

RUST GRIP

1. Identification of the substance/preparation and of the company/undertaking

1.1 Identification of the substance or preparation:

Product name: RUST GRIP
Synonyms: none

CAS No.	: N.A.	NFPA code	: N.D.
EC index No.	: N.A.	Molecular weight	: N.A.
EINECS No.	: N.A.	Formula	: N.A.
RTECS No.	: N.A.		

1.2 Use of the substance or the preparation:

Coating
 Professional use

1.3 Company/undertaking identification:

Superior Coatings & Concrete Trading
 Singel 12A
 NL-7411 HV Deventer
 Tel. : +31 570 67 29 71
 Fax : +31 570 67 03 43
 Email: info@sc2trading.com

1.4 Telephone number for emergency:

See 1.3

2. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS/ELINCS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
low boiling point naphtha (conc. benzene < 0.1%)	64741-41-9 265-041-0	29.86	F+;Xn;N	12-38-51/53-65-67 (Labelling in compliance with CONCAWE) (1)
straight run kerosine (conc. benzene < 0.1%)	64742-88-7 265-191-7	8.12	Xn;N	10-38-51/53-65-66 (Labelling in compliance with CONCAWE) (1)
diphenylmethane-4,4'-diisocyanate	101-68-8 202-966-0	16.1	Xn	20-36/37/38-42/43 (1)
methylenediphenyl diisocyanate	26447-40-5 247-714-0	6.9	Xn	20-36/37/38-42/43-51/53 (1)
4,4'-methylenediphenyl diisocyanate, oligomers	25686-28-6 500-040-3	23.01		

(1) For R-phrases in full: see heading 16

3. Hazards identification

- Flammable
- Irritating to eyes, respiratory system and skin
- May cause sensitisation by inhalation and skin contact
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- Vapours may cause drowsiness and dizziness

RUST GRIP

4. First aid measures

- 4.1 Eye contact:**
- Rinse immediately with plenty of water
 - Do not apply neutralizing agents
 - Take victim to an ophthalmologist if irritation persists
- 4.2 Skin contact:**
- Wash immediately with lots of water
 - Soap may be used
 - Take victim to a doctor if irritation persists
- 4.3 After inhalation:**
- Remove the victim into fresh air
 - Respiratory problems: consult a doctor/medical service
- 4.4 After ingestion:**
- Rinse mouth with water
 - Immediately give lots of water to drink
 - Do not induce vomiting
 - Consult a doctor/medical service if you feel unwell

5. Fire-fighting measures

- 5.1 Suitable extinguishing media:**
- Polyvalent foam
 - BC powder
 - Carbon dioxide
- 5.2 Unsuitable extinguishing media:**
- No data available
- 5.3 Special exposure hazards:**
- May build up electrostatic charges: risk of ignition
 - Gas/vapour flammable with air within explosion limits
 - On burning: release of toxic and corrosive gases/vapours nitrous vapours, carbon monoxide - carbon dioxide
- 5.4 Instructions:**
- Cool tanks/drums with water spray/remove them into safety
 - Dilute toxic gases with water spray
 - Take account of environmentally hazardous firefighting water
 - Use firefighting water moderately and contain it
- 5.5 Special protective equipment for firefighters:**
- Heat/fire exposure: compressed air/oxygen apparatus
 - Protective clothing for exposure to chemicals

6. Accidental release measures

- 6.1 Personal protection/precautions:**
- See heading 8.2/13
- 6.2 Environmental precautions:**
- Prevent soil and water pollution
 - Prevent spreading in sewers
 - Contain released substance, pump into suitable containers
 - Plug the leak, cut off the supply
 - Dam up the liquid spill
 - Try to reduce evaporation
- 6.3 Methods for cleaning up:**
- Take up liquid spill into absorbent material
 - Scoop absorbed substance into closing containers
 - Carefully collect the spill/leftovers
 - Damaged/cooled tanks must be emptied
 - Do not use compressed air for pumping over spills
 - Take collected spill to manufacturer/competent authority
 - Wash clothing and equipment after handling

