

Rudolf Hensel GmbH  
21039 Börnsen

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**HENSOTHERM® 420 KS**

### 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  
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#### Address enquiries to

**Technical information** [info@rudolf-hensel.de](mailto:info@rudolf-hensel.de)

**Safety Data Sheet** [sdb@chemiebuero.de](mailto:sdb@chemiebuero.de)

### 1.4 Emergency telephone number

**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

No classification.

### 2.2 Label elements

#### Hazard pictograms

**Hazard statements** none

**Special labelling** EUH210 Safety data sheet available on request.

**2004/42/CE**

Contains: Mixture: 5-Chloro-2-methyl-2H-isothiazolin-3-one/2-Methyl-4-isothiazolin-3-one (3:1). EUH208 May produce an allergic reaction.

0 g/l II A i WB One-pack performance coatings (max. 140 g/l)

### 2.3 Other hazards

**Human health dangers** Frequent persistent contact with the skin can cause skin irritation.

**Environmental hazards** Does not contain any PBT or vPvB substances.

**Other hazards** Further hazards were not determined with the current level of knowledge.

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### SECTION 3: Composition / Information on ingredients

#### Product-type:

The product is a mixture.

Range [%]	Substance
0,00015 - <0,0015	Mixture: 5-Chloro-2-methyl-2H-isothiazolin-3-one/2-Methyl-4-isothiazolin-3-one (3:1) CAS: 55965-84-9, EU-INDEX: 613-167-00-5 GHS/CLP: Acute Tox. 3: H301 H311 H331 - Skin Corr. 1B: H314 - Skin Sens. 1: H317 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M = 10

#### Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.  
For full text of H-statements: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

<b>General information</b>	Take off contaminated clothing and wash before reuse.
<b>Inhalation</b>	Ensure supply of fresh air. In the event of symptoms seek medical treatment.
<b>Skin contact</b>	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
<b>Eye contact</b>	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.
<b>Ingestion</b>	Get medical advice. Do not induce vomiting. Rinse out mouth and give plenty of water to drink.

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

Allergic reactions  
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

<b>Suitable extinguishing media</b>	Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.
<b>Extinguishing media that must not be used</b>	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)  
Nitrogen oxides (NOx).  
Phosphorus oxides (POx).

#### 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.

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## 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

## 6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, 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

The normal safety precautions for handling chemicals must be observed.

Use only in well-ventilated areas.

Provide suitable vacuuming at the processing area.

Do not eat, drink, smoke or take drugs at work.

Use barrier skin cream.

After worktime and before work breaks the affected skin areas must be thoroughly cleaned.

Take off contaminated clothing and wash before reuse.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.

Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Keep container tightly closed.

Protect from heat/overheating.

Keep in a cool place. Store in a dry place.

## 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)

Substance
Titanium dioxide
CAS: 13463-67-7, EINECS/ELINCS: 236-675-5, Reg-No.: 01-2119489379-17-XXXX
Long-term exposure: 4 mg/m <sup>3</sup> , respirable; total inhalable: TWA=10 mg/m <sup>3</sup>
Pentaerythritol
CAS: 115-77-5, EINECS/ELINCS: 204-104-9
Long-term exposure: 10 mg/m <sup>3</sup> , inhalable dust, respirable dust: TWA=4 mg/m <sup>3</sup>
Short-term exposure (15-minute): 20 mg/m <sup>3</sup>

