

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

Prepared according to Annex II of EC Regulation 1907/2006

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Chain Cleaner  
**Product Use:** Chain Cleaner  
**Date of issue :** 12.12.2010  
**Revision Date :** 07.05.2013  
**Company Information:** Sudheimer Car Technik Vertriebs GmbH  
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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### To people

See point 11 and 15.

The mixture is classified as dangerous in the terms of the directive 1999/45/EC.

Product is flammable. When using: development of explosive vapour/air mixture possible.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

### To the environment

See point 12.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 3. HAZARDS IDENTIFICATION

Chemical			
Content %	Symbol	R-phrases	EINECS, ELINCS
	Registration number (ECHA)	Classification categories	

Naphtha (petroleum), hydro desulfurized heavy			
70-95	Xn/N	10-51-53-65-66-67	265-185-4
		Dangerous for the environment, Flammable, Harmful	

Solvent naphtha (petroleum), heavy arom.			
1.0-5	Xn/N	51-53-65-66-67	265-198-5
		Dangerous for the environment, Flammable, Harmful	

Polyolefin amide alkene amine			
1.0-5		53	
		Dangerous for environment	

1,2,4-trimethylebenzene			
0,1-1	Xn/Xi/N	10-20-36/37/38-51-53	202-436-9
		Dangerous for the environment, Flammable, Harmful	

Naphthalene			
0,1-1	Xn/N	22-40(Carc. Cat.3) 50-53	202-049-5
		Carcinogen, Dangerous for the environment, Harmful	

#### 4. FIRST AID MEASURES

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

Supply person with fresh air and consult doctor according to symptoms. If the person is unconscious, place in a stable side position and consult a doctor. Respiratory arrest - Artificial respiration apparatus necessary.

**4.2 Skin contact:** Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor. Protective hand cream recommended.

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

**4.4 Ingestion:** Rinse the mouth thoroughly with water. Do not induce vomiting - give copious water to drink. Consult doctor immediately. Danger of aspiration In case of vomiting, keep head low so that the stomach content does not reach the lungs.

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

Indications for the physician:

Activated carbon

Gastric lavage (stomach washing) only under endotracheal intubation.

Subsequent observation for pneumonia and pulmonary oedema.

#### 5. FIRE FIGHTING MEASURES

**5.1 Suitable extinguishing media:** Extinction powder; Foam; Water jet spray; 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;

Hydrocarbons;

Toxic pyrolysis products;

Explosive vapour/air mixture;

Dangerous vapours heavier than air;

In case of spreading near the ground, flashback to distance sources of ignition is possible.

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

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.

**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 void inhalation, and with eyes or skin. If applicable, caution - risk of slipping.

**6.2 Environmental precautions:** If leakage occurs, dam up. Prevent surface and ground-water Infiltration, as well as ground penetration. Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous. If accidental entry into drainage system occurs, inform responsible authorities.

**6.3 Methods for cleaning up:** Collect using absorbant material (e.g. Universal binding medium), and dispose of according to point 13. Ensure sufficient ventilation.

## 7. HANDLING AND STORAGE

### 7.1 Handling

#### Tips for safe handling:

See point 6.1

Ensure good ventilation. Avoid inhalation of the vapours. Keep away from sources of ignition-Do not smoke. Do not heat to temperatures close to flash point. Take precautions against electrostatic charges. Avoid contact with eyes or skin. Do not carry cleaning cloths soaked in product in trouser pockets. Eating, drinking, smoking, as well as food-storage, is prohibited in workroom.

Observe directions on label and instructions for use. Use working methods according to operating instructions.

### 7.2 Storage

#### Requirements for storage rooms and containers:

Store product closed and only in original packing. Not to be stored in gangways or stair wells.

Solvent resistant floor Do not store with oxidizing agents. Do not store with flammable or self-igniting materials.

#### Special storage conditions:

See point 10

Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung"). Store in a well ventilated place. Protect from direct sunlight and warming.

<b>8. EXPOSURE CONTROL/PERSONAL PROTECTION</b>		
Chemical name	Naphtha (petroleum), hydrodesulfurized heavy	Content % 70-90
WEL-TWA: 300mg /m <sup>3</sup>	WEL-STEL: 2(II) (AGW)	---
BMGV: ---	Other informations: ---	

Chemical name	Naphtha (petroleum), hydrodesulfurized heavy	Content % 1-5
WEL-TWA:500mg/m <sup>3</sup> (aromatics) (WELL), 100	WEL-STEL: 2(II) (AGW)	---
BMGV: ---	Other informations: ---	

Chemical name	1,2,4- trimethylbenzene	Content % 0,1-1
WEL-TWA: 25ppm(125mg /m <sup>3</sup> ) (Trimethylbenzenes, all isomers or mixtures) (WELL), 20 ppm (100 mg /m <sup>3</sup> ) (EC)	WEL-STEL: ---	---
BMGV: ---	Other informations: ---	

