

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Junckers Hardener, for HP lacquers and LV SportSeal

Product no.

980

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture

Finishing of wood floors, interior. For professional users only.

Uses advised against

-

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

Junckers Industrier A/S

Vaerftsvej 4

4600 Koege

Denmark

Tel.: +45 7080 3000

Contact person

Kirsten Andersen

E-mail

productsafety@junckers.dk

SDS date

2018-03-05

SDS Version

6.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Sens. 1; H317

Acute Tox. 4; H332

STOT SE 3; H335

Aquatic Chronic 3; H412

See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

According to EC-Regulation 2015/830

Signal word

Warning

Hazard statement(s)

May cause an allergic skin reaction. (H317)
 Harmful if inhaled. (H332)
 May cause respiratory irritation. (H335)
 Harmful to aquatic life with long lasting effects. (H412)

Safety statement(s)

General -
Prevention Avoid breathing mist/vapours/fume/spray. (P261).
 Wear protective gloves/eye protection. (P280).
Response Call a POISON CENTER/doctor if you feel unwell. (P312).
Storage Store in a well-ventilated place. Keep container tightly closed. (P403+P233).
Disposal Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

Hydrophilic, alifatic polyisocyanate, Hexamethylene-1,6-diisocyanate

▼ 2.3. Other hazards

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Additional labelling

Contains isocyanates. May produce an allergic reaction. (EUH204)

Additional warnings

Not applicable

VOC

VOC-MAX: 370 g/l, MAXIMUM VOC CONTENT (A/j (SB)): 500 g/l.

SECTION 3: Composition/information on ingredients

▼ 3.1/3.2. Substances/Mixtures

NAME: Hydrophilic, alifatic polyisocyanate
 IDENTIFICATION NOS.: CAS-no: 160994-68-3 EC-no: (679-501-7)
 CONTENT: 60-80%
 CLP CLASSIFICATION: Skin Sens. 1B, Acute Tox. 4, STOT SE 3, Aquatic Chronic 3
 H317, H332, H335, H412
 NOTE: P

NAME: Hexamethylene-1,6-diisocyanate
 IDENTIFICATION NOS.: CAS-no: 822-06-0 EC-no: 212-485-8 REACH-no: 01-2119457571-37-xxxx Index-no: 615-011-00-1
 CONTENT: <0.1%
 CLP CLASSIFICATION: Acute Tox. 4, Skin Corr. 1C, Skin Sens. 1, Eye Dam. 1, Acute Tox. 1, Resp. Sens. 1,
 STOT SE 3
 H302, H314, H317, H318, H330, H334, H335
 NOTE: IS

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.
 S = Organic solvent P = Prepolymer isocyanate I = Isocyanate monomer

Other information

ATEmix(inhale, vapour) > 20
 ATEmix(inhale, dust/mist) = 1,848 -
 ATEmix(oral) > 2000
 N chronic (CAT 3) Sum = $\sum(C_i/(M(\text{chronic})^i \cdot 25) \cdot 0.1 \cdot 10^{\wedge} \text{CAT}_i) = 2,08 - 3,12$

SECTION 4: First aid measures

4.1. Description of first aid measures

▼ General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.
 The doctor can contact The National Poisons Information Service (dial 111, 24 h service).
 Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an

According to EC-Regulation 2015/830

unconscious person water or other drink.

Inhalation

Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable

▼ 4.2. Most important symptoms and effects, both acute and delayed

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Sensitisation: This product contains substances, which may produce an allergic reaction through inhalation. The allergic reaction is typically taking place within an hour subsequent to exposure. The reaction results in an inflammatory reaction to the lungs.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

Call a POISON CENTER/doctor if you feel unwell.

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Nitrogen oxides. Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

▼ 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from spilled material.

According to EC-Regulation 2015/830

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

Room temperature 18 to 23°C (Storage on stock, 3 to 8°C)

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

▼ OEL

Hexamethylene-1,6-diisocyanate

Long-term exposure limit (8-hour TWA reference period): - ppm | 0,02 mg/m³

Short-term exposure limit (15-minute reference period): - ppm | 0,07 mg/m³

Comments: Sen (Sen = Capable of causing respiratory sensitisation.)

DNEL / PNEC

No data available

8.2. Exposure controls

▼ Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

▼ Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

▼ Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment



Generally

Use only CE marked protective equipment.

In case of hypersensitive airways and skin (asthma, chronic bronchitis, chronic skin diseases) it is not advisable to work with the product.

Respiratory Equipment

In case of insufficient ventilation in the workplace and by spray application, respiratory protection is required. It is recommended to use an self-contained breathing mask. For short-term work, a combination filter A2-P2 is recommended.

