

SAFETY DATA SHEET

PHASE CHANGE MATERIAL 0°C

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: Phase Change Material 0°C
Product group: Mixture of inorganic materials

1.2 Relevant identified uses of the substance or mixture

Identified uses: Eutectic cooling/heating agent

1.3 Details of the supplier of the safety data sheet

Supplier: BoTemp BV
Provinciënbaan 25
5121 DK Rijen
The Netherlands
P +31 85 760 34 10
E service@botemp.nl

1.4 Emergency telephone number

+31 655 16 33 85

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) no.1272/2008 (CLP)

Acute toxic	Category: 4	H302	Harmful if swallowed
Skin irritation	Category: -	H317	May cause an allergic skin reaction
Eye irritation	Category: -	H320	Causes eye irritation

2.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC

R21/22 Harmful in contact with skin and if swallowed
R36 Irritating to eyes

2.1.3 Adverse physicochemical, human health and environmental effects

No additional information available.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

Hazard pictograms (CLP)



GHS07

Signal word (CLP) : Warning

Hazard Statements : H302 Harmful if swallowed
H317 May cause an allergic skin reaction
H320 Causes eye irritation

Precautionary Statements : P262 Do not get in eyes, on skin or on clothing
P264 Wash hands thoroughly after handling
P280 Wear protective gloves, protective clothing, eye protection, face protection
P301 + P310 **IF SWALLOWED:** call a doctor if you feel unwell
P302 + P352 **IF ON SKIN:** wash with plenty of water
P305 + P338 + P351 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: get medical advice/attention
P391 Collect spillage

2.3 Other hazards

Not classified

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Gel formula consists of water and a guar gum compound. The full text of all hazard statements is displayed in Section 15.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

After skin contact	Wash skin thoroughly with mild soap and water.
After eye contact	Rinse immediately with plenty of water, remove any contact lenses. Get medical attention if any discomfort continues.
After ingestion	Immediately rinse mouth with plenty of water. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

Ingestion	May cause discomfort if swallowed
Skin contact	May cause skin irritation
Eye contact	Causes eye irritation

4.3 Indication of any immediate medical attention and special treatment needed

If in doubt: GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials

Extinguishing media which must not be used for safety reasons None

5.2 Special hazards arising from the substance or mixture

Specific hazards: None

5.3 Advise for firefighters

Protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Provide adequate ventilation.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Avoid spreading of the gel. Shovel into dry containers. Cover and move the containers. Flush the area with water. Do **not** contaminate water sources or sewer.

6.4 Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Read and follow manufacturer's recommendations. Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original container. Avoid any damage that might lead to leakages of the container.

7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2

SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

8.1 information on basic physical and chemical properties

Appearance	Gel (T>0°C)	Solid (T<0°C)
Color	Yellow	
Odor	Slight gum odor	
Bulk density	1030 kg/m ³	
pH value	~8.0	
Melting point	0°C	

SECTION 9: STABILITY AND REACTIVITY

Stability

Stable under normal temperature conditions

Materials to avoid

None

Hazardous decomposition products

Carbon oxides

SECTION 10: TOXICOLOGICAL INFORMATION

10.1 Product information

Acute toxicity

Oral	This product contains a small amount of one or more toxic substances (<0.1%)
Dermal	
Inhalation	

Irritation

Skin irritation	May cause mild transient irritation
Eye irritation	Causes irritation if in direct contact with the eye
Respiratory irritation	Not expected to cause irritation of respiratory system

Other effects

Reproductive effects	None
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Additional information Our data are not sufficient for total texture judgement.
Follow the usual hygiene directives for handling with chemicals

SECTION 11: ECOLOGICAL INFORMATION

11.1 Toxicity

Contains a small amount of 5-chlorine-2-methyl-2H-isothiazol-3-on and 1,2-benzisothiazol-3(2H)-on mixture (<0.02%) which is toxic to aquatic organisms with long lasting effects.

11.2 Persistence and degradability

Contains a small amount of substances that may cause long term harmful effects to the environment (<0.1%)

11.3 Bioaccumulative potential

Bioaccumulation is unlikely

11.4 Mobility in soil

Contains components that are soluble in water

11.5 Result of PBT and vPvB assessment

No information available

11.6 Other adverse effects

Avoid spillage into the environment

SECTION 12: DISPOSAL CONSIDERATIONS

12.1 Waste treatment methods

Waste from unused product or leakages Dispose of in accordance with the European Directives on waste and hazardous waste. Should not be released into the environment.

SECTION 13: TRANSPORT INFORMATION

Road/Rail ADR/RID

No hazardous material as defined by the regulations

Sea IMDG

No hazardous material as defined by the regulations

SECTION 14: REGULATORY INFORMATION

14.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Contains none of the *Substances of very high concern (SVHCs)* listed by REACH

14.2 Chemical safety assessment

Not applicable

SECTION 15: OTHER INFORMATION

Full text of R-phrases, H-phrases (referred to in section 2 and section 3)

R-phrases	
R21	Harmful in contact with skin
R22	Harmful if swallowed
R36	Irritating to eyes

H-phrases	
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long-lasting effects
H411	Toxic to aquatic life with long-lasting effects

Disclaimer

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 guide 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.