

Safety Data Sheet

in accordance with Regulation (EC) No. 1907/2006 and (EU)
2020/878



Trade name: Therm ISO CB
Revised on: April 26, 2026
Print date: April 26, 2026
Version: DE 4.0
Replaces Version DE 3.0

1. Section 1: Identification of the substance or mixture (article) and the company:

1.1 Product identifier:

Name on the label / Trade name:

Therm ISO CB

Other designations:

Insulating break cores and feeder systems
Cold-box-bonded molded part

Note:

The mixture (product) is not subject to registration requirements under the REACH Regulation, Article 2(7).

1.2 Relevant identified uses of the substance or mixture (article) and uses that are discouraged:

1.2.1 Identified uses:

The product (article) is intended for professional users.
Auxiliary materials for the foundry industry, for the manufacture of molds and cores, use in the form of finished products

1.2.2 Uses not recommended:

Uses other than those identified.
No applications in the private sector.

1.3 Supplier details:

Supplier (manufacturer / distributor):

For Germany / EU:

GTP Schäfer GmbH
Benzstraße 15
41515 Grevenbroich
Germany

Email (contact person):

info@gtp-schaefer.de

Point of contact for information:

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1.4 Emergency number:

GTP Schäfer GmbH
Benzstraße 15
41515 Grevenbroich

Phone: +49 2181 233 94-0 (This number is only staffed during office hours.)

Mobile: +49 172 2026764

2. Section 2: Potential Hazards:

2.1 Classification of the substance or mixture (article):

The product is not classified as hazardous within the meaning of Regulation (EC) No. 1272/2008; there is also insufficient data available for classification.

2.2 Labeling elements:

The product (article) does not fall within the scope of Regulation (EC) No. 1272/2008; there is also insufficient data available for labeling.

2.3 Other hazards:

The product (article) contains hazardous ingredients or mixtures (see Section 3.2) that may be released during intended thermal decomposition.

During the casting process, either on its own or upon contact with acids or alkalis, depending on the specific reaction conditions, it may form nitroso gases (nitrogen oxides), hydrogen cyanide (prussic acid), carbon monoxide/dioxide, soot, formaldehyde, phenol, or ammonia

May have harmful effects if swallowed, inhaled, or in contact with the skin.

3. Section 3: Composition / Information on Ingredients:

3.1 Substances:

Description:

Not applicable; the product is a mixture (article).

3.2 Mixture (article):

Description:

Cold-box-bonded molded part (product) made of organic binders, hollow spheres (ceramic), quartz (silicon dioxide), and other fillers.

Hazardous ingredients:

Chemical name	CAS No.:	EC No.:	INDEX No.:	REACH Reg. No.:	Content (%)	Classification according to Regulation (EC) No. 1272/2008			Identification Label	Safety Safety	Note
						Signal words	Category	Hazard Notes H-phrases			
Phenolic resin solution	N/A	N/A	N/A	N/A	≤ 10	Caution	Eye Irrit. 2; STOT (Single Resp. Expo.) 3	H319 H335	GHS07 EU208	261,280, 304+340+312 , 337+313, 403+233, 501	Exists in a bound form

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Isocyanate preparation	N/A	N/A	N/A	N/A	≤ 10	Hazard	Skin Irrit. 2; Skin Sens. 1; Eye Irrit. 2; Acute Tox. (inhal.) 4; Resp. Sens. 1; STOT (Single Resp. Expo.) 3; STOT (Resp. Expo.) 2; Carc. 2	H315 H317 H319 H332 H334 H335 H351 H373	GHS07 GHS08	201, 260, 264, 280, 304+340+312, 308+313	Exists in a bound form

N/A = no information available

Non-hazardous ingredients:

Chemical name	CAS No.:	EC No.:	INDEX No.:	REACH Reg. No.:	Content (%)	Classification according to Regulation (EC) No. 1272/2008			Identification label	Safety Precautions	Remarks
						Signal words	Category	Hazard statements H-phrases			
Quartz sand (silicon dioxide)	14808-60-7	238-878-4	N/A	01-21207705-09-45	≤ 40	N/A	N/A	N/A	N/A	260, 270, 314	Available in bonded form
Hollow spheres (ceramic)	93924-19-7	300-212-6	N/A	01-21195636-88-21	≤ 80	N/A	N/A	N/A	N/A	N/A	Available in bound form

N/A = no information available

3.3 Note:

The abbreviations not fully spelled out in this section are listed in Chapter 16, as are safety information regarding the components used.

