

SUPERTHERM

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

1.1 Identification of the substance or preparation:

Product name: SUPERTHERM
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:

Insulant
 Paint

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)
1,2-ethanediol	107-21-1 203-473-3	1-4	Xn	22 (1)
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	25265-77-4 246-771-9	0.5-1.5	-	- (1)
mica	12001-26-2 310-127-6	3	-	- (1)

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

3. Hazards identification

- Not classified as dangerous in compliance with Directive 67/548/EEC and/or Directive 1999/45/EC

4. First aid measures

4.1 Eye contact:

- Rinse immediately with water
 - Take victim to an ophthalmologist if irritation persists

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- 4.2 **Skin contact:**
- Rinse with 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
 - Consult a doctor/medical service if you feel unwell

5. Fire-fighting measures

- 5.1 **Suitable extinguishing media:**
- Water spray
 - Polyvalent foam
 - BC powder
 - Carbon dioxide
- 5.2 **Unsuitable extinguishing media:**
- No data available
- 5.3 **Special exposure hazards:**
- Upon combustion CO and CO₂ are formed
- 5.4 **Instructions:**
- No specific firefighting instructions required
- 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:**
- Contain released substance, pump into suitable containers
 - Plug the leak, cut off the supply
- 6.3 **Methods for cleaning up:**
- Take up liquid spill into absorbent material
 - Scoop absorbed substance into closing containers
 - Clean contaminated surfaces with an excess of water
 - Wash clothing and equipment after handling

7. Handling and storage

- 7.1 **Handling:**
- Observe normal hygiene standards
 - Clean contaminated clothing
- 7.2 **Storage:**
- Keep container tightly closed
 - Protect against frost
 - Meet the legal requirements
 - Keep away from: heat sources, acids, bases

Storage temperature	: 1/50	°C
Quantity limits	: N.D.	kg
Storage life	: N.D.	days
Materials for packaging	:	
- suitable	: no data available	
- to avoid	: no data available	

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7.3 Specific uses:

- See information supplied by the manufacturer

8. Exposure controls/Personal protection

8.1 Exposure limit values:

1,2-ethanediol

TLV-TWA	: -	mg/m ³		ppm
TLV-STEL	: -	mg/m ³		ppm
TLV-Ceiling	: 100 aerosol	mg/m ³		ppm
WEL-LTEL	: 10 part/52 va	mg/m ³	- part/20 va	ppm
WEL-STEL	: -part/104 va	mg/m ³	- part/40 va	ppm
MAK	: 26	mg/m ³	10	ppm
MAC-TGG 8 h	: 52 damp	mg/m ³		
MAC-TGG 15 min.	: 104 damp	mg/m ³		
MAC-Ceiling	:	mg/m ³		
VME-8 h	: 52 vapeur	mg/m ³	20 vapeur	ppm
VLE-15 min.	: 104 vapeur	mg/m ³	40 vapeur	ppm
GWBB-8 h	: 52	mg/m ³	20	ppm
GWK-15 min.	: 104	mg/m ³	40	ppm
Momentary value	: M	mg/m ³	M	ppm
EC	: 52	mg/m ³	20	ppm
EC-STEL	: 104	mg/m ³	40	ppm

mica

TLV-TWA	: 3 R	mg/m ³		ppm
TLV-STEL	: -	mg/m ³		ppm
TLV-Ceiling	:	mg/m ³		ppm
WEL-LTEL	: 0.8 R/10 I	mg/m ³	-	ppm
WEL-STEL	: -	mg/m ³	-	ppm
MAK	:	mg/m ³		ppm
MAC-TGG 8 h	:	mg/m ³		
MAC-TGG 15 min.	:	mg/m ³		
MAC-Ceiling	:	mg/m ³		
VME-8 h	:	mg/m ³		ppm
VLE-15 min.	:	mg/m ³		ppm
GWBB-8 h	: 3	mg/m ³	-	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:

- Ethylene Glycol
- Ethylene Glycol
- Mica

NIOSH 5523
OSHA CSI
OSHA ID 142

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

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8.2.1.2 Hand protection:

- Gloves
Suitable materials: No data available
- Breakthrough time: N.D.

8.2.1.3 Eye protection:

- Safety glasses

8.2.1.4 Skin protection:

- Protective clothing
Suitable materials: No data available

8.2.2 Environmental exposure controls: see heading 13

9. Physical and chemical properties

9.1 General information:

Appearance (at 20°C)	: Liquid
Odour	: Characteristic
Colour	: White

9.2 Important health, safety and environmental information:

pH value	: 8.5/9	
Boiling point/boiling range	: 192	°C
Flashpoint	: > 100	°C
Explosion limits	: N.D.	vol%
Vapour pressure (at 20°C)	: 23	hPa
Vapour pressure (at 50°C)	: N.D.	hPa
Relative density (at 20°C)	: 1.4	
Water solubility	: Soluble	
Soluble in	: N.D.	
Relative vapour density	: 2.1	
Viscosity	: N.D.	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	: -1	°C
Auto-ignition point	: N.D.	°C
Saturation concentration	: N.D.	g/m ³

