SAFETY DATA SHEET

In accordance with 1907/2006 annex II and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)
Issued 2023-05-30
Version number 1.0

HOZON FINISHES

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

1.1. Product identifier

Trade name	Rapid Hardener 2C
CAS No	28182-81-2
EC No	500-060-2
REACH registration number	01-2119488934-20-0000

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

Identified uses	Surface treatment of wood

1.3. Details of the supplier of the safety data sheet

Company	Hozon Trading Co. AB Tryvägen 29 51335 Fristad Sweden
Telephone	+46 (0) 735126263
E-mail	hozonfinishes@gmail.com

1.4. Emergency telephone number

Phone number for emergencies: 999 or 112. The numbers are available 24/7.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin. Sens. 1, H317
Acute Tox. 4, H332
STOT SE 3, H335
(See section 16)

2.2. Label elements

Hazard pictogram

Signal word	Warning
Hazard statements	
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H335	May cause respiratory irritation
Precautionary statements	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P261	Avoid breathing dust, fume, mist, vapours,or spray
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves
P312	Call a POISON CENTER if you feel unwell
P405	Store locked up
P501	Dispose of contents and container to authorised waste disposal facility

Supplemental hazard information

Contains: HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER, HEXAMETHYLENE-DI-ISOCYANATE

2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

The product does not contain any substances identified as having endocrine disruptive properties in accordance with the criteria set out in (EU) 2017/2100 or (EU) 2018/605.

As from 24 August 2023 adequate training is required before industrial or professional use.

SECTION 3: Composition/information on ingredients

3.1. Substances

Constituent	Classification	Concentration
HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER		
CAS No: 28182-81-2 EC No: 500-060-2 REACH: 01-2119488934-20-0000	Acute Tox. 4, Skin. Sens. 1, STOT SE 3; H332, H317, H335	≈100 %
HEXAMETHYLENE-DI-ISOCYANATE		
CAS No: 822-06-0 EC No: 212-485-8 Index No: 615-011-00-1 REACH: 01-2119457571-37	Acute Tox. 1, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin. Sens. 1, STOT SE 3; H330, H302, H315, H319, H334, H317, H335	<0.25 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: First aid measures

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms occur, call a doctor/physician.

Upon breathing in

Bring the injured person out into fresh air. Give artificial respiration if breathing has stopped. If breathing is difficult let trained personnel administer oxygen. Let the injured person rest in a warm place with fresh air and seek medical advice immediately.

Upon eye contact

Remove contact lenses immediately if possible.

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor/ophthalmologist.

Upon skin contact

Remove contaminated clothing.

Wash the skin with soap and water.

If symptoms occur, contact a physician.

Wash contaminated clothing before reuse.

Upon ingestion

Rinse nose, mouth and throat with water.

Contact a doctor.

DO NOT induce vomiting.

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

Upon breathing in

May cause respiratory irritation.

Harmful if inhaled.

May cause allergy or asthma symptoms or breathing difficulties.

Upon skin contact

Rash and itching.

Allergic reactions.

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

Symptomatic treatment.

Upon contact with a doctor, make sure to have the label or this safety data sheet with you.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Recommended extinguishing agents

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

Unsuitable extinguishing agents

May not be extinguished with water dispersed under high pressure.

5.2. Special hazards arising from the substance or mixture

In the event of fire carbon oxides, nitrogen oxides, and traces of cyanide may be produced.
In case of fire, high pressure may build up causing the packaging to explode.

5.3. Advice for firefighters

Protective measures should be taken regarding other material at the site of the fire.
In case of fire use proper breathing apparatus.
Wear full protective clothing.
Cool closed containers that were exposed to fire with water.
Contain and collect extinguishing liquid.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep unauthorized and unprotected people at a safe distance.
Avoid inhalation and exposure to skin and eyes.
Use recommended safety equipment, see section 8.
Switch off equipment which has an exposed flame, glows, or has a heat source of some other kind.
Ensure good ventilation.
Use breathing apparatus when oxygen levels are low or unknown.

6.2. Environmental precautions

Avoid release to drains, soil or watercourses.

6.3. Methods and material for containment and cleaning up

Absorb the liquid with an inert absorbent, vermiculite, for example. Collect the material for disposal at a waste disposal facility.
Residues left behind after cleaning shall be treated as hazardous waste. For further information, contact the local authority sanitisation works. Present this safety data sheet.
Ensure good ventilation after sanitation.

6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Take the necessary preventive and protective measures for safe handling.
The product must only be handled by persons with relevant training.
Store this product separately from food items and keep it out of the reach of children and pets.
Avoid spillage, inhalation and contact with eyes and skin.
Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.
Do not eat, drink or smoke in premises where this product is handled.
Wash your hands after using the product.
Remove contaminated clothing.
Wash contaminated clothing before reuse.
Keep away from incompatible products.
Use recommended safety equipment, see section 8.
Implement appropriate engineering controls if necessary, see Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Take the necessary preventive and protective measures for safe storage.
The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.
Store separately from food and animal fodder, incl. utensils or surfaces which have been in contact with these things.
Keep out of reach for children.
Always use sealed and visibly labeled packages.
Store tightly, in original packaging.
Store in a well-ventilated and locked place.
Store in dry and cool area.
Do not store close to incompatible materials (see section 10.5).