4. Section 4: First Aid Measures:

4.1 Description of first aid measures, general information:

Even if the product is not classified as hazardous, first aid and medical treatment may be necessary in the event of accidents (e.g., ingestion) or even if poisoning is suspected.

After inhalation:

After inhalation of thermal decomposition products (e.g., nitrous gases, hydrogen cyanide, carbon monoxide/dioxide, phenol, ammonia), move the affected person to fresh air and keep them at rest.

If respiratory tract irritation or breathing difficulties occur, seek medical attention immediately.

After skin contact:

In case of skin contact, wash thoroughly with plenty of water and soap.

Seek medical attention if skin reactions, redness, or pain occur.

After eye contact:

If the eyes come into contact with the product (dust/thermal decomposition products), immediately rinse with running water for 10 to 15 minutes while keeping the eyelids open and consult an ophthalmologist. Contact lens wearers should remove their lenses immediately and rinse their eyes.

If eye irritation occurs, consult an ophthalmologist.

If swallowed:

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If swallowed or if large amounts of dust are inhaled, have the person drink water immediately.
Do not induce vomiting.
If swallowed, rinse the mouth with plenty of water (only if the person is conscious) and seek medical help immediately.

First-aiders self-protection:

When rescuing from the danger zone: Ensure your own safety!

4.2 Most important acute and delayed symptoms and effects:

Symptoms:

After inhaling dust:

No acute symptoms are expected.

After inhalation of thermal decomposition products:

Nitrous oxides: Rapid narcotic effect depending on concentration, up to symptoms of oxygen deficiency. The development of pneumonia (with or without preceding pulmonary edema) may occur as a late consequence of acute poisoning even after 10–30 days. Abnormal blood counts / neurological damage.

Hydrogen cyanide, hydrocyanic acid: Mucosal irritation, burning sensation on the tongue, metallic, scratchy taste in the mouth and throat; concentration-dependent gradual to sudden onset of systemic effects.

Formaldehyde: Irritation of the nasal and pharyngeal mucous membranes (burning sensation, urge to sneeze, runny nose), possibly asthma attacks

Phenol: Irritation of the nose and throat

Ammonia: Cough, breathing difficulties, nausea, urge to vomit, later respiratory tract inflammation

After skin contact:

Hydrogen cyanide, prussic acid: initial irritation, followed by redness

Formaldehyde: concentration- and time-dependent irritation up to chemical burns, allergic skin reactions

Phenol: Redness/whitening of the contact site, followed by necrosis

Ammonia: Irritation up to chemical burns

After eye contact:

Hydrogen cyanide, hydrocyanic acid: redness

Formaldehyde: mild, reversible irritation up to permanent corneal lesions

Phenol: corneal opacity

Ammonia: Tearing, burning / stinging pain in the eye

If swallowed:

Hydrogen cyanide, hydrocyanic acid: Mucosal irritation

Formaldehyde: Depending on concentration, irritation to chemical burns of the mucous membranes with abdominal pain, retching, and cyanosis

Phenol: Burning and chemical burns of the mucous membranes, stomach pain, nausea, diarrhea

4.3 Indications for immediate medical attention or special treatment:

The following literature sources, among others, can provide information on treatment by a physician:
IFA-DGUV-Gestis Substance Database

Treat symptomatically.

5. Section 5: Firefighting measures:

5.1 Extinguishing media:

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Suitable extinguishing media:

Water, foam, carbon dioxide, or dry chemical
Cover with the aforementioned extinguishing agents; adapt firefighting measures to the surrounding area.

Unsuitable extinguishing media:

No unsuitable extinguishing media known; avoid a full-power water jet.

5.2 Special hazards arising from the substance or mixture:

Heating or thermal decomposition may result in the release of toxic/corrosive gases or vapors.
See also Section 2.2

5.3 Firefighting instructions:

Use appropriate respiratory protection (filter types A, B, K, NO-P2, or combination filter ABEK-P2)
If necessary, wear self-contained breathing apparatus.
Wear appropriate personal protective equipment when fighting the fire.

Collect contaminated firefighting water separately. Do not allow it to enter the sewer system, soil, or waterways.