RUST GRIP

7. Handling and storage

7.1 Handling:

- Observe very strict hygiene - avoid contact
- Use spark-/explosionproof appliances and lighting system
- Take precautions against electrostatic charges
- Handle uncleaned empty containers as full ones
- Do not discharge the waste into the drain

7.2 Storage:

- Keep container tightly closed
- Store in a dry area
- Ventilation at floorlevel
- Protect against frost
- Keep away from: heat sources, ignition sources, bases, peroxides, water/moisture

Storage temperature	: 0/50	°C
Quantity limits	: N.D.	kg
Storage life	: N.D.	days
Materials for packaging	:	
- suitable	: metal	
- to avoid	: no data available	

7.3 Specific uses:

- See information supplied by the manufacturer

8. Exposure controls/Personal protection

8.1 Exposure limit values:

diphenylmethane-4,4'-diisocyanate

TLV-TWA	:	mg/m ³	0.005	ppm
TLV-STEL	:	mg/m ³	-	ppm
WEL-LTEL	: 0.02 (-NCO)	mg/m ³	-	ppm
WEL-STEL	: 0.07 (-NCO)	mg/m ³	-	ppm
MAK	: 0.05 E	mg/m ³		ppm
MAC-TGG 8 h	: 0.05	mg/m ³		
MAC-TGG 15 min.	: 0.21	mg/m ³		
VME-8 h	: 0.1	mg/m ³	0.01	ppm
VLE-15 min.	: 0.2(5 min)	mg/m ³	0.02(5 min)	ppm
GWBB-8 h	: 0.052	mg/m ³	0.005	ppm
GWK-15 min.	: -	mg/m ³	-	ppm
Momentary value	:	mg/m ³		ppm
EC	:	mg/m ³		ppm
EC-STEL	:	mg/m ³		ppm

Sampling methods:

- | | |
|--|------------|
| - Methylene Bisphenyl Isocyanate (MDI) | OSHA 47 |
| - 4,4-Methylene Bisphenyl Isocyanate (MDI) (Isocyanates) | NIOSH 5521 |
| - Petroleum Distillate (Naphthas) | NIOSH 1550 |
| - Petroleum Distillates (Naphtha) | OSHA 48 |
| - Aluminum, Pyro Powders | OSHA CSI |

8.2 Exposure controls:

8.2.1 Occupational exposure controls:

- Measure the concentration in the air regularly
- Work under local exhaust/ventilation

8.2.1.1 Respiratory protection:

- Wear gas mask with filter type A if conc. in air > exposure limit

RUST GRIP

8.2.1.2 Hand protection:

- Gloves
Suitable materials: Nitrile rubber
PVA
- Breakthrough time: N.D.

8.2.1.3 Eye protection:

- Face shield

8.2.1.4 Skin protection:

- Protective clothing
Suitable materials: Nitrile rubber
PVA

8.2.2 Environmental exposure controls: see heading 13

9. Physical and chemical properties

9.1 General information:

Appearance (at 20°C)	: Liquid
Odour	: Aromatic
Colour	: Grey

9.2 Important health, safety and environmental information:

pH value	: N.D.	
Boiling point/boiling range	: > 150	°C
Flashpoint	: 44	°C
Explosion limits	: 1.4 /	vol%
Vapour pressure (at 20°C)	: 10	hPa
Vapour pressure (at 50°C)	: N.D.	hPa
Relative density (at 20°C)	: 1.1	
Water solubility	: Insoluble	
Soluble in	: N.D.	
Relative vapour density	: N.D.	
Viscosity (25°C)	: 0.32	Pa.s
Partition coefficient n-octanol/water	: N.D.	
Evaporation rate		
ratio to butyl acetate	: N.D.	
ratio to ether	: N.D.	