Chemical name	Naphtha (petroleum), hydrodesulfurized heavy	Content % 0,1-1
WEL-TWA: 10 ppm (50 mg /m <sup>3</sup> ) (EC)	WEL-STEL: ---	---
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

### 9.1 General information

<b>Physical state:</b>	Liquid
<b>Colour:</b>	Light yellow, clear
<b>Odour:</b>	Characteristic

### 9.2 Important health, safety and environmental information

<b>pH-value undiluted:</b>	n.a
<b>Boiling point/boiling range (°C):</b>	145 °C
<b>Melting point/melting range (°C):</b>	Not detected.
<b>Flash Point: (°C):</b>	41 °C
<b>Ignition temperature:</b>	235 °C *
<b>Minimum limit of explosion:</b>	0,6 Vol % *
<b>Maximum limit of explosion:</b>	7,0 Vol % *
<b>Vapour pressure:</b>	3 hPa (20°C) *
<b>Density (g/ml):</b>	0,796 (15°C)
<b>Water solubility:</b>	Insoluble
<b>Vapour density (air = 1):</b>	Vapours heavier than air.
<b>Viscosity:</b>	< 7mm <sup>2</sup> /sec (40°C)

\* Naphtha (petroleum), hydrodesulfurized heavy

## 10. STABILITY AND REACTIVITY

**Conditions to avoid:** See point 7 Stable when handled and stored correctly. Heating, open flame, ignition sources.

**Materials to avoid:**

See point 7

Avoid contact with strong oxidizing agents.

**Hazardous decomposition products:**

See point 5.3

No decomposition when used as directed.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg):	See pont 15.
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:	Cat. 3 *
Mutagenicity:	n.c.
Reproductive toxicity:	n.c.
Narcosis:	Possible

### Further information

The product was not tested. Classification according to calculation procedure. The following may occur: Irritation of the eyes; Irritation of the respiratory tract; Headaches; Dizziness; Effects/damages the central nervous system; Coordination disorders; Unconsciousness; Liver and kidney damage; Blood count modifications; Nausea Vomiting; Danger of aspiration; Oedema of the lungs.

\* Naphthalene

## 12. ECOLOGICAL INFORMATION-ENVIRONMENTAL TOXICITY

**The product was not tested.**

**Persistence and degradability:**

**Readily biodegradable \***

**Photochemical decomposition in the atmosphere.\***

**Behaviour in sewage plants:** Isolate as much as possible with an oil separator.

**According to the recipe, contains no AOX.**

**Aquatic toxicity:** See point 2

**Ecological toxicity:** n.av.

**Mobility:** n.av.

**Accumulation:**

**Concentration in organisms possible. \***

**\* Naphtha (petroleum), hydrodesulfurized heavy**

**Results of PBT assessment** n.av.

**Other adverse effects:** n.av.

### 13. DISPOSAL CONSIDERATIONS

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

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. 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) 07 07 04 other organic solvents, washing liquids and mother liquors  
Recommendation: Pay attention to local and national official regulations Implement substance recycling. E.g. suitable incineration plant. Do not dispose of with household waste.

#### 13.2 For contaminated packing material

See point 13.1

Pay attention to local and national official regulations. Empty container completely. Uncontaminated packaging can be recycled. Dispose of packaging that cannot be cleaned in the same manner as the substance.

### 14. TRANSPORT INFORMATION

#### General statements

UN-Number: 3295

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

Class/packing group: 3/III

UN 3295 HYDROCARBONS, LIQUID, N.O.S.

Classification code: F1

LQ: 7

Tunnel restriction code: D/E

#### Transport by sea

IMDG-code: 3/III (class/packing group) EmS:F-E, S-D

Marine Pollution: Yes

HYDROCARBONS, LIQUID; N.O.S. (NAPHTHA (PETROLEUM); HYDRODESULFURIZED HEAVY)

#### Transport by air

IATA: 3/-/III (class/secondary danger/packing group)

Hydrocarbons, liquid, n.o.s

#### 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:

Harmful

Dangerous for the environment

**R-phrases:**

10 Flammable.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

**S-phrases:**

(2) Keep out of the reach of children.

24 Avoid contact with skin.

23 Do not breathe vapour.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

61 Avoid release to the environment. Refer to special instructions/safety data sheets.

62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

**Additions:**

Naphtha (petroleum), hydrodesulfurized heavy

Observe restrictions: Yes

Observe youth employment law (German regulation).

Observe law on protection of expectant mothers (German regulation).

Regulation (EC) No 1907/2006, Annex XVII.

VOC (1999/13/EC): ~ 95 % w/w



## 16. OTHER INFORMATION

These details refer to the product as it is delivered.

Revised points:14

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

10 Flammable.

51 Toxic to aquatic organisms.

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

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

20 Harmful by inhalation.

36/37/38 Irritating to eyes, respiratory system and skin.

22 Harmful if swallowed.

40 Limited evidence of a carcinogenic effect.

50 Very toxic to aquatic organisms.

### 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.