HOT PIPE COATING™
MATERIAL SAFETY DATA SHEET

Based on Directive 2001/58/EC of the Commission of the European Communities

1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identification of the substance or preparation

Product name: HOT PIPE COATING
Synonyms: none
CAS No.: N.A.
EC index No.: N.A.
NFPA code: N.D.
EINECS No.: N.A.
Molecular weight: N.A.
RTECS No.: N.A.
Formula: N.A.

1.2 Use of the substance/preparation

Coating

1.3 Company/undertaking identification

Superior Products Europe n.v.
Kampweg 123
B-2990 Wuustwezel
Tel: +32 3 690 02 40
Fax: +32 3 690 02 41
e-mail address: info@specoating.com

1.4 Emergency telephone

During office hours: +32 3 690.02.40 (Stefan Rutten)

Compiled by: Brandweerinformatiecentrum voor Gevaarlijke Stoffen vzw (BIG)
Technische Schoolstraat 43 A, B-2440 Geel
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2. INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>CAS No./EINECS No.</th>
<th>Conc. in %</th>
<th>Hazard symbol</th>
<th>Risks (R-phrases)</th>
</tr>
</thead>
</table>
| hexaboron dinzinc undecaoxide, heptahydrate | 138265-88-0  
235-804-2 | 67 | N | 51/53 (1) |
| mica | 12001-26-2  
310-127-6 | 3 | - | - |
| polysacrylic acid | 9003-01-4 | 20 | - | - |

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

Superior Products Europe nv/sa
Kampweg 123 | B-2990 Wuustwezel | Belgium
Phone: +32 3 690 02 40 | Fax: +32 3 690 02 41 | www.specoating.com | info@specoating.com
3. HAZARDS IDENTIFICATION

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

4. FIRST AID MEASURES

4.1 Eye contact
- Rinse immediately with plenty of water
- Take victim to an ophthalmologist if irritation persists

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
- Consult a doctor/medical service if you feel unwell

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media
- Water
- 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

- Take account of environmentally hazardous firefighting water
- Use firefighting water moderately and contain it

5.5 Special protective equipment for fire-fighters

- Heat/fire exposure: compressed air/oxygen apparatus
- Protective clothing for exposure to chemicals

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal 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

6.3 Methods for cleaning up

- Take up liquid spill into inert absorbent material
- Scoop absorbed substance into closing containers
- Carefully collect the spill/leftovers
- 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
- Do not discharge the waste into the drain

7.2 Storage

- Keep container tightly closed
- Store in a cool area
- Provide for a tub to collect spills
- Meet the legal requirement
- Keep away from: heat sources, acids, bases

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

7.3 Specific use(s)

See information supplied by the manufacturer for the identified use(s)

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Exposure limit values

8.1.1 Occupational exposure

hexaboron dizinc undecaoxide, heptahydrate

TLV-TWA : 2 l mg/m³ ppm
### HOT PIPE COATING™
**MATERIAL SAFETY DATA SHEET**

<table>
<thead>
<tr>
<th>TLV-STE</th>
<th>6 I</th>
<th>mg/m³</th>
<th>ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>mica</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TLV-TWA</th>
<th>3 R</th>
<th>mg/m³</th>
<th>ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV-STE</td>
<td>-</td>
<td>mg/m³</td>
<td>ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEL-LTEL</th>
<th>0.8 R/10 l</th>
<th>mg/m³</th>
<th>ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL-STE</td>
<td>-</td>
<td>mg/m³</td>
<td>ppm</td>
</tr>
</tbody>
</table>

- **polyacrylic acid**
  - MAK: 0.05 A mg/m³ ppm
  - MAC-TGG 8 h: 0.05 R mg/m³

### 8.1.2 Sampling methods
- Zinc & Cpds (as Zn) NIOSH 7030
- Mica 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
- Personal protective equipment
  - Respiratory protection: Wear gas mask with filter type A if conc. in air > exposure limit. Respiratory protection not required in normal conditions.
  - Hand protection:
    - Gloves; Suitable materials: No data available
    - Breakthrough time: N.D.
  - Eye protection: Safety glasses
  - 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 (at %) : 8
Boiling point/boiling range : 192 °C
Flash point : >100 °C
Explosion limits (explosive properties) : N.D. vol%
Vapour pressure (at 20°C) : 23 hPa
Vapour pressure (at 50°C) : N.D. hPa
Relative density (at 20°C) : 0.72
Water solubility : Soluble
Soluble in : N.D.
Relative vapour density : 2.1
Viscosity (at °C) : 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 : 0 °C
Auto-ignition temperature : N.D. °C
Saturation concentration : N.D. g/m³