9.3 Other information:

Melting point/melting range	: N.D.	°C
Auto-ignition point	: 214	°C
Saturation concentration	: N.D.	g/m ³

10. Stability and reactivity

10.1 Conditions to avoid:

- Unstable on exposure to moisture

10.2 Materials to avoid:

- Keep away from: heat sources, ignition sources, bases, peroxides, water/moisture

10.3 Hazardous decomposition products:

- Reacts on exposure to water (moisture) release of carbon dioxide
- On burning: release of toxic and corrosive gases/vapours nitrous vapours, carbon monoxide - carbon dioxide

11. Toxicological information

11.1 Acute toxicity:

diphenylmethane-4,4'-diisocyanate

LD50 oral rat	: 9200	mg/kg
LD50 dermal rat	: N.D.	mg/kg
LD50 dermal rabbit	: > 10000	mg/kg
LC50 inhalation rat	: N.D.	mg/l/4 h
LC50 inhalation rat	: N.D.	ppm/4 h

11.2 Chronic toxicity:

diphenylmethane-4,4'-diisocyanate

EC carc. cat.	: not listed
EC muta. cat.	: not listed
EC repr. cat.	: not listed

Carcinogenicity (TLV)	: not listed
Carcinogenicity (MAC)	: not listed
Carcinogenicity (VME)	: not listed
Carcinogenicity (GWBB)	: not listed

Carcinogenicity (MAK)	: 3B
Mutagenicity (MAK)	: not listed
Teratogenicity (MAK)	: -

IARC classification	: 3
---------------------	-----

11.3 Routes of exposure: ingestion, inhalation, eyes and skin

11.4 Acute effects/symptoms:

- **AFTER INHALATION**
- Irritation of the respiratory tract
- Irritation of the nasal mucous membranes
- **EXPOSURE TO HIGH CONCENTRATIONS:**
- Headache
- Dizziness
- Nausea
- **AFTER SKIN CONTACT**
- Tingling/irritation of the skin
- **AFTER EYE CONTACT**
- Irritation of the eye tissue

11.5 Chronic effects:

- May cause sensitization by skin contact
- May cause sensitization by inhalation
- Not listed in carcinogenicity class (IARC, EC, TLV, MAK)
- Not listed in mutagenicity class (EC, MAK)
- Not classified as toxic to reproduction (EC)
- **ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:**
- Respiratory difficulties
- Skin rash/inflammation

12. Ecological information

12.1 Ecotoxicity:

diphenylmethane-4,4'-diisocyanate:

- LC50 (24 h) : >=500 mg/l (BRACHYDANIO RERIO)
- EC50 (h) : >100 mg/l (DAPHNIA MAGNA)

12.2 Mobility:

- Volatile organic compounds (VOC): 45%
- Insoluble in water

For other physicochemical properties see heading 9

12.3 Persistence and degradability:

- biodegradation BOD₅ : N.D. % ThOD
- water : - N.D.
- soil : T ½: N.D. days

12.4 Bioaccumulative potential:

- log P_{ow} : N.D.
- BCF : N.D.

12.5 Other adverse effects:

- WGK : 2 (Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
- Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC)
- Greenhouse effect : no data available
- Effect on waste water purification : no data available

13. Disposal considerations

13.1 Provisions relating to waste:

- Waste material code (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 01 11* (waste paint and varnish containing organic solvents or other dangerous substances)
- Hazardous waste (91/689/EEC)

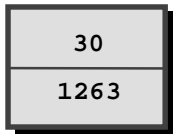
13.2 Disposal methods:

- Recycle/reuse
- Remove to an authorized plant for the destruction, neutralization and elimination of hazardous waste

13.3 Packaging/Container:

- Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10* (packaging containing residues of or contaminated by dangerous substances)

14. Transport information



14.1 Classification of the substance in compliance with UN Recommendations

```

UN number           : 1263
CLASS               : 3
SUB RISKS           : -
PACKING             : III
PROPER SHIPPING NAME :
UN 1263, Paint, Special provision 640E
    
```

14.2 ADR (transport by road)

```

CLASS               : 3
PACKING             : III
CLASSIFICATION CODE : F1
DANGER LABEL TANKS : 3
DANGER LABEL PACKAGES : 3
    
```