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

Hand protection

Recommended: Butyl rubber. Breakthrough time: > 480 minutes (Class 6)

Material thickness: $\geq 0,5$ mm.

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Clear
Odour	Faint
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	86 mm ² /s
Density (g/cm ³)	1,06

Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	175
Vapour pressure (20°C)	15 hPa
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.

9.2. Data on fire and explosion hazards

Flash point (°C)	61
Ignition (°C)	300
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.

Solubility

Solubility in water	Insoluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	No data available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

Curing time 24 h.

According to EC-Regulation 2015/830

10.3. Possibility of hazardous reactions

Nothing special

10.4. Conditions to avoid

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

▼ Acute toxicity

Substance: Hexamethylene-1,6-diisocyanate
Species: Rat
Test: LD50
Route of exposure: Dermal
Result: 593 mg/kg

Substance: Hexamethylene-1,6-diisocyanate
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 746 mg/kg

Substance: Hydrophilic, alifatic polyisocyanate
Species: Rabbit
Test: LC50
Route of exposure: Inhalation
Result: 0,390 mg/l (4 h) (dust/mist)

Substance: Hydrophilic, alifatic polyisocyanate
Species: Rat
Test: LD50
Route of exposure: Dermal
Result: > 2000 mg/kg

Substance: Hydrophilic, alifatic polyisocyanate
Species: Rat
Test: LD50
Route of exposure: Oral
Result: > 2000 mg/kg

Skin corrosion/irritation

Data on substance: Hydrophilic, alifatic polyisocyanate
Test: OECD Guideline 404
Organism: Rabbit
Result: slightly irritating

Serious eye damage/irritation

Data on substance: Hydrophilic, alifatic polyisocyanate
Test: OECD TG 405
Organism: Rabbit
Result: slightly irritating

▼ Respiratory or skin sensitisation

Data on substance: Hydrophilic, alifatic polyisocyanate
Test: OECD Guideline 406
Organism: Guinea pig
Result: Positiv

May cause an allergic skin reaction.

Sensitisation: This product contains substances, which may produce an allergic reaction through inhalation. The allergic reaction is typically taking place within an hour subsequent to exposure. The reaction results in an inflammatory reaction to the lungs.

Germ cell mutagenicity

Data on substance: Hydrophilic, alifatic polyisocyanate

According to EC-Regulation 2015/830

Test: Ames test
Organism: Bacteria
Result: No indication of mutagenicity

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

▼ Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

▼ 12.1. Toxicity

Substance: Hydrophilic, alifatic polyisocyanate
Species: Fish
Test: LC50
Duration: 96 h
Result: 28,3 mg/l

Substance: Hydrophilic, alifatic polyisocyanate
Species: Daphnia
Test: EC50
Duration: 48 h
Result: > 100 mg/l

Substance: Hydrophilic, alifatic polyisocyanate
Species: Algae
Test: ErC50
Duration: 72 h
Result: > 100 mg/l

▼ 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Hexamethylene-1,6-diisocyanate	No	Manometric Respirometry Test	42%
Hydrophilic, alifatic polyisocyanate	No	Manometric Respirometry Test	2 %

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
No data available.			

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

Isocyanate reacts with water on the interface to form CO₂ and a solid, insoluble reaction product with high melting point (polyurea). This reaction is rapidly accelerated by surfactants or water soluble solvents.

Polyurea is inert and not degradable.

12.6. Other adverse effects

This product contains substances, which due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

08 01 11

waste paint and varnish containing organic solvents or other dangerous substances

Specific labelling

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Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

14.1. UN number -
 14.2. UN proper shipping name -
 14.3. Transport hazard class(es) -
 14.4. Packing group -
 Notes -
 Tunnel restriction code -

IMDG

UN-no. -
 Proper Shipping Name -
 Class -
 PG* -
 EmS -
 MP** -
 Hazardous constituent -

IATA/ICAO

UN-no. -
 Proper Shipping Name -
 Class -
 PG* -

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

(*) Packing group

(**) Marine pollutant

SECTION 15: Regulatory information

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

▼ Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

According to EC-Regulation 2015/830

Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

Additional information

Not applicable

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Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).

EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼ Full text of H-phrases as mentioned in section 3

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H330 - Fatal if inhaled.

H332 - Harmful if inhaled.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 - May cause respiratory irritation.

H412 - Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

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Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

shcw/chymeia

According to EC-Regulation 2015/830

**Date of last essential change
(First cipher in SDS version)**

2017-08-15(5.0)

**Date of last minor change
(Last cipher in SDS version)**

2017-08-15

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