EEC-Safety data sheet

PHASE CHANGE MATERIAL

Version: 1 Date: 15.01.2007 Revision: 05.12.2007

1. Chemical product and company identification

***RUBITHERM*® PX 82**

Manufacturer/supplier:
Rubitherm Technologies GmbH
Sperenberger Str. 5a, 12277 Berlin
Tel.: +49 30/720004-62, Fax: +49 30/720004-99
Emergency telephone:
Tel.: +49 30/720004-62

2. Potential hazards

Description of hazards:
none
Adverse human health effects:
slightly irritating to eyes, respiratory system and skin
Physical and chemical hazards:
- fire or explosion:
fine dust with air can build-up explosive atmosphere
- further hazards:
none
Classification/specific hazards:
according to the EEC dangerous preparations Directive no classification is necessary.

3. Composition/information on ingredients

Chemical characterisation:
PCM on inorganic background material

CAS-No.: 112926-00-8; 8002-74-2
EINECS-No.: 231-545-4; 232-315-6

4. First-aid measures

Inhalation:
move the affected person away from the contaminated area and into the fresh air. If breathing difficulties persist: take medical advices immediately.
Skin contact:
Rinse with water
Eye contact:
Immediately rinse out with plenty of water for at least 15 minutes, whilst keeping the eyes wide open.
Swallow:
Rinse mouth out with water. Drink water.

5. Fire-fighting measures

Suitable means for extinguishing:
Carbon dioxide, foam, dry powder, sand, water mist
Unsuitable means for extinguishing:
water yet
Special exposure hazards arising from the substance, its combustion products or from resulting gases:
In cause of incomplete combustion irritant vapours, smoke and carbon monoxide can be formed.
Special protective equipment for fire fighting:
Wear appropriate personal protective clothing and use self-contained breathing apparatus.

6. Measures in case of unintended release

Personal precautions:
Avoid contact with eyes. Personal protective equipment: respirator device with a particle filter; safety goggles.
Environmental precautions:
This product does not present any particular risk for the environment.
Methods for cleaning up:
remove mechanically

7. Handling and storage

Technical Measures: Dust extraction (suction)
Advices for safe handling:
Avoid formation of explosive dust-air-mixtures. Assure proper grounding and bonding of equipment. Avoid ignition sources.
Advices for fire and explosion control:
Avoid the formation of dust.
Avoid the build-up of dust.
Storage
Store under cool, dry and light protected conditions

8. Exposure controls / personal protection

Engineering measures: extract dust at emission point.
Occupational exposure limits:
Silicone dioxide:
USA: TLV (TWA): 10 mg/m³
Germany: MAK: 4 mg/m³
Personal protective equipment:
Respiratory protection:
in the event of insufficient ventilation: respiratory protective device with a particle filter.
Hand protection: protective gloves made of rubber.
Eye protection: safety goggles
Collective emergency equipment: eyes fountain.
Hygiene measures: frequently vacuum dust.

9. Physical and chemical properties

Physical state:	at room temperature solid (powder)
Colour:	white
Odour:	odourless
Melting area (OECD 103):	77 – 85 °C
Typical:	82 °C
pH-value: aqueous suspension:	6 - 8
Flash point (DIN-ISO 2592):	> 270°C
Vapour pressure at 20°C:	< 0,01 hPa
Bulk Density at 20°C:	approx. 0.694 g/ml
Solubility at 20°C - in water:	insoluble

10. Stability / reactivity

Stability: stable at room temperature.
Conditions to avoid:
Product decomposed above 250 °C.
Material to avoid: Strong oxidising agents
Decomposition products:
Carbon monoxide, carbon dioxide, organic matter.

11. Toxicological information

Acute oral toxicity:

LD50:	> 2000 mg/kg (Rat)
LD50:	> 2000 mg/kg (Rabbit)

Inhalation:	slightly irritating to the respiratory system.
Irritant effect on skin:	repeated or prolonged contact may cause slight irritation to the skin.
Irritant effect on eyes:	slightly irritating
Sensitization:	Non-sensitising
Mutagenicity:	No indications of mutagenic effects.

12. Environmental details

Product is insoluble in water. It can be removed mechanically in a purification plant.
Information on elimination (persistence and degradability):
The organic components of the product are inherently biodegradable according to OECD 301 B.
Fish toxicity: Non-toxic (DIN 38 412-L 31)

13. Disposal considerations

Product can be recycle or thermal used after process these.

Germany:

Can be disposed off after consultation with the responsible authorities according to the following waste disposal codes (European Waste Catalogue):

EWC-Code	Description
07 01 99	Wastes not otherwise specified

14. Transport information

Product is not a hazardous good according to ADR/RID; GGVs/GGVE, ADNR/ADN; IMDG/GGVSee; ICAO-TI and IATA-DGR).

15. Statutory provisions

Classification and labelling:
The product does not require a hazard warning label in accordance with the EEC Directives
Risk phrases:
Not applicable
Safety phrases:
Not applicable
National regulations
Germany:
Water hazard class (WGK): Not water endangering substance according to Annex I VwVwS

16. Other information

Literature:

Ullmann‘s Encyclopedia of Industrial Chemistry, 5th Edition, Vol. A 28, Chapter „Waxes“, Verlag Chemie GmbH, 1996.
Shubik et al., Toxicol. Appl. Pharmacol., 4, Suppl. 1-62, 1962

This safety data sheet describes a product group. It contains only safety related information. For specific data see product data sheet.

The information on this data sheet is gathered to the best of RUBITHERM’s knowledge and belief and fits as the experiences stand at the moment. RUBITHERM doesn’t guarantee the adherence of certain features in sense of legally binding.

In case of questions please call number given in point 1.

Rubitherm Technologies GmbH