Fire class:

Not applicable

6. Section 6: Accidental release measures:

6.1 Personal precautions:

Avoid contact with eyes, as well as inhalation and ingestion of dust; dust mask recommended.
Avoid generating dust; vacuum up dust without creating a dust cloud.
Keep away from ignition sources.
Ensure adequate ventilation.

6.2 Environmental protection measures:

Do not allow the product or product residues to enter the sewer system, waterways, or the ground.
Ensure that waste is collected and stored safely in closed containers.

6.3 Methods and materials for containment and cleanup:

Collect mechanically (avoid generating dust) and place in suitable containers for disposal. Use vacuum systems for cleanup.
Alternatively, affected surfaces can also be cleaned with a damp cloth
Handle the collected material in accordance with the Disposal section.

6.4 Additional information:

Please note the protective measures in Sections 7, 8, and 13.

7. Section 7: Handling and Storage:

7.1 Precautions for safe handling:

Do not remove the packaging until immediately before use and, if necessary, empty any remaining contents.
Refer to the product information / technical data sheet.

Fire prevention measures:

No special fire protection measures are required.
Protect from excessive heat.
Do not store in the immediate vicinity of the casting line or melting and furnace equipment.
Prevent dust accumulation / remove dust deposits regularly.
Observe standard fire prevention measures.

Measures to prevent aerosol and dust formation:

Handle products in a manner that prevents abrasion and dust formation (e.g., avoid pouring).
Use enclosed equipment whenever possible.
Provide exhaust air purification if necessary

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Environmental protection measures:

Effectively extract any thermal decomposition products generated and, if necessary, feed them into an exhaust air purification system.

Dispose of product residues in accordance with legal regulations.

General workplace hygiene guidelines:

Do not eat, drink, smoke, or use snuff at the workplace.

Wash hands and/or face before breaks and at the end of the workday.

Keep away from food, beverages, and animal feed.

Do not inhale dust or thermal decomposition products.

Use the product only in quantities necessary for operational requirements.

7.2 Conditions for safe storage, taking into account incompatibilities:

Technical measures and storage conditions:

Store in tightly closed containers in a cool, dry place.

Packaging materials:

Store only in original packaging (cardboard trays).

Requirements for storage areas and containers:

No special requirements; do not store outdoors; store in a dry place.

Storage compatibility:

Storage class: 11 – flammable solids (according to TRGS 509 / TRGS 510) (recommended)

Do not store together with:

Food and animal feed

Explosive substances (storage class 1)

Strongly oxidizing substances (storage class 5.1A)

Infectious substances (storage class 6.2)

Radioactive substances (Class 7)

Do not store together with strong acids and alkalis. Store separately from oxidizing agents and reducing agents.

Observe restrictions and requirements for combined storage in accordance with TRGS 509 / TRGS 510 with:

Gases (storage class 2A)

Flammable liquids (storage class 3)

Other explosive solid substances (storage class 4.1A)

Pyrophoric or self-igniting substances (storage class 4.2)

Oxidizing substances (storage class 5.1 B)

Ammonium nitrate and substances containing ammonium nitrate (Class 5.1 C)

Organic peroxides and self-decomposing substances (Class 5.2)

Flammable acutely toxic substances (storage class 6.1A)

Non-flammable acutely toxic substances (Class 6.1 B)

Additional information on storage conditions:

Storage temperature (°C): +5 to +30 °C

Relative humidity (%): Store in a dry place / protect from moisture

Storage stability: No data

Maximum storage period: The maximum recommended storage period is 1 year. Experience has shown that the product remains usable even beyond the specified maximum storage period. However, we cannot guarantee the product's specified properties after the maximum storage period has expired.

7.3 Specific end uses:

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Recommendation: For commercial use only. Not for private use.

