

Trade name: **HERCULAN SR 320 { A }**

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 - No special measures required.
 - Ensure good ventilation/exhaustion at the workplace.
 - Open and handle receptacle with care.
 - Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
 - Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 - No special requirements.
- **Information about storage in one common storage facility:**
 - Not required.
- **Further information about storage conditions:**
 - Protect from frost.
 - Keep receptacle tightly sealed.
 - Store in dry conditions.
 - Store in a cool place.
- **Specific end use(s)**
 - No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:**
 - No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:**
 - The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Store protective clothing separately.
 - Do not eat, drink, smoke or sniff while working.
- **Breathing equipment:**
 -  Only during spraying without adequate removal by suction.
 - Use suitable respiratory protective device in case of insufficient ventilation.
 - Use suitable respiratory protective device when high concentrations are present.
- **Recommended filter device for short term use:**
 - Combination filter A-P2
- **Protection of hands:**
 -  Protective gloves
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves**
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

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- **As protection from splashes gloves made of the following materials are suitable:**
 - Nitrile rubber, NBR
 - Natural rubber, NR
- **Eye protection:**
 -  Tightly sealed goggles
- **Body protection:**
 -  Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form:** Fluid
 - Color:** According to product specification
 - Odor:** Characteristic
 - Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
 - Melting point/Melting range:** Undetermined.
 - Boiling point/Boiling range:** >200 °C (>392 °F)
- **Flash point:** 164 °C (327 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:**
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapor pressure:** Not determined.
- **Density at 20 °C (68 °F):** 1.29 g/cm³ (10.765 lbs/gal)
- **Relative density**
 - Not determined.
- **Vapor density**
 - Not determined.
- **Evaporation rate**
 - Not determined.
- **Solubility in / Miscibility with**
 - Water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 0.9 %
 - Water:** 0.0 %
- **Solids content:** 61.1 %
- **Other information**
 - No further relevant information available.

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10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** The product shows the following dangers according to internally approved calculation methods for preparations:

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

1318-02-1	Zeoliet	3
14808-60-7	Quartz (SiO2)	1
13463-67-7	titanium dioxide	2B

· **NTP (National Toxicology Program)**

14808-60-7	Quartz (SiO2)	K
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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

85535-85-9 alkanes, C14-17, chloro

Accute LC50	1 mg/L (Gammarus pulex)
Acute EC50	0.006 mg/L (Daphnia Magna)

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:** Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Void
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Void
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Void
- **Packing group**
- **DOT, ADR, IMDG, IATA** Void
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** Void

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

36890-68-3	ε.-caprolactone, oligomeric reaction products with 2,2'-oxydiethanol
1332-58-7	Kaolinite
31831-53-5	2-oxepanone, polymer with 1,4 butandiol
68186-91-4	Copper chromite spinel pigment Cu(Cr,Fe)2O4
56-81-5	glycerol
110-63-4	butane-1,4-diol
111-46-6	2,2'-oxydiethanol
69011-20-7	Styreen-Divinylbenzen-Copolymer
502-44-3	hexan-6-olide

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenicity categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

1332-58-7	Kaolinite	A4
14808-60-7	Quartz (SiO ₂)	A2
13463-67-7	titanium dioxide	A4

MAK (German Maximum Workplace Concentration)

14808-60-7	Quartz (SiO ₂)	1
13463-67-7	titanium dioxide	3A

NIOSH-Ca (National Institute for Occupational Safety and Health)

14808-60-7	Quartz (SiO ₂)	
13463-67-7	titanium dioxide	

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms GHS08
Signal word Danger

Hazard-determining components of labeling: Quartz (SiO₂)
alkanes, C14-17, chloro

Hazard statements H350 May cause cancer.
H362 May cause harm to breast-fed children.

Precautionary statements
P263 Avoid contact during pregnancy/while nursing.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:
Additional classification according to Decree on Hazardous Materials: Carcinogenic hazardous material group III (dangerous).

Information about limitation of use: Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

Technical instructions (air):

Class	Share in %
NK	0.9

Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

VOC
VOC EU [%] 0.00 %
VOC USA 9.8 g/l / 0.08 lb/gl
VOC CH 0.00 %
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS:** Environmental Department
- Contact:** Dr. Michael Kissel
- Date of preparation / last revision:** 08/03/2016 / 17
- Abbreviations and acronyms:**
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - ICAO: International Civil Aviation Organisation
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - ACGIH: American Conference of Governmental Industrial Hygienists
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - NFPA: National Fire Protection Association (USA)
 - HMS: Hazardous Materials Identification System (USA)
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - NIOSH: National Institute for Occupational Safety & Health
 - OSHA: Occupational Safety & Health
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit
 - REL: Recommended Exposure Limit
 - Carc. 1A: Carcinogenicity – Category 1A
 - Lact.: Reproductive toxicity – effects on or via lactation
 - STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

*** Data compared to the previous version altered.**

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