80%/28d: n.a. According to the recipe, contains no AOX.

Hydrocarbons, C10-C13,	, n-alkanes, iso	oalkanes, cy	clics, <2% a	omatics			
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOELR	28d	0,101	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	LL50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOELR	21d	0,176	mg/l	Daphnia magna	,	
12.1. Toxicity to algae:	EL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	80	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		10-2500			,	High
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Other organisms:	EL50	48h	>1000	mg/l	Tetrahymen pyriformis		
Water solubility:							Product floats of the water surface.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1474	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	21d	>100	mg/l	Brachydanio rerio	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	
12.1. Toxicity to daphnia:	EC50	48h	1550	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	100	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	1840	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	



Page 13 of 17

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

12.1. Toxicity to algae:	NOEC/NOEL	72h	286	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	95	%		OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	>99	%		OECD 302 B (Inherent Biodegradability - Zahn- Wellens/EMPA Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		3,2				Slight
12.3. Bioaccumulative potential:	Log Pow		0,81			OECD 107 (Partition Coefficient (n- octanol/water) - Shake Flask Method)	Not to be expected
12.4. Mobility in soil:	H (Henry)		0,00000 16	atm*m3/m ol		,	
12.5. Results of PBT and vPvB assessment				~			No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	16h	>700	mg/l	Pseudomonas putida	DIN 38412 T.8	

Carbon dioxide							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	35	mg/l	Salmo gairdneri		
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance
12.7. Other adverse							Greenhouse
effects:							effect
Other information:	Log Kow		0,83				
Global warming			1				
potential (GWP):							

## **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU) 16 05 04 gases in pressure containers (including halons) containing hazardous substances Recommendation: Sewage disposal shall be discouraged. Pay attention to local and national official regulations. Take full aerosol cans to problem waste collection. Take emptied aerosol cans to valuable material collection.

#### For contaminated packing material

Pay attention to local and national official regulations. Recommendation:

Return to manufacturer with residual pressure.

Do not perforate, cut up or weld uncleaned container.



Page 14 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

œ

Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

#### **SECTION 14: Transport information**

#### **General statements**

Transport by road/by rail (ADR/RID)		
14.1. UN number or ID number:	1950	
14.2. UN proper shipping name:		
UN 1950 AEROSOLS		
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	•
14.5. Environmental hazards:	Not applicable	
Tunnel restriction code:	D	
Classification code:	5F	
LQ:	1 L	
Transport category:	2	
Transport by sea (IMDG-code)		
14.1. UN number or ID number:	1950	
14.2. UN proper shipping name:		
UN 1950 AEROSOLS		
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	-
14.5. Environmental hazards:	Not applicable	
Marine Pollutant:	Not applicable	
EmS:	F-D, S-U	
Transport by air (IATA)		
14.1. UN number or ID number:	1950	
14.2. UN proper shipping name:		
UN 1950 Aerosols, flammable		
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	•
14.5. Environmental hazards:	Not applicable	
14.6. Special precautions for user		
Persons employed in transporting dangerous goods must be trained.		
All persons involved in transporting must observe safety regulations.		
Precautions must be taken to prevent damage.		

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

Freighted as packaged goods rather than in bulk, therefore not applicable. Minimum amount regulations have not been taken into account. Danger code and packing code on request. Comply with special provisions.

# **SECTION 15: Regulatory information**

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

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)! Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of	Qualifying quantity (tonnes) of
		dangerous substances as	dangerous substances as
		referred to in Article 3(10) for the	referred to in Article 3(10) for the
		application of - Lower-tier	application of - Upper-tier
		requirements	requirements
P3b	11.1, 11.2	5000 (netto)	50000 (netto)
The Notes to Annex 1 of Directive 2	2012/18/EU, in particular those name	ed in the tables here and notes 1-6, m	ust be taken into account when
assigning categories and qualifying	guantities.		



Page 15 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent

#### Directive 2010/75/EU (VOC): **REGULATION (EC) No 648/2004**

30 % and more aliphatic hydrocarbons

ആ

Observe incident regulations.

National requirements/regulations on safety and health protection must be applied when using work equipment.

#### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

#### **SECTION 16: Other information**

Revised sections:

2 Employee training in handling dangerous goods is required. These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

#### Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Asp. Tox. 1, H304	Classification according to calculation procedure.
Aerosol 1, H222	Classification according to calculation procedure.
Aerosol 1, H229	Classification based on the form or physical state.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents. H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation. H319 Causes serious eye irritation.

H331 Toxic if inhaled.

EUH066 Repeated exposure may cause skin dryness or cracking.

Asp. Tox. — Aspiration hazard Aerosol — Aerosols Acute Tox. — Acute toxicity - inhalation Acute Tox. — Acute toxicity - oral Skin Irrit. — Skin irritation Eye Irrit. - Eye irritation

#### Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

#### Any abbreviations and acronyms used in this document:

58,05 %



അ Page 16 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent acc., acc. to according, according to Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the ADR International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF Bioconcentration factor BSEF The International Bromine Council CAS **Chemical Abstracts Service** Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances CLP and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon for example (abbreviation of Latin 'exempli gratia'), for instance e.g. EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants) EC European Community ECHA European Chemicals Agency ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect EEC European Economic Community EINECS European Inventory of Existing Commercial Chemical Substances ELINCS European List of Notified Chemical Substances EN European Norms United States Environmental Protection Agency (United States of America) EPA ErCx,  $E\mu Cx$ , ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants) et cetera etc. **European Union** EU EVAL Ethylene-vinyl alcohol copolymer Fax. Fax number general gen. GHS Globally Harmonized System of Classification and Labelling of Chemicals GWP Global warming potential Adsorption coefficient of organic carbon in the soil Koc Kow octanol-water partition coefficient International Agency for Research on Cancer IARC International Air Transport Association IATA IBC (Code) International Bulk Chemical (Code) IMDG-code International Maritime Code for Dangerous Goods including, inclusive incl. **IUCLID** International Uniform Chemical Information Database IUPAC International Union for Pure Applied Chemistry LC50 Lethal Concentration to 50 % of a test population LD50 Lethal Dose to 50% of a test population (Median Lethal Dose) Log Koc Logarithm of adsorption coefficient of organic carbon in the soil Log Kow, Log Pow Logarithm of octanol-water partition coefficient LQ Limited Quantities MARPOL International Convention for the Prevention of Marine Pollution from Ships mg/kg bw mg/kg body weight mg/kg bw/d, mg/kg bw/day mg/kg body weight/day mg/kg dw mg/kg dry weight mg/kg wwt mg/kg wet weight not applicable n.a. n.av. not available not checked n.c. n.d.a. no data available



ആ Page 17 of 17 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.03.2024 / 0027 Replacing version dated / version: 12.11.2023 / 0026 Valid from: 04.03.2024 PDF print date: 08.03.2024 MoS2-Rostloeser MoS2-Rust Solvent NIOSH National Institute for Occupational Safety and Health (USA) NLP No-longer-Polymer NOEC, NOEL No Observed Effect Concentration/Level OECD Organisation for Economic Co-operation and Development organic org. OSHA Occupational Safety and Health Administration (USA) PBT persistent, bioaccumulative and toxic . Polyethylene PF PNEC Predicted No Effect Concentration ppm parts per million PVC Polyvinylchloride REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals) **REACH-IT List-No.** 6/7/8/9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT. RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail) SVHC Substances of Very High Concern Telephone Tel. TOC Total organic carbon UN RTDG United Nations Recommendations on the Transport of Dangerous Goods Volatile organic compounds VOC

vPvB very persistent and very bioaccumulative

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

# Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.