8. Section 8: Exposure controls and personal protection:

8.1 Exposure limits:

Components with occupational exposure limits or biological limit values that must be monitored:

Occupational exposure limits:

Related to thermal decomposition products / dust emissions:

Air limits:

Limit value type (country of origin)	Substance	EC No.	CAS No.	Occupational exposure limit		Recommended monitoring procedures	Peak limit	Source
				Inhalable inhalable aerosol fraction	alveolar common aerosol fraction			
Germany	Dust (for dust with a density of 1 g/cm ³)	N/A	N/A	4 mg/m ³	0.3 mg/m ³	N/A	No exceedance of twice the general dust limit value	DFG

Limit value type (country of origin)	Substance	EC No.	CAS No.	Occupational exposure limit		Recommended monitoring procedures	Peak limiting	Source
				Long-term	Short-term			
Germany	Nitrous oxide (nitrous gases)	233-032-0	10024-97-2	180 mg/m ³	360 mg/m ³	N/A	2-fold exceedance in 15 min, max. 4 times per shift, 1-hour interval	DFG
Germany	Hydrogen cyanide (hydrocyanic acid)	200-821-6	74-90-8	2.1 mg/m ³	4.2 mg/m ³	N/A	2-fold exceedance in 15 min, max. 4 times per shift, 1-hour interval	DFG
Germany	Formaldehyde	200-001-8	50-00-0	0.37 mg/m ³	0.74 mg/m ³	N/A	2-fold exceedance in 15 min, max. 4 times per shift, 1-hour interval	DFG
Germany	Ammonia	231-635-3	7664-41-7	14 mg/m ³	28 mg/m ³	N/A	2-fold exceedance in 15 min, max. 4 times per shift, 1-hour interval	DFG

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Germany	Carbon monoxide	211-128-3	630-08-0	35 mg/m ³	70 mg/m ³	N/A	2-fold exceedance in 15 min, max. 4 times per shift, 1-hour interval	DFG
Germany	Carbon dioxide	204-696-9	124-38-9	9,100 mg/m ³	18,200 mg/m ³	N/A	2-fold exceedance in 15 min, max. 4 times per shift, 1-hour interval	DFG
No sufficient product-related data available.								

N/A = no data available

When burning products made from Therm ISO CB, the formation of nitrous gases, ammonia, formaldehyde, aldehyde, and hydrogen cyanide cannot be ruled out. Whether occupational exposure limits are exceeded when using products made from Therm ISO CB depends heavily on the conditions. Verification of compliance with occupational exposure limits is recommended at least upon first use.

Biological limit values:

Limit value type (Country of origin)	Substance	EC No.	CAS No.	Parameter	Limit value	Test material	Source	Remarks
Germany	Phenol	203-632-7	108-95-2	Phenol (after hydrolysis)	200 mg/L	Urine	DFG	at the end of the shift
Germany	Carbon monoxide	211-128-3	630-08-0	CO-Hb	5%	Blood	DFG	at the end of the shift
No sufficient product-related data available.								

N/A = no data available

DNEL and PNEC values:

DNEL for workers				
Route of exposure	Duration of effect	Endpoint effect	Value	Note
Inhalation, systemic, and local	Short-term	Repeated exposure	3 mg/m ³	Based on hollow spheres (ceramic)
Inhalation, local	Long-term	Repeated exposure	0.113 mg/m ³	Based on hollow spheres (ceramic)
No sufficient product-specific data available.				

DNEL User/Consumer				
Route of exposure	Duration of effect	Endpoint effect	Value	Remarks
No sufficient product-related data available.				

PNEC			
Conservation objective	Extrapolation factor	Value	Remarks
Freshwater	50	2 mg/L	Based on hollow spheres (ceramic)
Seawater	500	0.2 mg/L	Based on hollow spheres (ceramic)
Wastewater treatment plant	10	100 mg/L	Based on hollow spheres (ceramic)

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Soil organisms	1000	333.3 mg/kg soil dw	Based on hollow spheres (ceramic)
No sufficient product-related data available.			

bw = body weight
dw = dry weight

8.2 Exposure control and monitoring:

8.2.1 Exposure controls and monitoring in the workplace:

Product-specific measures to prevent exposure:

Only intended, identified use is permitted.

Instructional measures to prevent exposure:

Safety instructions for handling the individual components are listed in Section 16.

Organizational measures to prevent exposure:

Only intended, identified use is permitted. It must be determined whether occupational exposure limits are being complied with. Reference is made to European Directive EN 689 on the assessment of exposure to chemical substances.

Technical measures to prevent exposure:

See Section 7. No additional measures are required.

Technical measures and the use of appropriate work procedures take precedence over the use of personal protective equipment.

Personal protective equipment:

Respiratory protection: Personal respiratory protection is not normally required.

Respiratory protection is required when:

If technical extraction or ventilation measures are not possible or insufficient, respiratory protection must be worn (thermal decomposition products / dust).