7.3. Specific end use(s)

See identified uses in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

Isocyanates, all (as –NCO) except methyl isocyanate

United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 0.02 mg/m^3
Short term exposure limit (STEL) 0.07 mg/m^3
Note Sen

Explanations of abbreviations are given in Section 16b

DNEL

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

	Type of exposure	Route of exposure	Value
Worker	Acute Local	Inhalation	1 mg/m^3
Worker	Acute Systemic	Inhalation	1 mg/m^3
Worker	Chronic Local	Inhalation	0.5 mg/m^3
Worker	Chronic Systemic	Inhalation	0.5 mg/m^3

HEXAMETHYLENE-DI-ISOCYANATE

	Type of exposure	Route of exposure	Value
Worker	Acute Local	Inhalation	0.07 mg/m^3
Worker	Acute Systemic	Inhalation	0.07 mg/kg bw
Worker	Chronic Local	Inhalation	0.035 mg/kg bw
Worker	Chronic Systemic	Inhalation	0.035 mg/m^3

PNEC

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

Environmental protection target	PNEC value
Fresh water	0.127 mg/L
Freshwater sediments	267000 mg/kg dw
Microorganisms in sewage treatment	38.3 mg/L
Soil (agricultural)	53200 mg/kg dw

HEXAMETHYLENE-DI-ISOCYANATE

Environmental protection target	PNEC value
Fresh water	0.075 mg/L
Soil (agricultural)	0.0027 mg/kg dw

8.2. Exposure controls

The risks posed by the product or its constituents must be considered in the task specific risk assessment, in accordance with current working environment legislation. The risk assessment should be reviewed regularly and updated if necessary.

8.2.1. Appropriate engineering controls

The ventilation in the workplace must ensure an air quality that meets the requirements of the current working environment legislation. Local exhaust ventilation should be used to remove airborne contaminants at the source.

Eye/face protection

Use protective glasses with tight seals according to standard EN166.

Skin protection

Use suitable protective clothing.

Use protective gloves fulfilling the standard EN374 if there is a risk of direct contact.

During continuous contact use gloves with a minimum breakthrough time of at least 240 minutes, preferably over 480 minutes.

The most suitable protective glove should be chosen in consultation with the glove supplier, taking into account the risk assessment for the specific task and the properties of the chemicals involved. Note that the breakthrough time of the material is affected by the duration of the exposure, temperature conditions, abrasion, etcetera.

Based on the chemical properties of the product, the following glove materials are recommended (EN 374):.

– Butyl rubber.

– Fluoro rubber FKM.

– Polymer laminate.

Respiratory protection

Use appropriate respiratory protective equipment in case of insufficient ventilation.

The most appropriate respiratory protective equipment should be decided in consultation with the appointed safety representative, taking into account the risk assessment for the specific task.

Based on the physical and chemical properties of the product, the following filter type(s) and/or filter combination(s) are recommended:.

– A2/P2.

8.2.3. Environmental exposure controls

Work with the product should take place in such a way that the product does not get into drains, waterways, soil and air.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state	liquid Form: liquid
(b) Colour	colourless
(c) Odour	weak smell
(d) Melting point/freezing point	Not indicated
(e) Boiling point or initial boiling point and boiling range	Not indicated
(f) Flammability	Not indicated
(g) Lower and upper explosion limit	Not indicated
(h) Flash point	≈203 °C
(i) Auto-ignition temperature	≈440 °C
(j) Decomposition temperature	≈150 °C
(k) pH	Not indicated
(l) Kinematic viscosity	Not indicated
(m) Solubility	Solubility in water: Insoluble
(n) Partition coefficient n-octanol/water (log value)	8.38
(o) Vapour pressure	<0.00001 hPa (20°C)
(p) Density and/or relative density	≈1.15 g/cm^3 (20°C)
(q) Relative vapour density	Not indicated
(r) Particle characteristics	Not indicated

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not indicated

9.2.2. Other safety characteristics

Not indicated

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No data available.

10.3. Possibility of hazardous reactions

Exothermic reaction with amines and alcohols.

Isocyanates react slowly with water forming carbon dioxide. Risk of pressure build-up in closed containers and possible explosion hazard.

10.4. Conditions to avoid

Protect from moisture.

Protect from heat and direct sunlight.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Not indicated.

Acute toxicity

Harmful when inhaled.

