

Fireshield, a division of Fire Protection Coatings Limited  
8013 Christchurch

Date printed 17.07.2023, Revision 19.10.2022

Version 3.0

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

**1.1 Product identifier**

**HENSOGRUND 2K EP Base**

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

**1.2.1 Relevant uses**

Basic coating

**1.2.2 Uses advised against**

None known.

**1.3 Details of the supplier of the safety data sheet**

**Company**

Fireshield, a division of Fire Protection Coatings Limited  
Level 1, 60 Cashel Street  
8013 Christchurch / NEW ZEALAND  
Phone 0800 FIRESHIELD (0800 347374)  
Homepage [www.fireshieldcoatings.com](http://www.fireshieldcoatings.com)  
E-mail [info@fireshieldcoatings.com](mailto:info@fireshieldcoatings.com)

**Address enquiries to**

**Technical information**

[info@fireshieldcoatings.com](mailto:info@fireshieldcoatings.com)

**Safety Data Sheet**

[sdb@chemiebuero.de](mailto:sdb@chemiebuero.de) (No dispatch of safety data sheets)  
Safety data sheets are available from the supplier.

**1.4 Emergency telephone number**

**Advisory body**

National Poison Centre (New Zealand): 0800 764 766 (24 hours)




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## SECTION 2: Hazards identification

<b>Approval</b>	This product is considered to be a hazardous substance to the Hazardous Substances and New Organisms Act (HSNO).	
<b>Hazard classifications</b>	flammable liquids Category 3 Skin irritation Category 2 Skin sensitisation Category 1 Skin irritation Category 2 specific target organ toxicity - single exposure Category 3 specific target organ toxicity - repeated exposure Category 2	
<b>Hazard pictograms</b>	  	
<b>Signal word</b>	WARNING	
<b>Hazard statements</b>	H226 Flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure.	
<b>Precautionary statements</b>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe vapours / spray. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves / protective clothing / eye protection / face protection. P333+P313 If skin irritation or rash occurs: Get medical advice / attention. P312 Call a POISON CENTER / doctor if you feel unwell. P501 Dispose of contents/container in accordance with local/regional/national/international regulation.	
<b>Other Classifications</b>	There are no other Classifications that are known to apply.	

## SECTION 3: Composition / Information on ingredients

**3.1 Substances**  
not applicable

**3.2 Mixtures**  
The product is a mixture.

Range [%]	Substance
15 - < 25	Reaction mass of ethylbenzene and xylene
1 - <10	Epoxidharz (Mol.-Gew. >700 - <=1100) CAS: 25036-25-3
1 - <10	Quartz (≤ 10µm) CAS: 14808-60-7

**Comment on component parts** For full text of H-statements: see SECTION 16.

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#### 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>	Remove the victim into fresh air and keep him calm. In the event of symptoms seek medical treatment.
<b>Skin contact</b>	In case of contact with skin wash off immediately 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>	Consult a doctor immediately. 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

Irritant effects  
Allergic reactions

##### 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>	Foam. Dry powder. Water spray jet. Carbon dioxide.
<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)  
Sulphur oxides (SO<sub>x</sub>).  
Nitrogen oxides (NO<sub>x</sub>).

##### 5.3 Advice for firefighters

Use self-contained breathing apparatus.  
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.  
Cool containers at risk with water spray jet.  
Collect contaminated firefighting water separately, must not be discharged into the drains.

#### SECTION 6: Accidental release measures

##### 6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.  
Ensure adequate ventilation.  
Use breathing apparatus if exposed to vapours/dust/aerosol.  
Use personal protective equipment (protective gloves, safety glasses, protective clothing).  
High risk of slipping due to leakage/spillage of product.

##### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.  
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

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### 6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand).  
Dispose of absorbed material in accordance with the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Provide good room ventilation even at ground level (vapours are heavier than air).  
Provide suitable vacuuming at the processing area.

Take precautionary measures against static discharges.  
Keep away from all sources of ignition - Refrain from smoking.  
Use explosion-proofed equipment/fittings and non-sparking tools.  
Vapours can form an explosive mixture with air.

