

# MANNOL<sup>®</sup> MATERIAL SAFETY DATA SHEET

Prepared according to Annex II of EC Regulation 1907/2006

<p><b>1. PRODUCT AND COMPANY IDENTIFICATION</b>  <b>Product Name:</b> Rust Dissolver  <b>Product Use:</b> Rust Dissolver Ultra Molybdenum  <b>Date of issue :</b> 12.12.2010  <b>Revision Date :</b> 01.02.2013  <b>Company Information:</b> Sudheimer Car Technik Vertriebs GmbH  <b>Address:</b> Feldstrasse 154, 22880 Wedel, Germany  <b>Information telephone :</b> +49 (0) 4103 1211 118  <b>Emergency telephone :</b> +49 (0) 4103 1211 0  <b>E-mail :</b> info@sct-germany.de  <b>Fax :</b> +49 (0) 4103 1211 116</p>
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<p><b>2. COMPOSITION/INFORMATION ON INGREDIENTS</b>  <b>To people</b>          See point 11 and 15.          Preparation is classified as hazardous in the sense of directive 1999/45/EC. Product is extremely flammable. Danger of bursting (explosion) when heated. Repeated exposure may cause skin dryness or cracking. When using: development of explosive vapour/air mixture possible.  <b>To the environment</b>          See point 12.</p>
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<b>3. HAZARDS IDENTIFICATION</b>			
<b>Chemical</b>			
<b>Content %</b>	<b>Symbol</b>	<b>R-phrases</b>	<b>EINECS, ELINCS</b>
	<b>Registration number (ECHA)</b>	<b>Classification categories</b>	
Naphtha (petroleum), hydro desulfurized heavy			
50-60	Xn	65-66	265-185-4
2-Butoxyethanol			
1.-5	Xn/Xi	20/21/22-36/38	203-905-0
Carbon dioxide			
		Substance for which an EU exposure limit value applies	
1.-10			204-696-9

For complete wording of the R-phrases, refer to point 16.

#### **4. FIRST AID MEASURES**

**4.1 Inhalation:** Remove person from danger area.

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

**4.2 Eye contact:** Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

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

**4.4 Ingestion:** Do not induce vomiting. Consult doctor immediately.

**4.5 Special resources necessary for first aid:**

Indications for the physician: symptomatic treatment.

#### **5. FIRE FIGHTING MEASURES**

**5.1 Suitable extinguishing media:**

Adapt to the nature and extent of fire.

Water jet spray / foam / CO<sub>2</sub> / dry extinguisher

Cool container at risk with water.

**5.2 Extinguishing media which shall not be used for safety reasons:**

High volume water jet.

**5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:**

In case of fire the following can develop:

Oxides of carbon Oxides of sulphur Hydrocarbons

Toxic pyrolysis products.

Danger of explosion by prolonged heating. Explosive vapour/air mixture.

**5.4 Special protective equipment for fire-fighters:**

Protective respirator with independent air supply.

According to size of fire.

Full protection, if necessary.

**5.5 Further information**

Dispose of contaminated extinction water according to official regulations.

#### **6. ACCIDENTAL RELEASE MEASURES**

Refer to point 13. and for personal protection refer to point 8.

**6.1 Personal precautions:**

Remove possible causes of ignition - do not smoke. Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

**6.2 Environmental precautions:**

Prevent from entering drainage system.

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

**6.3 Methods for cleaning up:**

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

Collect using absorbant material (e.g. Universal binding medium, sand, kieselguhr) and dispose of according to point 13.

## 7. HANDLING AND STORAGE

### 7.1 Handling

#### Tips for safe handling:

See point 6.1

Ensure good ventilation.

Keep away from sources of ignition - Do not smoke. Do not use on hot surfaces.

Wash hands before breaks and at end of work. Eating, drinking, smoking, as well as food-storage, is prohibited in work-room. General hygiene measures for the handling of chemicals are applicable.

Observe directions on label and instructions for use.

### 7.2 Storage

#### Requirements for storage rooms and containers:

Store in a well-ventilated place. Observe special regulations for aerosols. Not to be stored in gangways or stair wells. Do not store with oxidizing agents.

#### Special storage conditions:

See point 10

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

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Chemical name	Naphtha (petroleum), hydrodesulfurized heavy	Content % 50-60
WEL-TWA: 100mg /m <sup>3</sup>	WEL-STEL: 2(II) (AGW)	---
BMGV: ---	Other informations: ---	

Chemical name	2-Buthoxyethanol	Content % 1-5
WEL-TWA: 25 ppm (123 mg/m <sup>3</sup> ) (WEL), 20ppm (98 mg/m <sup>3</sup> ) (EC)	WEL-STEL: 50 ppm (246 mg/m <sup>3</sup> ) (WEL, EC)	---
BMGV: 240 mmol butoxyacetic acid/mol, creatinine in urine, post shift Other informations: Sk (WEL)		

Chemical name	Carbon dioxide	Content % 1-10
WEL-TWA: 5000 ppm (9150 mg/m <sup>3</sup> ) (WEL), 5000 ppm (9000 mg/m <sup>3</sup> ) (EC)	WEL-STEL: 15000 ppm (27400 mg/m <sup>3</sup> ) (WEL)	---
BMGV: ---	Other informations: ---	

Chemical name	Oil mist, mineral	Content % :
WEL-TWA: 5 mg/m <sup>3</sup> (ACGIH)	WEL-STEL: 10 mg/m <sup>3</sup> (ACGIH)	---
BMGV: ---	Other informations: ---	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit-Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or

heritable genetic damage. \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

## 8.2 Exposure controls

### 8.2.1 Occupational exposure 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. 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. Respiratory protection: If OES or MEL is exceeded. Gas mask filter A (EN 14387), code colour brown.

