

Fireshield, a division of Fire Protection Coatings Limited
8013 Christchurch

Date printed 04.07.2023, Revision 30.05.2022

Version 6.0

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

1.1 Product identifier

HENSOGGRUND 2K Hardener

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

1.2.1 Relevant uses

Primer

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
E-mail info@fireshieldcoatings.com

Address enquiries to

Technical information

info@fireshieldcoatings.com

Safety Data Sheet

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

Approval	This product is considered to be a hazardous substance to the Hazardous Substances and New Organisms Act (HSNO).
Hazard classifications	flammable liquids Category 3 skin irritation Category 2 skin irritation Category 2 specific target organ toxicity - single exposure Category 3 specific target organ toxicity - repeated exposure Category 2
Hazard pictograms	  
Signal word	WARNING
Hazard statements	H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	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. P312 Call a POISON CENTER / doctor if you feel unwell. P501 Dispose of contents/container in accordance with local/regional/national/international regulation.
Other Classifications	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
50 - 70	Fettsäuren, Tallöl-, Dimere, Polymere mit Tallölfettsäuren und Triethylentetramin CAS: 68915-18-4
35 - 50	Reaction mass of ethylbenzene and xylene

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

General information	Take off contaminated clothing and wash before reuse.
Inhalation	Remove the victim into fresh air and keep him calm. In the event of symptoms seek 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	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
Vertigo
Dizziness
If swallowed or in the event of vomiting, risk of product entering the lungs.

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	Water spray jet. Carbon dioxide. Foam. Dry powder.
Extinguishing media that must not be used	Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

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.

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/aerosol.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

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.

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.

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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.
Use solvent-resistant equipment.

Vapours can form an explosive mixture with air.
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.
Ignitable mixtures can be formed in the empty container.

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

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
Keep only in original container.

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.

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 ³
Industrial, inhalative (vapor), Acute - systemic effects, 442 mg/m ³
Industrial, inhalative (vapor), Long-term - local effects, 221 mg/m ³
Industrial, inhalative (vapor), Acute - local effects, 442 mg/m ³
Industrial, dermal, Long-term - systemic effects, 212 mg/kg bw/day
general population, inhalative (vapor), Long-term - systemic effects, 65.3 mg/m ³
general population, inhalative (vapor), Acute - systemic effects, 260 mg/m ³
general population, inhalative (vapor), Long-term - local effects, 65.3 mg/m ³
general population, inhalative (vapor), Acute - local effects, 260 mg/m ³
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

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8.2 Exposure controls

Additional advice on system design	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.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	For short-term contact: 0.4mm Butyl rubber, >480 min (EN 374-1/-2/-3). 0.4mm Nitrile rubber, >480 min (EN 374-1/-2/-3). In full contact: 0.4mm Viton, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Solvent-resistant protective clothing (EN 340)
Other	Avoid contact with eyes and skin. Do not inhale gases/vapours/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.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	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	various
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	137
Flash point [°C]	24 (DIN 53213)
Flammability	not applicable
Lower explosion limit	0.9 Vol.-%
Upper explosion limit	7.8 Vol.-%
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	1.0 (20°C)
Density [g/cm ³]	0.94 (DIN 53217) (20 °C / 68,0 °F)
Relative density	not determined
Bulk density [kg/m ³]	not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	135 s / 4 mm (20 °C) (DIN 53211)
Relative vapour density	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Auto-ignition temperature [°C]	465
Decomposition temperature [°C]	not applicable
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.
Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.

10.4 Conditions to avoid

See SECTION 7

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10.5 Incompatible materials

Strong basic compounds
Strong oxidizing agent.
strong acids

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
Fettsäuren, Tallöl-, Dimere, Polymere mit Tallölfettsäuren und Triethylentetramin, CAS: 68915-18-4
LD50, oral, Rat, > 2000 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, inhalativ (vapour), > 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

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
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 ³ (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 ³ , 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

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

Contains no ingredients with endocrine-disrupting properties.

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.

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 1263

Air transport in accordance with IATA 1263

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14.2 UN proper shipping name

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG Paint related material, 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 related material

- Label



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 3

Air transport in accordance with IATA 3

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

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

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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

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:

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