Exceedance of the applicable occupational exposure limit for thermal decomposition products / dust.

When used as intended:

Filter-type respirator or powered air-purifying respirator, type:

Filter types A, B, K, NO-P2 / combination filter ABEK-P2 or powered air-purifying respirator (at least TH2P).

Self-contained breathing apparatus:

Use respiratory protection in accordance with EN 143 / EN 14387 if concentrations exceed the application limit for filter devices, if oxygen levels are below 17% by volume, or under unclear conditions.

The wearing time limits according to GefStoffV in conjunction with the rules for the use of respiratory protective equipment (BGR 190) must be observed.

Hand protection: Hand protection is not normally necessary; depending on the other substances used, wearing gloves is recommended.

The use of water-insoluble skin protectants is recommended.

In case of frequent hand contact:

Gloves for protection against mechanical hazards in accordance with DIN EN 388

The wearing time limits according to GefStoffV in conjunction with the rules for the use of protective gloves (BGR 195) must be observed.

Eye protection: In case of dust: Dust goggles with side protection (in accordance with EN 166).

Body protection: Not required. Normal long-sleeved work clothing is sufficient. Recommendation: Protective clothing in accordance with EN 13034, EN 14605

Hygiene: After handling the product, wash hands, forearms, and face, especially before breaks or at the end of work activities.

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8.2.2 Limiting and monitoring environmental exposure:

Product-related measures to prevent exposure:

No special measures required.

Instructional measures to prevent exposure:

Handle the product only in accordance with its intended use.

Organizational measures to prevent exposure:

Minimize dust generation during handling.
Use the product only in the quantities necessary.

Technical measures to prevent exposure:

Effective extraction of dusts/thermal decomposition products at the source.

9. Section 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

	Value	Method	Remarks
Physical state	Solid		
Color	gray		
Odor	Odorless		
pH value (20°C):	approx. 7	DIN 19260	Measured in aqueous suspension
Melting point / range (°C):	Not applicable		Not applicable, as decomposition occurs
Boiling point / range (°C):	Not applicable		
Flash point (°C):	Not applicable		
Ignition temperature (°C):	Not applicable		Product is not self-igniting
Vapor pressure:	Not applicable		Not applicable, as it is composed of non-volatile inorganic and high-molecular-weight organic solids
Density (g/cm ³):	450–1,000	DIN 51757	
Bulk density (kg/m ³):	Not determined		
Water solubility (20°C in g/l):	Practically insoluble		Solubility of inorganic components is expected
Partition coefficient n-octanol/water (log Pow):	Not determined		
Dynamic viscosity (mPa·s):	Not applicable		Solid
Dust explosibility:	Not applicable		Product is not dust-explosive
Explosion limits	Not applicable		
Lower:			
Upper:			

9.2 Other information:

No additional data

10. Section 10: Stability and reactivity:

10.1 Conditions to avoid:

No special restrictions known; protect from heat and sunlight.

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10.2 Substances to avoid:

Acids and oxidizing agents
See also Section 7.2.4.

10.3 Hazardous decomposition products:

Nitrous gases (nitrogen oxides)
Hydrogen cyanide (cyanide)
Carbon monoxide / dioxide
Soot
Phenol
Formaldehyde
Ammonia

Exposure limits for individual substances are listed in Chapter 8.

11. Section 11: Toxicological Information:

11.1 Acute toxicity:

	Effective dose	Species	Method	Remarks
Acute oral toxicity	LD ₅₀ /14d: 2,000 mg/kg	N/A	Calculation method	Based on phenolic resin solution
Acute dermal toxicity	LD ₅₀ /24 h: > 2,000 mg/kg	N/A	Calculation method	Based on phenolic resin solution
Acute inhalation toxicity	LC ₅₀ /4 h: > 20 g/m ³	N/A	Calculation method	Based on phenolic resin solution
Acute inhalation toxicity	LC ₅₀ /4h: 1.54 g/m ³	N/A	Calculation method	Based on isocyanate preparation
No sufficient product-specific data relevant for classification is available.				

N/A = no data available

Mixture (product):

Oral toxicity:

No sufficient product-specific data relevant for classification is available.

Dermal toxicity:

Contact with dust causes irritation of the skin and mucous membranes.

