SECTION 1: Identification of the substance / preparation and of the company

1.1 Product identifier

HENSOMASTIK 5 KS-SP

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant uses

Fire retardant coating

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company: Rudolf Hensel GmbH
Lauenburger Landstr. 11
21039 Börnsen / GERMANY
Phone +49 (0)40-72 10 62 10
Fax +49 (0)40-72 10 62 52
Homepage www.rudolf-hensel.de
E-mail info@rudolf-hensel.de

Address enquiries to
Technical information: info@rudolf-hensel.de
Safety Data Sheet: sdb@chemiebuero.de

1.4 Emergency phone

Company: +49 (0)40-72 10 62 10 (7:00 - 17:00) 0172 4115390 (17:00 - 07:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

not determined

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

No classification.

2.2 Label elements

Labelling according to Regulation 67/548/EEC or 1999/45/EC

The product is required to be labelled in accordance with EC-Directives.

Hazard symbols: none
R-phrases: none
Special labelling: Safety data sheet available for professional user on request.

2.3 Other hazards

Environmental hazards: Does not contain any PBT or vPvB substances.
Other hazards: No particular hazards known.
SECTION 3: Composition / Information on ingredients

Product-type:
The product is a mixture.

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
<th>CAS:</th>
<th>EINECS/ELINCS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - &lt;10</td>
<td>Quartz (&lt; 10µm)</td>
<td>14808-60-7</td>
<td>238-878-4</td>
</tr>
<tr>
<td></td>
<td>GHS/CLP: STOT RE 1: H372</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EEC: Xn, R 48/20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - &lt;5</td>
<td>Glass</td>
<td>65997-17-3</td>
<td>266-046-0</td>
</tr>
<tr>
<td></td>
<td>GHS/CLP: Skin Irrit. 2: H315</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EEC: X, R 38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comment on component parts
The quartz in this preparation is not available on foreseeable use. Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%. For full text of H-statements and R-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Change soaked clothing.

Inhalation
Ensure supply of fresh air.
In the event of symptoms seek for medical treatment.

Skin contact
When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
Supply with medical care.

4.2 Most important symptoms and effects, both acute and delayed
Irritant effects

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media
Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.

Extinguishing media that must not be used
Full water jet.

5.2 Special hazards arising from the substance or mixture
In the event of fire the following can be released:
Carbon monoxide (CO)

5.3 Advice for firefighters
Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
High risk of slipping due to leakage/spillage of product.
6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand, sawdust, generalpurpose binder, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures necessary if used correctly.

Wash hands before breaks and after work.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Do not store together with food and animal food/diet.
Keep container tightly closed.
Storage class 10 - 13 (VCI)

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

| Ingredients with occupational exposure limits to be monitored (GB) |
|------------------|-------------------|
| Range [%] | Substance |
| 1 - <10 | Titanium dioxide |
| CAS: 13463-67-7, EINECS/ELINCS: 236-675-5, ECB-Nr.: 01-2119489379-17-XXXX |
| Long-term exposure: 4 mg/m³, respirable; total inhalable: TWA=10 mg/m³ |
| 1 - <10 | Quartz (< 10µm) |
| CAS: 14808-60-7, EINECS/ELINCS: 238-878-4 |
| Long-term exposure: 0,1 mg/m³, respirable, crystalline |

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.

Eye protection
Safety glasses.

Hand protection
Butyl rubber, >480 min (EN 374).
The details concerned are recommendations. Please contact the glove supplier for further information.

Skin protection
Not required under normal conditions.

Other
Avoid contact with eyes and skin.

Respiratory protection
Not required under normal conditions.

Thermal hazards
not applicable

Delimitation and monitoring of the environmental exposition
Comply with applicable environmental regulations limiting discharge to air, water and soil.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form: pasty
Color: white
Odor: characteristic
Odour threshold: not determined
pH-value: 7.45 - 7.55
pH-value [1%]: not determined
Boiling point [°C]: not determined
Flash point [°C]: not applicable
Flammability [°C]: not applicable
Lower explosion limit: not applicable
Upper explosion limit: not applicable
Oxidizing properties: no
Vapour pressure/gas pressure [kPa]: not determined
Density [g/ml]: 1.27 - 1.41
Bulk density [kg/m³]: not applicable
Solubility in water: soluble
Partition coefficient [n-octanol/water]: not determined
Viscosity: 45000 - 75000 mPa.s (20°C)
Relative vapour density determined in air: not determined
Evaporation speed: not determined
Melting point [°C]: not determined
Autoignition temperature [°C]: not applicable
Decomposition temperature [°C]: not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

10.4 Conditions to avoid

See SECTION 7

10.5 Incompatible materials

Strong oxidizing agent.

10.6 Hazardous decomposition products

No hazardous decomposition products known.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
<th>LD50, dermal, Rabbit: &gt; 2000 mg/kg.</th>
<th>LD50, oral, Rat: &gt; 2000 mg/kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - &lt;5</td>
<td>Glass, CAS: 65997-17-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Serious eye damage/irritation not determined
Skin corrosion/irritation not determined
Respiratory or skin sensitisation not determined
Specific target organ toxicity — single exposure not determined
Specific target organ toxicity — repeated exposure not determined
Mutagenicity There is no evidence of any mutagenic effects.
Reproduction toxicity There is no evidence of any reproductive toxicity effects.
Carcinogenicity There is no evidence of any carcinogenic effects.
General remarks No classification on the basis of the calculation procedure of the preparation directive. Toxicological data of complete product are not available. The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

12.2 Persistence and degradability

Behaviour in environment compartments not determined
Behaviour in sewage plant not determined
Biological degradability not determined

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

No classification on the basis of the calculation procedure of the preparation directive. Ecological data of complete product are not available.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

For recycling, consult manufacturer.

Waste no. (recommended) 080112

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150102

150104

SECTION 14: Transport information

14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable
SECTION 15: Regulatory information

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

1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC


CHIP 3/ CHIP 4

- Observe employment restrictions for people none
- VOC (1999/13/CE) not applicable

15.2 Chemical safety assessment not applicable

SECTION 16: Other information

16.1 R-phrases (SECTION 3)

R 48/20: Harmful - danger of serious damage to health by prolonged exposure through inhalation.
R 38: Irritating to skin.

16.2 Hazard statements (SECTION 3)

H315 Causes skin irritation.
H372 Causes damage to lung through prolonged or repeated exposure if inhaled.

16.3 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform Chemical Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.4 Other information

Classification procedure

SECTION 8 been added: Comply with applicable environmental regulations limiting discharge to air, water and soil.
SECTION 12 deleted: The product contains organically bound halogen in accordance with the formulation.