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

11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity
hexaboron dizinc undecaoxide, heptahydrate
LD₅₀ oral rat : 10000 mg/kg
LD₅₀ dermal rabbit : 10000 mg/kg
mica
LD₅₀ oral rat : > 5000 mg/kg
polyacrylic acid
LD₅₀ oral rat : 2500 mg/kg

11.2 Chronic toxicity
EC carc. cat. : not listed
EC muta. cat. : not listed
EC repr. cat. : not listed
Carcinogenicity (TLV) : A4 (hexaboron dizinc undecaoxide, heptahydrate)
Carcinogenicity (MAC) : not listed
Carcinogenicity (VME) : not listed
Carcinogenicity (GWBB) : not listed
Carcinogenicity (MAK) : 4 (polyacrylic acid)
Mutagenicity (MAK) : not listed
Teratogenicity (MAK) : C (polyacrylic acid)
IARC classification : 3 (polyacrylic acid)

11.3 Routes of exposure
Ingestion, inhalation, eyes and skin

11.4 Acute effects/symptoms:
AFTER SKIN CONTACT
- Slight irritation
AFTER EYE CONTACT
- Slight irritation

11.5 Chronic effects (continuous/repeated exposure)
- Contains a substance of group C (MAK-Schwangerschaftsgruppe)
- Not listed in carcinogenicity class (IARC,EC,TLV,MAK)
- Not listed in mutagenicity class (EC,MAK)

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity
hexaboron dizinc undecaoxide, heptahydrate:
LC50 (96 h) : 2.4 mg/l (SALMO GAIRDNERI/ ONCORHYNCHUS MYKISS)
LC50 (48 h) : 76 mg/l (DAPHNIA MAGNA)
polyacrylic acid:
LC50 (96 h) : 580/2000 mg/l (LEPOMIS MACROCHIRUS)
LC50 (96 h) : 168/280 mg/l (DAPHNIA MAGNA)

12.2 Mobility
- Volatile organic compounds (VOC): 0%
- Soluble in water
- For other physicochemical properties see heading 9

12.3 Persistence and degradability
- Biodegradation BOD5 : N.D. % ThOD
- Water : No data available
- Soil : T ½: N.D. days

12.4 Bioaccumulative potential
- log Pow : N.D.
- BCF : N.D.

12.5 Other adverse effects
- WGK: 2 (Classification based on the components in compliance with Verwaltungs-
vorschrift 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) Hazardous
13.2 Disposal methods

Recycle/reuse

13.3 Packaging/Container


14. TRANSPORT INFORMATION

14.1 Classification of the substance in compliance with UN Recommendations

<table>
<thead>
<tr>
<th>UN number</th>
<th>CLASS</th>
<th>SUB RISKS</th>
<th>PACKING GROUP</th>
<th>PROPER SHIPPING NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>3082</td>
<td>9</td>
<td>-</td>
<td>III</td>
<td>UN 3082, Environmentally hazardous substance, liquid, n.o.s. (hexaboron dizinc undecaoxid, heptahydrate)</td>
</tr>
</tbody>
</table>

14.2 ADR (transport by road)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>PACKING GROUP</th>
<th>CLASSIFICATION CODE</th>
<th>DANGER LABEL TANKS</th>
<th>DANGER LABEL PACKAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>III</td>
<td>M6</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

14.3 RID (transport by rail)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>PACKING GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>III</td>
</tr>
</tbody>
</table>
CLASSIFICATION CODE: M6
DANGER LABEL TANKS: 9
DANGER LABEL PACKAGES: 9

14.4 ADNR (transport by inland waterways)
CLASS: 9
PACKING GROUP: III
CLASSIFICATION CODE: M6
DANGER LABEL TANKS: 9
DANGER LABEL PACKAGES: 9

14.5 IMDG (maritime transport)
CLASS: 9
SUB RISKS: -
PACKING GROUP: III
MFAG: -
EMS: F-A, S-F
MARINE POLLUTANT: -

14.6 ICAO (air transport)
CLASS: 9
SUB RISKS: -
PACKING GROUP: III
PACKING INSTRUCTIONS
/PASSENGER AIRCRAFT: 914/Y914
/PACKING INSTRUCTIONS
/CARGO AIRCRAFT: 914

14.7 Special precautions
None
15. REGULATORY INFORMATION

15.1 EU legislation

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

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S61 : Avoid release to the environment. Refer to special instructions/safety data sheets.

15.2 National provisions

The Netherlands: Waterbezwaarlijkheid: 6

16. OTHER INFORMATION

The information provided on this SDS 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)

PBT-substances : persistent, bioaccumulative and toxic substances

Exposure limits

TLV : Threshold Limit Value - ACGIH USA

WEL : Workplace Exposure Limits - United Kingdom
HOT PIPE COATING™
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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 headings 2 and 3
RS1/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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Aug 12

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