Inhalation toxicity:

Inhalation of dust may cause irritation of the respiratory tract (nose and throat) and respiratory impairment

Components that may contribute to acute inhalation toxicity:

- Isocyanate preparation, LD 50 (oral): ATE 1.5 mg/kg

Specific target organ toxicity (STOT) following single exposure:

Phenolic resin solution and isocyanate preparation may irritate the respiratory tract; the General Concentration Limits (GCL) must be observed: Category 3: 20%

No sufficient product-related data relevant for classification is available.

Specific symptoms in animal testing:

No sufficient product-related data relevant for classification is available.

11.2 Skin corrosion/irritation:

	Duration of exposure	Species	Assessment	Method	Remarks
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No sufficient product-related data relevant for classification is available.					

N/A = no data available

Isocyanate preparations cause skin irritation and/or dermatitis.
The general concentration limits (GCL) must be observed: Category 2: 3%

Mixture (article):

No sufficient product-related data relevant for classification is available; contact with dust may cause mechanical irritation and injury.

11.3 Serious eye damage / irritation:

	Exposure duration	Species	Assessment	Method	Remarks
No sufficient product-related data relevant for classification is available.					

Phenolic resin solution causes severe eye irritation. The general concentration limits (GCL) must be observed:
Category 2: 3%

Isocyanate preparation causes severe eye irritation. The general concentration limits (GCL) must be :
Category 2: 3%

Mixture (product):

Eye irritation:

No sufficient product-specific data is available; contact with dust may cause mechanical irritation and injuries.

11.4 Respiratory or skin sensitization:

Isocyanate preparation: In sensitive individuals, skin contact or inhalation of aerosols or dust.

Mixture (product):

After inhalation:

No sufficient product-specific data relevant for classification is available.

Components that may contribute to *respiratory sensitization*:

- **Isocyanate preparation: The general concentration limits (GCL) must be observed: Category 1: 1%**

After skin contact:

No sufficient product-specific data relevant for classification is available.

Ingredients that may contribute to *skin sensitization*:

- **Isocyanate preparation: The general concentration limits (GCL) must be observed: Category 1: 1%**

11.5 Toxicity following repeated exposure (subacute, subchronic, chronic):

Quartz dust (silicon dioxide) (respirable fraction):

Depending on the quantity and nature of respirable quartz dust, changes in lung (silicosis). Even a persistent accumulation of significant amounts of dust in the lungs during prolonged high exposure can lead to pneumoconiosis.

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Mixture (product):

Repeated inhalation of high amounts of dust can cause mucosal irritation and impairment of the respiratory tract, as well as to coughing, sore throat, sneezing fits, and shortness of breath.

Otherwise, no sufficient product-related data relevant for classification is available.

Specific target organ toxicity (STOT) upon repeated exposure:

Isocyanate preparations may cause organ damage (lungs) upon prolonged or repeated inhalation.

Mixture (product): No sufficient product-related data relevant for classification is available.

11.6 CMR effects (carcinogenic, mutagenic, and toxic to reproduction):

Quartz dust (silicon dioxide) (respirable fraction):

Carcinogenicity: Carcinogen, Category 1; causes cancer and contributes to the risk of cancer

Isocyanate preparation:

Carcinogenicity: Carcinogen, Category 2; determined from epidemiological data to cause cancer and contribute to cancer risk.
For relevant ingredients, the general concentration limits (GCL) must be observed: Category 2: 1%.

Formaldehyde:

Carcinogenicity: Carcinogen: Category 4; Substance with carcinogenic effects in which genotoxic effects play no role or only a minor role
Germ cell mutagenicity: Mutagen, Category 5; very low contribution to genetic risk

Phenol:

Carcinogenicity: Carcinogen, Category 3; substance data provide evidence of a carcinogenic effect
Germ cell mutagenicity: Mutagen; Category 3B; suspected mutagenic effect in in vivo germ cells

Mixture (product):

Carcinogenicity: No sufficient product-related data available.
In vitro mutagenicity: No sufficient product-related data available.
In vivo mutagenicity: No sufficient product-related data available.
Germ cell mutagenicity: No sufficient product-related data available.
Reproductive toxicity: No sufficient product-related data available.

11.7 Practical experience / Aspiration hazard:

Observations relevant to classification: No data available regarding product handling.

Other observations: No data available regarding product handling.