Do not eat, drink, smoke or take drugs at work.  
Take off contaminated clothing and wash before reuse.  
Use barrier skin cream.  
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.  
Prevent penetration into the ground.  
Do not store together with oxidizing agents.  
Do not store together with food and animal food/diet.  
Keep container tightly closed.  
Keep container in a well-ventilated place.  
Protect from heat/overheating and from sun.  
Keep in a cool place. Store in a dry place.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

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## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

#### Ingredients with occupational exposure limits to be monitored (NZ)

not applicable

#### DNEL

Substance
Reaction mass of ethylbenzene and xylene
Industrial, inhalative (vapor), Long-term - systemic effects, 221 mg/m <sup>3</sup>
Industrial, inhalative (vapor), Acute - systemic effects, 442 mg/m <sup>3</sup>
Industrial, inhalative (vapor), Long-term - local effects, 221 mg/m <sup>3</sup>
Industrial, inhalative (vapor), Acute - local effects, 442 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 212 mg/kg bw/day
general population, inhalative (vapor), Long-term - systemic effects, 65.3 mg/m <sup>3</sup>
general population, inhalative (vapor), Acute - systemic effects, 260 mg/m <sup>3</sup>
general population, inhalative (vapor), Long-term - local effects, 65.3 mg/m <sup>3</sup>
general population, inhalative (vapor), Acute - local effects, 260 mg/m <sup>3</sup>
general population, dermal, Acute - local effects, 125 mg/kg bw/day
general population, oral, Long-term - systemic effects, 12.5 mg/kg bw/day

#### PNEC

Substance
Reaction mass of ethylbenzene and xylene
soil, 2.31 mg/kg soil dw
sediment (seawater), 12.46 mg/kg sediment dw
sediment (freshwater), 12.46 mg/kg sediment dw
sewage treatment plants (STP), 6.58 mg/L
seawater, 0.327 mg/L
freshwater, 0.327 mg/L

### 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 Viton, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
<b>Skin protection</b>	Solvent-resistant protective clothing (EN 340)
<b>Other</b>	Avoid contact with eyes and skin. Do not breathe vapour/spray. 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 high concentrations. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
<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.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	liquid
Color	light grey
Odor	characteristic
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not determined
Flash point [°C]	26
Flammability	not applicable
Lower explosion limit	1 Vol.%
Upper explosion limit	8 Vol.%
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/cm <sup>3</sup> ]	1.65-1.75 (20 °C / 68,0 °F)
Relative density	not determined
Bulk density [kg/m <sup>3</sup> ]	not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	2500 - 3500 mPas (20 °C) > 130 s 6mm (20°C)
Relative vapour density	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Auto-ignition temperature [°C]	not self-igniting
Decomposition temperature [°C]	not determined
Particle characteristics	not applicable

### 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

Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.  
Reactions with strong oxidizing agents, strong acids and alkalis.

### 10.4 Conditions to avoid

Strong heating.  
See SECTION 7

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#### 10.5 Incompatible materials

See SECTION 10.3.

#### 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 oral toxicity

Product
ATE-mix, oral, > 2000 mg/kg
Substance
Reaction mass of ethylbenzene and xylene
LD50, oral, Rat, 3523 - 4000 mg/kg

#### Acute dermal toxicity

Product
ATE-mix, dermal, > 2000 mg/kg
Substance
Reaction mass of ethylbenzene and xylene
LD50, dermal, Rabbit, 12126 mg/kg

#### Acute inhalational toxicity

Product
ATE-mix, inhalative, > 20 mg/l 4h
Substance
Reaction mass of ethylbenzene and xylene
LC50, inhalativ (vapour ), Rat, 6350 - 6700 ppm 4h

#### Serious eye damage/irritation

Irritant  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

Substance
Reaction mass of ethylbenzene and xylene
Eye, irritant

#### Skin corrosion/irritation

Irritant  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

Substance
Reaction mass of ethylbenzene and xylene
dermal, irritant

#### Respiratory or skin sensitisation

May cause an allergic skin reaction.  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

Substance
Reaction mass of ethylbenzene and xylene
dermal, non-sensitizing



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**Specific target organ toxicity —  
single exposure**

May cause respiratory irritation.  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

Substance
Reaction mass of ethylbenzene and xylene
inhalative, irritant

**Specific target organ toxicity —  
repeated exposure**

May cause damage to organs through prolonged or repeated exposure.  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

Substance
Reaction mass of ethylbenzene and xylene
NOAEL, oral, Rat, 250 mg/kg bw/day (chronic), adverse effect observed
NOAEC, inhalative, Rat, 3515 mg/m <sup>3</sup> (subchronic), adverse effect observed

**Mutagenicity**

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.

