

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Junckers HP Hardener

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

Hardener for 2-component surface treatment of floors

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 70 80 30 00

Contact person**E-mail**

productsafety@junckers.dk

SDS date

2020-03-26

SDS Version

7.0

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)**Signal word**

According to EC-Regulation 2015/830

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)

▼ Precautionary statements

- General** -
- Prevention**
 - Avoid breathing vapours. (P261).
 - Avoid release to the environment. (P273).
 - Wear protective clothing/protective gloves. (P280).
- Response**
 - Call a POISON CENTER/doctor if you feel unwell. (P312).
 - If skin irritation or rash occurs: Get medical advice/attention. (P333+P313).
- Storage**
 - Store in a well-ventilated place. Keep container tightly closed. (P403+P233).
- Disposal** -

▼ Identity of the substances primarily responsible for the major health hazards

Hydrophilic, alifatic polyisocyanate; Hexamethylene-1,6-di-isocyanate

Additional labelling

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

Unique formula identifier (UFI)

35Q2-E0P7-U001-3CWP

▼ 2.3. Other hazards

Not applicable

Additional warnings

Not applicable

▼ VOC (volatile organic compound)

VOC-Max: 110 g/l, MAXIMUM VOC CONTENT (A/j (WB)): 140 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
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-di-isocyanate
IDENTIFICATION NOS.:	CAS-no: 822-06-0 EC-no: 212-485-8 REACH-no: 01-2119457571-37 Index-no: 615-011-00-1
CONTENT:	<0.1%
CLP CLASSIFICATION:	Acute Tox. 4, Skin Irrit. 2, Skin Sens. 1, Eye Irrit. 2, Acute Tox. 1, Resp. Sens. 1, STOT SE 3 H302, H315, H317, H319, H330, H334, H335
NOTE:	I O

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

Other information

- ATEmix(inhale, vapour) > 20
- ATEmix(inhale, dust/mist) = 1,8464 -
- 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

According to EC-Regulation 2015/830

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 0344 892 0111 (24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an 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 and open eyes widely. Flush eyes with water or saline water (20-30 °C) for at least 15 minutes. Seek medical assistance and 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

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: 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.

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.

According to EC-Regulation 2015/830

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

Store in cool, dry conditions in well sealed receptacles.

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-di-isocyanate

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

DNEL (Hexamethylene-1,6-di-isocyanate): 35 µg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Local effects - Workers

DNEL (Hexamethylene-1,6-di-isocyanate): 70 µg/m³

Exposure: Inhalation

Duration of Exposure: Short term – Local effects - Workers

PNEC (Hexamethylene-1,6-di-isocyanate): 8,42 mg/l

Exposure: Sewage Treatment Plant

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

According to EC-Regulation 2015/830

No specific requirements.

Individual protection measures, such as personal protective equipment



▼ **Generally**

Use only CE marked protective equipment.

▼ **Respiratory Equipment**

Recommended: Self-contained breathing apparatus. For small surfaces: Gas filter type A.

▼ **Skin protection**

Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester. Chemical resistant suit with helmet/hood (Type 4, 5, 6 Category III) is recommended for spray applications.

▼ **Hand protection**

Butyl rubber

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	Colourless
Odour	Faint
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm ³)	1,06

▼ **Phase changes**

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

▼ **Data on fire and explosion hazards**

Flash point (°C)	61
Ignition (°C)	No data available.
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.
-------------------------	--------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

▼ **10.2. Chemical stability**

The product is stable under the conditions, noted in the section "Handling and storage".

10.3. Possibility of hazardous reactions

Nothing special

▼ **10.4. Conditions to avoid**

According to EC-Regulation 2015/830

Nothing special

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-di-isocyanate

Species: Rat

Test: LD50

Route of exposure: Oral

Result: 746 mg/kg

Substance: Hexamethylene-1,6-di-isocyanate

Species: Rat

Test: LC50

Route of exposure: Inhalation

Result: 0,124 mg/l

Substance: Hydrophilic, alifatic polyisocyanate

Species: Rat

Test: LC50

Route of exposure: Inhalation

Result: 0,39 mg/l

▼ Skin corrosion/irritation

No data available.

▼ Serious eye damage/irritation

No data available.

▼ Respiratory or skin sensitisation

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

No data available.

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

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: Danio rerio

Test: LC50

Duration: 96 h

Result: 28,3 mg/l

▼ 12.2. Persistence and degradability

According to EC-Regulation 2015/830

Substance	Biodegradability	Test	Result
Hexamethylene-1,6-di-isocyanat...	No	Manometric Resp. Test	42 %
Hydrophilic, alifatic polyisocy...	No	Manometric Resp. Test	2 %

▼ 12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
Hexamethylene-1,6-di-isocyanat...	No	3,2	58

▼ 12.4. Mobility in soil

Hexamethylene-1,6-di-isocyanat...: Log Koc= 2,61248, Calculated from LogPow (Moderate mobility potential.).

▼ 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

▼ 12.6. Other adverse effects

This product contains substances, which 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

Not applicable

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

-

According to EC-Regulation 2015/830

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.

Demands for specific education

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

Additional information

Not applicable

Seveso

-

Biocidal reg. no.

Not applicable

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).

Regulation (EC) 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.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

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

-

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)

According to EC-Regulation 2015/830

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

ULS

Date of last essential change

(First cipher in SDS version)

2018-03-05(6.0)

Date of last minor change

(Last cipher in SDS version)

2018-03-05