

EEC-Safety data sheet
PHASE CHANGE MATERIAL

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1. Chemical product and company identification

RUBITHERM® SP 22A17

Manufacturer/supplier:

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Emergency telephone:

Tel.: +49 30/720004-62

2. Potential hazards

Classification:

Xi, irritant; Xn, harmful

Potential dangers for health and environment:

Irritant eyes (R 36)

Irritant skin (R 38)

serious eyesdisadvantages (R 41)

In case of swallowing product lung damaged can be caused. (R 65)

Repeated skin contact can cause dryness or cracking. (R 66)

3. Composition/information on ingredients

Chemical characterisation:

Calciumchloride:

CAS-No.: 10043-32-4

EINECS: 233-140-8

Labelling: Xi, R 36

Urea:

CAS-No.: 57-13-6

EINECS: 200-315-5

Additive:

CAS-No.: 8002-74-2

EINECS: 232-315-6

Labelling: R 41

4. First-aid measures

Inhalation:

Take concerned person on fresh air. In case of unconsciousness, vomiting, dizziness or irritation of respiratory tract take medical advices immediately.

Eye contact:

Rinse out your eyes with cold water. If you have irritation take medical advices.

Skin contact:

After contact with product change soaked clothes immediately and wash skin with water and soap.

When swallowed:

Rinse out your mouth and drink water afterwards. If you swallowing a huge amount of the product take medical advices immediately. Do not induce vomiting.

5. Fire-fighting measures

Suitable means for extinguishing:

Foam, powder, carbon dioxide, water mist, sand

Unsuitable means for extinguishing:

water jet

Special exposure hazards arising from the substance, its combustion products or from resulting gases:

In cause of incomplete combustion irritant vapours, smoke, soot and carbon monoxide can be formed.

Special protective equipment in closed rooms:

Use self-contained breathing apparatus.

6. Measures in case of unintended release

Personal precautions:

Avoidance skin, mucosa and eyes contact. Therefore use protective clothing.

Environmental precautions:

It's not allowed to drain into environment, surface water, ground water, sewage system or soil.

Methods for cleaning up:

Solid: remove product mechanically

Liquid: use binder to remove liquid product

7. Handling and storage

Handling

Advices for safe handling:

No special measures if you use product correctly.

Advices for protection against fire and explosion:

No special measures because product is not inflammable

Storage

Requirements for storage rooms and containers:

Store product cool, dry and in closed barrels.

Information on storage together with other products:

Do not store product with strong oxidising agents and food.

8. Exposure controls / personal protection

Ingredients with occupational exposure limits which should be monitored:

Germany:

AG-values doesn't exist.

Personal protective equipment:

Hand protection:

Protective gloves made from PVC, neoprene or butyl rubber.

Eye protection: Safety goggles

Body protection: protective clothing

Breathing protection: use breathing apertures if ventilation is not adequate.

9. Physical and chemical properties

Physical state:	past-like, liquid
Colour:	grey white
Odour:	n.e.
Odour threshold (ppm):	n.e.
pH-value at 20°C:	n.e.
Boiling area (OECD 103):	1080 – 1110 °C
Melting area (OECD 103):	22 - 24 °C
Typical:	23 °C
Flash point:	n.e.
Flammability:	n.e.
Auto flammability:	n.a.
Explosive properties:	n.a.
Oxidising properties:	none
Vapour pressure at 50°C (OECD104):	<0.11 hPa
Vapour density:	n.a.
Evaporation rate:	n.a.
Density at 20°C (DIN 51 757):	1.47 kg/l
Solubility at 20°C - in water:	soluble
Partition coefficient, log p_{OW} (OECD 107):	n.e.
Kinetic Viscosity at 55°C (Brookfield):	111,1 mm ² /s
Pour point:	n.a.
Freezing point:	20 °C
	n.a. = not applicable; n.e. = not established

10. Stability/ reactivity

Conditions to avoid:
Protect the product from a dampness environment. Do not over heat the product because it will decomposed.

Material to avoid:
Strong oxidising agents, water and venylmethylether.

Decomposition products:
None data.

11. Toxicological information

Acute toxicity :	
Orale LD50:	1000 mg/kg (Rat)
Orale LD50:	1940 mg/kg (Mouse)
Orale LD50:	1384 mg/kg (Rabbit)
Skin irritation:	slightly irritant adverse skin and mucosa
Eye irritation:	slightly irritant
Sensitisation:	not available
Mutagenic:	not mutagenic
Carcinogenic:	not carcinogen

12. Environmental details

Elimination/persistence and degradability:
Do not allow to enter environment.

aquatic toxicity:

LC50 / fish:	>1 - <10 mg/l
EC50 / daphnia (2 days):	144 mg/l/48h
EC50 / algae (3 days):	3130 mg/l/120h

Slightly hazardous to water, therefore water hazard class 1.

13. Disposal considerations

Disposal aligned in accordance with local authorities and in abidance by the laws.

Packaging:

Barrels: can be returned to supplier or producer.

14. Transport information

US DOT:	not regulated
RID/ADR:	not regulated
IMO:	not regulated
ICAO/IATA:	not regulated
Other:	Allowed for mailing in adequate packaging

15. Statutory provisions

Xi	irritant
Xn	harmful
R 36	irritant to eyes
R 38	irritant to skin and mucosa
R 41	serious eyesdisadvantages
R 65	in case of swallowing lung damaged can be caused.
R 66	repeated skin contact can cause dryness or cracking.
S 2	keep away from children
S 24/25	avoid contact with skin and eyes
S 26	at contact with eyes rinse out with cold water and seek medical attendance
S 39	wear safety goggles or face guard
S 46	in case of swallowing product take medical advices and show package or this sheet.

National regulations

Germany:
Classification according to VbF: not applicable
TA Luft: not applicable
Water hazard class (WGK): 1, low hazardous to waters (self-classification)
StörfallVO: not applicable

16. Other information

This safety data sheet 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