Substance
Reaction mass of ethylbenzene and xylene
in vivo, no adverse effect observed

**Reproduction toxicity**

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.

**- Fertility**

No information available.

**- Development**

Substance
Reaction mass of ethylbenzene and xylene
inhalative, Rat, 4698 mg/m <sup>3</sup> , no adverse effect observed

**Carcinogenicity**

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.

Substance
Reaction mass of ethylbenzene and xylene
NOAEL, oral, Rat, 500 mg/kg bw/day (chronic), no adverse effect observed

**Aspiration hazard**

Based on the available information, the classification criteria are not fulfilled.

**General remarks**

none

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## SECTION 12: Ecological information

### 12.1 Toxicity

Product

Based on the available information, the classification criteria are not fulfilled.

Substance

Reaction mass of ethylbenzene and xylene

LC50, (24h), Daphnia magna, 1 mg/l OECD 202

LC50, (96h), Oncorhynchus mykiss, 2.6 mg/l OECD 203

EC50, (72h), Selenastrum capricornutum, 2.2 mg/l OECD 201

NOEC, (21d), Invertebrates, 1.57 mg/l

### 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

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 Endocrine disrupting properties

Does not contain a relevant substance that meets the classification criteria.

### 12.7 Other adverse effects

None known.

## SECTION 13: Disposal considerations

**Restrictions** There are no product-specific restrictions. However, state and local disposal regulations may apply.

**Disposal method** Disposal of this product must comply with the requirements of state and local disposal regulations.

**Contaminated packaging** Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

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**SECTION 14: Transport information**

**14.1 UN number**

Transport by land according to ADR/RID 1263

Inland navigation (ADN) 1263

Marine transport in accordance with IMDG 1263

Air transport in accordance with IATA 1263

**14.2 UN proper shipping name**

Transport by land according to ADR/RID Paint (No dangerous goods, according ADR 2.2.3.1.5 to max. 450 l)

- Label



- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (D/E)

Inland navigation (ADN)

Paint (No dangerous goods, according ADR 2.2.3.1.5 to max. 450 l)

- Label



Marine transport in accordance with IMDG

Paint (No dangerous goods, according IMDG 2.3.2.5 to max. 30 l (see 5.4.1.5.10) - "transport in compliance with 2.3.2.5 of the IMDG Code")

- EMS

F-E, S-E

- Label



Air transport in accordance with IATA Paint

- Label



**14.3 Transport hazard class(es)**

Transport by land according to ADR/RID 3

Inland navigation (ADN) 3

Marine transport in accordance with IMDG 3

Air transport in accordance with IATA 3

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#### 14.4 Packing group

Transport by land according to ADR/RID III

Inland navigation (ADN) III

Marine transport in accordance with IMDG III

Air transport in accordance with IATA III

#### 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

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## SECTION 15: Regulatory information

This product is considered to be a hazardous substance to the Hazardous Substances and New Organisms Act (HSNO).

### Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

<b>MSDS</b>	The content and format of this Safety-Data-Sheet is in accordance with HSNO Approved Code of Practice.
<b>Labelling</b>	No removal of labels and/or decanting of product into other containers can occur.
<b>Emergency plan</b>	No information available.
<b>Approved handler</b>	No information available.
<b>Tracking</b>	No information available.
<b>Bunding &amp; secondary containment</b>	No information available.
<b>Signage</b>	No information available.
<b>Location test certificate</b>	No information available.
<b>Flammable zone</b>	No information available.
<b>Fire extinguisher</b>	No information available.

**Note:** No information available.

**Other Legislation** In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

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## SECTION 16: Other information

### 16.1 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  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
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  
LL50 = Median lethal loading  
LQ = Limited Quantities  
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

### 16.2 Other information

#### Classification procedure

flammable liquids Category 3: H226 Flammable liquid and vapour. (On basis of test data)  
Skin irritation Category 2: H315 Causes skin irritation. (Calculation method)  
Skin sensitisation Category 1: H317 May cause an allergic skin reaction. (Calculation method)  
Skin irritation Category 2: H319 Causes serious eye irritation. (Calculation method)  
specific target organ toxicity - single exposure Category 3: H335 May cause respiratory irritation. (Calculation method)  
specific target organ toxicity - repeated exposure Category 2: H373 May cause damage to organs through prolonged or repeated exposure. (Calculation method)

#### Modified position

none

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