14.3 RID (transport by rail)

```

CLASS               : 3
PACKING             : III
CLASSIFICATION CODE : F1
DANGER LABEL TANKS : 3
DANGER LABEL PACKAGES : 3
    
```

14.4 ADNR (transport by inland waterways)

```

CLASS               : 3
PACKING             : III
CLASSIFICATION CODE : F1
DANGER LABEL TANKS : 3
DANGER LABEL PACKAGES : 3
    
```

14.5 IMDG (maritime transport)

```

CLASS               : 3
SUB RISKS           : -
PACKING             : III
MFAG                : -
EMS                 : F-E, S-E
MARINE POLLUTANT    : -
    
```

14.6 ICAO (air transport)

```

CLASS               : 3
SUB RISKS           : -
PACKING             : III
PACKING INSTRUCTIONS PASSENGER AIRCRAFT : 309/Y309
PACKING INSTRUCTIONS CARGO AIRCRAFT    : 310
    
```

14.7 Special precautions in connection with transport : none

RUST GRIP

15. Regulatory information

15.1 EU legislation:

Classification according to directives 67/548/EEC and 1999/45/EC



Harmful



Dangerous for the environment

contains: low boiling point naphtha; methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

R10	:	Flammable
R36/37/38	:	Irritating to eyes, respiratory system and skin
R42/43	:	May cause sensitisation by inhalation and skin contact
R51/53	:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R67	:	Vapours may cause drowsiness and dizziness
S(02)	:	(Keep out of reach of children)
S23	:	Do not breathe vapour
S24	:	Avoid contact with skin
S33	:	Take precautionary measures against static discharges
S37	:	Wear suitable gloves
S45	:	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S61	:	Avoid release to the environment. Refer to special instructions/safety data sheets.
S(63)	:	(In case of accident by inhalation: remove casualty to fresh air and keep at rest)

15.2 National provisions:

The Netherlands:
Waterbezwaarlijkheid: 6

16. Other information

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

N.A. = NOT APPLICABLE
N.D. = NOT DETERMINED
(*) = INTERNAL CLASSIFICATION (NFPA)

Exposure limits:

TLV : Threshold Limit Value - ACGIH USA
WEL : Workplace Exposure Limits - United Kingdom
MAK : Maximale Arbeitsplatzkonzentrationen - Germany
MAC : Maximale aanvaarde concentratie - The Netherlands
VME : Valeurs limites de Moyenne d'Exposition - France
VLE : Valeurs limites d'Exposition à court terme - France
GWBB : Grenswaarde beroepsmatige blootstelling - Belgium
GWK : Grenswaarde kortstondige blootstelling - Belgium
EC : Indicative occupational exposure limit values - directive 2000/39/EC

RUST GRIP

I : Inhalable fraction = **T**: Total dust = **E**: Einatembarer Aerosolanteil
R : Respirable fraction = **A**: Alveolengängiger Aerosolanteil/Alveolar dust
C : Ceiling limit

a:	aerosol		r:	rook/Rauch	(fume)
d:	damp	(vapour)	st:	stof/Staub	(dust)
du:	dust		ve:	vezel	(fibre)
fa:	Faser	(fibre)	va:	vapour	
fi:	fibre		om:	oil mist	
fu:	fume		on:	olienevel/Ölnebel	(oil mist)
p:	poussière	(dust)	part:	particles	

Chronic toxicity:

K : List of the carcinogenic substances and processes - The Netherlands

Full text of any R-phrases referred to under heading 2:

R10 : Flammable
R12 : Extremely flammable
R20 : Harmful by inhalation
R36/37/38 : Irritating to eyes, respiratory system and skin
R38 : Irritating to skin
R42/43 : May cause sensitisation by inhalation and skin contact
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R63 : Possible risk of harm to the unborn child
R65 : Harmful: may cause lung damage if swallowed
R66 : Repeated exposure may cause skin dryness or cracking