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## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	0,7mm Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
<b>Skin protection</b>	Protective clothing.
<b>Other</b>	Avoid contact with eyes and skin. Do not inhale aerosols. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
<b>Respiratory protection</b>	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, filter P2. (DIN EN 143)
<b>Thermal hazards</b>	not applicable
<b>Delimitation and monitoring of the environmental exposition</b>	Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form</b>	pasty
<b>Color</b>	white
<b>Odor</b>	characteristic
<b>Odour threshold</b>	not applicable
<b>pH-value</b>	7,7 - 8,7
<b>pH-value [1%]</b>	not determined
<b>Boiling point [°C]</b>	not determined
<b>Flash point [°C]</b>	not applicable
<b>Flammability (solid, gas) [°C]</b>	not applicable
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Oxidising properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	not determined
<b>Density [g/ml]</b>	1,3 - 1,4 (20 °C / 68,0 °F)
<b>Bulk density [kg/m³]</b>	not applicable
<b>Solubility in water</b>	miscible
<b>Partition coefficient [n-octanol/water]</b>	not determined
<b>Viscosity</b>	10000 - 14000 mPa.s (20°C)
<b>Relative vapour density determined in air</b>	not applicable
<b>Evaporation speed</b>	not applicable
<b>Melting point [°C]</b>	not determined
<b>Autoignition temperature [°C]</b>	not self-igniting
<b>Decomposition temperature [°C]</b>	not determined

### 9.2 Other information

none



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## 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

No hazardous reactions known.

### 10.4 Conditions to avoid

See SECTION 7.2.

### 10.5 Incompatible materials

not applicable

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product
ATE-mix, inhalativ (mist), > 5 mg/l 4h.
ATE-mix, dermal, > 2000 mg/kg.
ATE-mix, oral, > 2000 mg/kg.
Substance
Mixture: 5-Chloro-2-methyl-2H-isothiazolin-3-one/2-Methyl-4-isothiazolin-3-one (3:1), CAS: 55965-84-9
LD50, dermal, Rabbit: ca. 100 mg/kg.
LD50, oral, Rat: ca. 66 mg/kg.
LC50, inhalative, Rat: 0,33 mg/l (4h).

<b>Serious eye damage/irritation</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Skin corrosion/irritation</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Respiratory or skin sensitisation</b>	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Specific target organ toxicity — single exposure</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Specific target organ toxicity — repeated exposure</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Mutagenicity</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Reproduction toxicity</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Carcinogenicity</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Aspiration hazard</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled.
<b>General remarks</b>	none

## SECTION 12: Ecological information

### 12.1 Toxicity

Substance
Mixture: 5-Chloro-2-methyl-2H-isothiazolin-3-one/2-Methyl-4-isothiazolin-3-one (3:1), CAS: 55965-84-9
LC50, (96h), Oncorhynchus mykiss: 0,22 mg/l.
EC50, (48h), Daphnia magna: 0,12 mg/l.

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	not determined
<b>Behaviour in sewage plant</b>	not determined
<b>Biological degradability</b>	not determined

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### 12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

### 12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

### 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

None known.

## 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

Coordinate disposal with the authorities if necessary.

#### Waste no. (recommended)

080120

#### 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

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

### 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"

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#### 14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

#### 14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

#### 14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

### SECTION 15: Regulatory information

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

EEC-REGULATIONS 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS DOT-Classification, ADR (2017); IMDG-Code (2017, 38. Amdt.); IATA-DGR (2017).

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4

- Observe employment restrictions for people none

- VOC (2010/75/CE) 0 %

#### 15.2 Chemical safety assessment

not applicable





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## SECTION 16: Other information

### 16.1 Hazard statements (SECTION 03)

H410 Very toxic to aquatic life with long lasting effects.  
 H400 Very toxic to aquatic life.  
 H317 May cause an allergic skin reaction.  
 H314 Causes severe skin burns and eye damage.  
 H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

### 16.2 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  
 ATE = acute toxicity estimate  
 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  
 LC0 = lethal concentration, 0%  
 LOAEL = lowest-observed-adverse-effect level  
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
 NOAEL = No Observed Adverse Effect Level  
 NOEC = No Observed Effect Concentration  
 PBT = Persistent, Bioaccumulative and Toxic substance  
 PNEC = Predicted No-Effect Concentration  
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
 STP = Sewage Treatment Plant  
 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

### 16.3 Other information

#### Classification procedure

#### Modified position

SECTION 4 been added: Irritant effects  
 SECTION 7 been added: Take off contaminated clothing and wash before reuse.  
 SECTION 7 been added: After worktime and before work breaks the affected skin areas must be thoroughly cleaned.  
 SECTION 8 been added: Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.  
 SECTION 9 been added: not self-igniting



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