Observe wearing time limitations for respiratory protection equipment. Hand protection: Solvent resistant protective gloves (EN 374). If applicable Protective nitrile gloves (EN 374) Protective hand cream recommended. Eye protection: Tight fitting protective goggles with side protection (EN 166). Skin protection: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments) Additional information on hand protection - No tests have been performed. Selection made for preparations according to the best available knowledge and information on the ingredients.

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 preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.2 Environmental exposure controls

n.av.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Aerosol
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic
<b>pH-value undiluted:</b>	n.a
<b>Boiling point/boiling range (°C):</b>	n.av.
<b>Melting point/melting range (°C):</b>	n.av.
<b>Flash Point: (°C):</b>	n.c.
<b>Oxidising properties:</b>	No
<b>Vapour pressure:</b>	n.c.
<b>Density (g/ml):</b>	0,829 – 0,86 (20°C)
<b>Water solubility:</b>	Insoluble

## 10. STABILITY AND REACTIVITY

### Conditions to avoid:

See point 7

Stable when handled and stored correctly.

Pressure increase will result in danger of bursting. Heating, open flame, ignition sources.

### Materials to avoid:

See point 7

Avoid contact with strong oxidizing agents.

### Hazardous decomposition products:

See point 5.3

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg):	n.av.
Inhalation, LC50 rat inhal. (mg/l/4h):	n.av.
Skin contact, LD50 rat dermal (mg/kg):	See point 15
Eye contact:	n.av.

### Delayed and chronic effects

Sensitization:	n.c.
Carcinogenicity:	n.c.
Mutagenicity:	n.c.
Reproductive toxicity:	n.c.
Narcosis:	n.c.

### Further information

Classification according to calculation procedure. The following may occur:

Irritation of the respiratory tract with long-term contact: Product removes fat Irritation of the skin.

## 12. ECOLOGICAL INFORMATION-ENVIRONMENTAL TOXICITY

Water hazard class (Germany): 2

Self classification: Yes (VwVwS) Persistence and degradability:

Photochemical decomposition in the atmosphere.\*

Readily biodegradable OECD \*

95% OECD 301E, > 99% OECD 302B \*\*

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Behaviour in sewage plants:

According to the recipe, contains no AOX.

Aquatic toxicity: n.av. Ecological toxicity: n.av. Mobility:

Adsorption in ground.\* Accumulation:

Concentration in organisms possible. \*

\* Naphtha (petroleum), hydrodesulfurized heavy

\*\* 2-Butoxyethanol

### 13. DISPOSAL CONSIDERATIONS

#### 13.1. For the material / preparation / residue

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. (2001/118/EC, 2001/119/EC, 2001/573/EC)

16 05 04 gases in pressure containers (including halons) containing dangerous substances

Recommendation:

Pay attention to local and national official regulations, e.g. suitable incineration plant.

Approved rubbish dump for special refuse.

#### 13.2 For contaminated packing material

See point 13.1

Pay attention to local and national official regulations.

Recommendation:

Return to manufacturer with residual pressure. Do not perforate, cut up or weld uncleaned container.

### 14. TRANSPORT INFORMATION

#### General statements

UN-Number: 1950



#### Road/ Rail-transport (ADR/RID)

Class/packing group: 3/-

UN 1950 AEROSOLS

Classification code: 5F

LQ: 2

#### Transport by sea

IMDG-code: 2.1/- (class/packing group)

EmS: F-D, S-U

Marine Pollution: n.a

AEROSOLS

#### Transport by air

IATA: 2.1/-/ (class/secondary danger/packing group)

Aerosols, flammable

#### Additional information:

Danger code and packing code on request.

## 15. REGULATORY INFORMATION

**Classification according to Dangerous Product Regulations incl. EC Directives (67/548/EEC and 1999/45/EC)**

**Symbols:** Xn/N

Indications of danger: F+ Indications of danger: Extremely flammable

**R-phrases:**

66 Repeated exposure may cause skin dryness or cracking.

**S-phrases:**

23.c Do not breathe spray.

35 This material and its container must be disposed of in a safe way.

51 Use only in well-ventilated areas.

**Additions:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition – No smoking.

Keep out of the reach of children.

Without adequate ventilation, formation of explosive mixtures may be possible.

Observe restrictions: Yes

Observe restrictive guidelines 76/769/EEC, 1999/51/EC, 1999/77/EC

Observe youth employment law (German regulation). VOC 1999/13/EC ~ 58% w/w

## 16. OTHER INFORMATION

These details refer to the product as it is delivered.

Storage class VCI (Germany): 2 B Revised points: 8

The following phrases represent the prescribed R-phrases for the ingredients (designated in point 3).

65 Harmful: may cause lung damage if swallowed.

65 Also harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.

36/38 Irritating to eyes and skin.

**Legend**

These details refer to the product as it is delivered.

Revised points: 2, 3, 4, 8, 9, 11, 12, 15, 16

The following phrases represent the prescribed R-phrases / H-phrases (GHS/CLP) for the ingredients (designated in point 3).

11 Highly flammable.

36 Irritating to eyes.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

64 May cause harm to breastfed babies.

50 Very toxic to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

12 Extremely flammable.