11.8 Information on other hazards:

Observations, information, or data regarding health effects that may be caused by endocrine-disrupting properties or by blindness/phototoxicity are not available with regard to product handling.

12. Section 12: Environmental Information:

12.1 Ecotoxicity:

Aquatic toxicity	Effective dose	Exposure duration	Species	Method	Assessment	Remarks
No sufficient product-related data relevant for classification is available.						

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N/A = no data available

Mixture (article):

No sufficient product-related data relevant for classification is available. Due to the inert nature of the mixture (article), no adverse effects on the living and non-living environment are expected.

12.2 Persistence and degradability:

Mixture (product):

Due to the inert nature of the mixture (product composed of inorganic substances, not subject to degradation), no data are available regarding either physicochemical or photochemical elimination.

12.3 Bioaccumulative potential:

Due to the inert nature of the product (composed of inorganic substances), no data on bioaccumulation potential is available, nor is any available for the individual substances.

12.4 Mobility:

Known or expected distribution among environmental compartments:

Mixture (product):

No data are available for the mixture (product) regarding surface tension, adsorption/desorption, or distribution in environmental compartments.

12.5 Result of the PBT assessment:

Neither the individual substances nor the mixture (article) meet the criteria for classification as PBT or vPvB.

12.6 Endocrine-disrupting effects on the environment:

Due to the inert nature of the mixture (product composed of inorganic substances), no data are available.

12.7 Other adverse effects:

No other adverse effects on ozone depletion potential, global warming potential, or photochemical ozone formation are known.

12.8 Other information:

Separation of the aqueous phase by filtration is possible.

13. Section 13: Disposal Considerations:

13.1 Disposal / Waste (Product):

Unused product:

Contact the manufacturer regarding recycling. Check for recycling options.

Otherwise, dispose of in accordance with the German Closed-Loop Recycling Act (KrWG): hazardous waste pursuant to Section 3 of the Waste Catalogue Ordinance (AVV)

Used product:

Dispose of only fully reacted and cooled-down product.

Dispose of in accordance with the German Closed Substance Cycle Waste Management Act (KrWG).

13.2 EAK / AVV waste codes:

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Suggested list of waste codes/waste descriptions according to AVV:

Unused product:

10 10 05* Casting molds and sands containing hazardous substances prior to casting
10 10 06 Molding boxes and molding sands prior to casting, excluding those covered by 10 10 05*

Used product:

10 10 07* casting molds and sands containing hazardous substances after casting
10 10 08 Casting molds and sands after casting, except those covered by 10 10 07*

13.3 Packaging:

Uncontaminated and completely empty packaging may be recycled.

14. Section 14: Transport Information

14.1 Transport hazard classes:

Land transport (ADR (RID)):

Official name: Not classified for this mode of transport. Hazard label:
Class: UN No.:
Classification code: Packing group:

Water Transport (ADN(R) /IMDG Code):

Proper shipping name: Not classified for this mode of transport. Hazard label:
Class: UN No.:
Classification code: Packing group:
EmS: Marine Pollutant:

IMDG Code: Product is not transported as bulk cargo.

Air transport (ICAO-TI / IATA-DGR):

Proper shipping name: Not classified for this mode of transport. Hazard label:
Class: UN No.:
Classification code: Packing group:

14.2 Special precautions for the user:

No special precautions are required regarding transport or movement within or outside the premises.

15. Section 15: Regulatory information:

15.1 EU regulations:

Chemical Safety Assessment:

Risk assessments have been conducted and registration dossiers prepared for individual substances in this product:
- Registration dossiers for quartz and cenospheres by the European Chemicals Agency (ECHA).

Labeling:

Hazard symbols and hazard statements:

Hazard-determining components for labeling:	Not applicable, as not subject to labeling requirements
H-statements:	Not applicable, as not subject to labeling requirements
P-phrases:	Not applicable, as not subject to labeling requirements
Special labeling of certain products:	Not applicable, as not subject to labeling requirements

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Approval and/or restrictions on use:

Approvals:

No information available.

Restrictions on use:

Not for use in the private sector.

15.2 National regulations (Germany):

Notes on employment restrictions:

The relevant national regulations regarding the protection of young workers and expectant mothers must be observed.