10. Stability and reactivity

10.1 Conditions to avoid:

- Stable under normal conditions

10.2 Materials to avoid:

- Keep away from: heat sources, acids, bases

10.3 Hazardous decomposition products:

- Upon combustion CO and CO₂ are formed

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11. Toxicological information

11.1 Acute toxicity:

1,2-ethanediol

LD50 oral rat : > 5000 mg/kg
LD50 dermal rabbit : 10483 mg/kg

2,2,4-trimethyl-1,3-pentanediol monoisobutyrate

LD50 oral rat : 3200 mg/kg
LD50 dermal rabbit : > 15200 mg/kg

mica

LD50 oral rat : > 5000 mg/kg

11.2 Chronic toxicity:

1,2-ethanediol

Carcinogenicity (TLV) : A4
Teratogenicity (MAK) : C

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

11.4 Acute effects/symptoms:

- AFTER INHALATION
- ON CONTINUOUS EXPOSURE/CONTACT:
 - Nausea
 - Headache
- AFTER SKIN CONTACT
 - Slight irritation
- ON CONTINUOUS EXPOSURE/CONTACT:
 - Tingling/irritation of the skin
- AFTER EYE CONTACT
 - Slight irritation
 - Irritation of the eye tissue

11.5 Chronic effects:

- Not listed in carcinogenicity class (IARC,EC,TLV,MAK)
- Not listed in mutagenicity class (EC,MAK)
- Not classified as toxic to reproduction (EC)

12. Ecological information

12.1 Ecotoxicity:

1,2-ethanediol:

- LC50 (96 h) : 40761 mg/l (SALMO GAIRDNERI/ ONCORHYNCHUS MYKISS)
- EC50 (48 h) : 41100 mg/l (DAPHNIA MAGNA)
- EC50 (96 h) : 6.5/13 g/l (SELENASTRUM CAPRICORNUTUM)

2,2,4-trimethyl-1,3-pentanediol monoisobutyrate:

- LC50 (96 h) : 30/33 mg/l (PIMEPHALES PROMELAS)
- EC50 (48 h) : 147.8 mg/l (DAPHNIA SP.)
- EC50 (72 h) : 18.4 mg/l (SELENASTRUM CAPRICORNUTUM)

12.2 Mobility:

- Volatile organic compounds (VOC): N.D. %
- Soluble in water

For other physicochemical properties see heading 9

12.3 Persistence and degradability:

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

12.4 Bioaccumulative potential:

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

12.5 Other adverse effects:

- WGK : 1 (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 (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 02 99 (wastes not otherwise specified)

13.2 Disposal methods:

- Recycle/reuse
- Contains a component for which a prohibition exists against discharge into surface water

13.3 Packaging/Container:

- No available data

14. Transport information

- 14.1 Classification of the substance in compliance with UN Recommendations
- | | | |
|----------------------|---|---|
| UN number | : | - |
| CLASS | : | |
| SUB RISKS | : | |
| PACKING | : | |
| PROPER SHIPPING NAME | : | |
- 14.2 ADR (transport by road)
- | | | |
|-----------------------|---|-------------|
| CLASS | : | Not subject |
| PACKING | : | |
| CLASSIFICATION CODE | : | |
| DANGER LABEL TANKS | : | |
| DANGER LABEL PACKAGES | : | |
- 14.3 RID (transport by rail)
- | | | |
|-----------------------|---|-------------|
| CLASS | : | Not subject |
| PACKING | : | |
| CLASSIFICATION CODE | : | |
| DANGER LABEL TANKS | : | |
| DANGER LABEL PACKAGES | : | |
- 14.4 ADNR (transport by inland waterways)
- | | | |
|-----------------------|---|-------------|
| CLASS | : | Not subject |
| PACKING | : | |
| CLASSIFICATION CODE | : | |
| DANGER LABEL TANKS | : | |
| DANGER LABEL PACKAGES | : | |
- 14.5 IMDG (maritime transport)
- | | | |
|------------------|---|-------------|
| CLASS | : | Not subject |
| SUB RISKS | : | |
| PACKING | : | |
| MFAG | : | |
| EMS | : | |
| MARINE POLLUTANT | : | |
- 14.6 ICAO (air transport)
- | | | |
|---|---|-------------|
| CLASS | : | Not subject |
| SUB RISKS | : | |
| PACKING | : | |
| PACKING INSTRUCTIONS PASSENGER AIRCRAFT | : | |
| PACKING INSTRUCTIONS CARGO AIRCRAFT | : | |
- 14.7 Special precautions in connection with transport
- | | | |
|--|---|--|
| | : | not restricted for any mode of international transport |
|--|---|--|

15. Regulatory information

15.1 EU legislation:

Not classified as dangerous in compliance with Directive 67/548/EEC and/or Directive 1999/45/EC

15.2 National provisions:

The Netherlands:
Waterbezwaarlijkheid: 11

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

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:

R22 : Harmful if swallowed