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

LD50 rabbit 24h: 2001 mg/kg Dermally
LD50 rat 24h: 2501 mg/kg Orally

HEXAMETHYLENE-DI-ISOCYANATE

LD50 rat 24h: 593 mg/kg Dermally
LC50 rat 4h: 0.124 mg/l Inhalation
LD50 rat 24h: 738 mg/kg Orally

Skin corrosion/irritation

The product is not classified for skin corrosion/irritation.

Serious eye damage/irritation

The product is not classified for serious eye damage/eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.
Risk for allergic reactions and respiratory sensibility (asthma) in sensitive persons.

Germ cell mutagenicity

The product is not classified as mutagen.

Carcinogenicity

The product is not classified as carcinogenic.

Reproductive toxicity

The product is not classified as a reproductive toxicant.

STOT-single exposure

May cause potent irritation in the airways/lungs.

STOT-repeated exposure

The product is not classified for specific organ toxicity after repeated exposure.

Aspiration hazard

The product is not classified as being toxic for aspiration.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

The product does not contain any substances identified as having endocrine disruptive properties in accordance with the criteria set out in (EU) 2017/2100 or (EU) 2018/605.

11.2.2. Other information

Not indicated.

SECTION 12: Ecological information

12.1. Toxicity

Prevent release on land, in water and drains.
The product is not to be labelled as a environmental hazard. However, it is not inconceivable that large emissions, or repeated small emissions, can have a harmful effect on the environment.

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

EC50 Freshwater water flea (Daphnia magna) 48 h: 127 mg/l
EC50 Algae 72 h: 1001 mg/l
LC50 Fish 96h: 100 mg/l

HEXAMETHYLENE-DI-ISOCYANATE

EC50 Freshwater water flea (Daphnia magna) 48 h: 89.2 mg/l
EC50 Algae 72 h: 77.5 mg/l
LC50 Fish 96h: 82.9 mg/l

12.2. Persistence and degradability

The product is not expected to be readily degradable.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

The product is not soluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties

The product does not contain any substances identified as having endocrine disruptive properties in accordance with the criteria set out in (EU) 2017/2100 or (EU) 2018/605.

12.7. Other adverse effects

No known effects or hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste handling of the product

Avoid discharge into sewers.
Discarded products must be disposed of as hazardous waste in accordance with regulations.
Not completely emptied packaging can contain remnants of dangerous substances and should therefore be handled as hazardous waste according to the above. Completely emptied packaging can be recycled.
See directive 2008/98/EC on waste. Observe national or regional provisions on waste management.

SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number or ID number

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

14.8 Other transport information

Not applicable

SECTION 15: Regulatory information

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

The product is subject to restrictions. REACH annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles.

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.

15.2. Chemical safety assessment

Not indicated.

SECTION 16: Other information

16a. Indication of where changes have been made to the previous version of the safety data sheet
Revisions of this document

This is the first version

16b. Legend to abbreviations and acronyms used in the safety data sheet
Full texts for Hazard Class and Category Code mentioned in section 3

Acute Tox. 4	Acute toxicity (inhal.), Hazard Category 4 - Acute Tox. 4, H332 - Harmful if inhaled
Skin. Sens. 1	Respiratory or skin sensitisation, Sensitisation — Skin, hazard category 1 - Skin. Sens. 1, H317 - May cause an allergic skin reaction
STOT SE 3	Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation - STOT SE 3, H335 - May cause respiratory irritation
Acute Tox. 1	Acute toxicity (inhal.), Hazard Category 1 - Acute Tox. 1, H330 - Fatal if inhaled
Skin Irrit. 2	Skin corrosion/irritation, Hazard Category 2 - Skin Irrit. 2, H315 - Causes skin irritation
Eye Irrit. 2	Serious eye damage/eye irritation, Hazard Category 2 - Eye Irrit. 2, H319 - Causes serious eye irritation
Resp. Sens. 1	Respiratory or skin sensitisation, Sensitisation — Respiratory, hazard category 1 - Resp. Sens. 1, H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Explanations of the abbreviations in Section 8
United Kingdom (EH40/2005 (Third edition, published 2018))

Sen	Capable of causing occupational asthma

Explanations of the abbreviations in Section 14

ADR	European Agreement concerning the International Transport of Dangerous Goods by Road
RID	Regulations concerning the International Transport of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods Code
ICAO	International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)
IATA	The International Air Transport Association

16c. Key literature references and sources for data
Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I , as updated to 2023-05-30.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

1907/2006	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
1272/2008	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
EH40/2005	EH40/2005 Workplace exposure limits
2008/98/EC	DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19

November 2008 on waste and repealing certain Directives

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I , where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI .

16e. List of relevant hazard statements and/or precautionary statements
Full texts for hazard statements mentioned in section 3

H332 Harmful if inhaled
H317 May cause an allergic skin reaction
H335 May cause respiratory irritation
H330 Fatal if inhaled
H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment
Warning for misuse

Not indicated.

Other relevant information

Not indicated

Editorial information

This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, www.kemrisk.se