Major Accidents Ordinance (12th BImSchV):

As a product, it is not subject to the 12th BImSchV

Water hazard class:

WGK 1 = slightly hazardous to water (self-classification according to AwSV; Annex 1 not applicable, as this is a product)

Technical Instructions on Air Quality Control (TA-Luft):

The respective emission limit values must be observed:

Ammonia: 30 mg/m³

Nitrogen oxides: 350 mg/m³ (as nitrogen dioxide)

Total dust, including particulate matter: 20 mg/m³

Carbon monoxide: 150 mg/m³

Formaldehyde: 20 mg/m³

Hydrogen cyanide: 3 mg/m³

Phenol: 50 mg/m³ (as ammonia)

Cyanides: 1 mg/m³ (as CN)

Other regulations, restrictions, and prohibitions:

TRGS 900 Occupational Exposure Limits; DFG

16. Section 16: Other information:

16.1 Wording of H- and P-phrases:

Full text of the H- and P-phrases for the individual components of the product (article) listed in Chapter 3, as well as abbreviations of the labels for the individual substances mentioned in Chapter 2:

Hazard statements:

H315: Causes skin irritation
H317: May cause allergic skin reactions
H319: Causes serious eye irritation
H332: Harmful if inhaled
H334: May cause allergies, asthma-like symptoms, or breathing difficulties if inhaled
H335: May irritate the respiratory tract
H341: May cause genetic defects
H351: May cause cancer
H373: May cause damage to organs following prolonged or repeated exposure

EU208 Contains: Formaldehyde. May cause allergic reactions.

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Safety instructions:

Prevention:

- P201 Obtain special instructions before use
- P260 Do not breathe dust, fumes, gas, mist, vapor, or aerosol
- P261 Avoid inhaling dust/smoke/gas/mist/vapor/aerosol.
- P264 Wash thoroughly after use.
- P280 Wear protective gloves, protective clothing, eye protection, and face protection
- P284 Wear respiratory protection

Response:

- P304+340+312 If inhaled: Move to fresh air and keep at rest in a position comfortable for breathing.
If you feel unwell, call a POISON CONTROL CENTER or a doctor.
- P308+313 If exposed or affected: Get medical advice/attention.
- P337+313 If eye irritation persists: Get medical advice/attention.

Storage:

- P403+233 Keep container tightly closed in a well-ventilated place.

Disposal:

- P501 Dispose of contents and container in accordance with local, regional, national, international regulations

16.2 Training instructions:

Employees must be regularly trained in accordance with legal requirements regarding the scope and associated hazards.

16.3 Recommended restrictions on use:

No private use.

16.4 Additional information:

The information in this Safety Data Sheet is based on our best knowledge at the time of publication. The information is intended to provide guidance on the safe handling of the product described in this Safety Data Sheet during storage, processing, transport, and disposal. The information is not transferable to other products. If the product mentioned in this safety data sheet is blended, mixed, or processed with other materials, or subjected to further processing, the information in this safety data sheet cannot be applied to the new material produced in this way, unless expressly stated otherwise.

16.5 Data sources:

- 1.) Current safety data sheets for the ingredients
- 2.) IFA-DGUV (Institute for Occupational Safety and Health of the German Social Accident Insurance), GESTIS Substance Database
- 3.) RIGOLETTO database "Catalog of Water-Hazardous Substances" Federal Environment Agency (UBA) in accordance with AwSV (Regulation on Facilities for the Handling of Water-Hazardous Substances); Version 3.8.5 / 2026
- 4.) TA-Luft 2021
- 5.) DFG (German Research Foundation) - MAK and BAT Values List 2025, Bulletin 61, <https://mak-dfg.publisso.de>
- 6.) ECHA/EU - REACH Registration Dossier: Ashes (residues), cenospheres (hollow spheres), as of March 17, 2026
- 7.) ECHA/EU - REACH Registration Dossier Quartz, as of May 2, 2023
- 8.) TRGS 509 Technical Rules for Hazardous Substances – Storage of Liquid and Solid Hazardous Substances in Stationary containers; as of: March 26, 2024
- 9.) TRGS 510 Technical Rules for Hazardous Substances – Storage of Hazardous Substances in Portable Containers; as of: February 16, 2021
- 10.) TRGS 900 Technical Rules for Hazardous Substances – Occupational Exposure Limits; as of May 6, 2025
- 11.) DGUV I 209-095 Quartz-containing dust in the foundry industry; as of: March 2023