

SECTION 1: Identification of the substance/mixture and of the company/undertaking:**1.1 Product identifier:**

ProFast Topcoat 705-AS hardener

UFI: /

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

/

Concentration in use: /

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

Duizeldonksestraat 44

NL5705CA HELMOND (NEDERLAND)

Phone: 0031492547665 – E-mail: jw.koolen@prokol.nl – Website: <http://www.prokol.nl/>**1.4 Emergency telephone number:**

+31 88 755 8000 Nationaal Vergiftigingen Informatie Centrum (NVIC) (Uitsluitend bestemd om professionele hulpverleners te informeren bij acute vergiftigingen.)

SECTION 2: Hazards identification:**2.1 Classification of the substance or mixture:**

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008

H317 Skin Sens. 1 H332 Acute tox. 4 H335 STOT SE 3**2.2 Label elements:**

Pictograms



Signal word

Warning

Hazard statements

H317 Skin Sens. 1: May cause an allergic skin reaction.
H332 Acute tox. 4: Harmful if inhaled.
H335 STOT SE 3: May cause respiratory irritation.

Precautionary statements

P261: Avoid breathing dust/vapours/spray.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER or doctor if you feel unwell.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Contains

Hexamethylene diisocyanate, oligomers

2.3 Other hazards:

None

SECTION 3: Composition/information on ingredients:

Hexamethylene diisocyanate, oligomers	≤ 100 %	CAS number: 28182-81-2 EINECS: 500-060-2 REACH Registration number: 01-2119485796-17 CLP Classification: H317 Skin Sens. 1 H332 Acute tox. 4 H335 STOT SE 3
diisopropyl-1,1'-biphenyl	≤ 5 %	CAS number: 69009-90-1 EINECS: 273-683-8 REACH Registration number: / CLP Classification: H304 Asp. Tox. 1 H373 STOT RE 2 H413 Aquatic Chronic 4

For the full text of the H phrases mentioned in this section, see section 16.

SECTION 4: First aid measures:

4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

Skin contact: Remove contaminated clothing, rinse skin with plenty of water, if necessary seek medical attention.
Eye contact: Thoroughly rinse with water (contact lenses to be removed if this is easily done) then take to physician.
Ingestion: Rinse mouth, do not induce vomiting, take to hospital immediately.
Inhalation: Let sit upright, fresh air, rest and take to hospital.

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

Skin contact:	Redness, pain
Eye contact:	Redness, pain, blurred vision
Ingestion:	Diarrhoea, headache, abdominal cramps, sleepiness, vomiting
Inhalation:	Sore throat, cough, shortness of breath, headache

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

None

SECTION 5: Fire-fighting measures:

5.1 Extinguishing media:

CO₂, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

None

5.3 Advice for firefighters:

Extinguishing agents to be avoided: None

SECTION 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

6.2 Environmental precautions:

Do not allow to flow into sewers or open water.

6.3 Methods and material for containment and cleaning up:

Contain released substance, store into suitable containers. If possible, remove by using absorbent material.

6.4 Reference to other sections:

For further information, check sections 8 & 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Handle with care to avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in a sealed container in a closed, frost-free, ventilated room.

7.3 Specific end use(s):

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SECTION 8: Exposure controls/personal protection:

8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the workplace exposure limit values are known

Hexamethylene diisocyanate, oligomers 1 mg/m³ (F)

8.2 Exposure controls:

Inhalation protection:	If necessary, use an air-purifying face mask in case of respiratory hazards.	
Skin protection:	Handling with Viton-gloves (EN 374). Breakthrough time: >480' Material thickness: 0,7 mm. Thoroughly check gloves before use. Take of the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
Eye protection:	Keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	
Other protection:	Wear impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	
Environmental controls:	Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions. For further information, check sections 6 and 13.	
Engineering controls:	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Adequate ventilation should be provided so that exposure limits are not exceeded. For further information, check section 7.	

SECTION 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

Appearance/20°C:	Liquid
Colour:	colourless
Odour:	characteristic
Melting point/melting range:	/
Boiling point/Boiling range:	82 °C – 285 °C
Flammability (solid, gas):	Not applicable
Lower flammability or explosive limit, (Vol %):	1.000 %
Upper flammability or explosive limit, (Vol %):	15.000 %
Flash point:	/
Auto-ignition temperature:	370 °C
Decomposition temperature:	/
pH:	/
pH 1% diluted in water:	/
Kinematic viscosity, 40°C:	1 mm ² /s
Solubility in water:	Not soluble
Partition coefficient: n-octanol/water:	Not applicable

Vapour pressure/20°C,:	1,420 Pa
Relative density, 20°C:	1.1300 kg/l
Vapour density:	Not applicable
Particle characteristics:	/

9.2 Other information:

Dynamic viscosity, 20°C:	1 mPa.s
Sustained combustion test:	/
Evaporation rate (n-BuAc = 1):	/
Volatile organic component (VOC):	/
Volatile organic component (VOC):	0.000 g/l

SECTION 10: Stability and reactivity:

10.1 Reactivity:

Stable under normal conditions.

10.2 Chemical stability:

Extremely high or low temperatures.

10.3 Possibility of hazardous reactions:

None

10.4 Conditions to avoid:

Protect from sunlight and do not expose to temperatures exceeding + 50°C.

10.5 Incompatible materials:

Alkalines, water, acids, organic matter, oxidants, reductants

10.6 Hazardous decomposition products:

Under recommended usage conditions, hazardous decomposition products are not expected.

SECTION 11: Toxicological information:

11.1 Information on toxicological effects:

a) acute toxicity:

H332 Acute tox. 4: Harmful if inhaled.

Calculated acute toxicity, ATE oral: > 2,000 mg/kg

Calculated acute toxicity, ATE dermal: > 2,000 mg/kg

Hexamethylene diisocyanate, oligomers	LD50 oral, rat:	≥ 5,000 mg/kg
	LD50 dermal, rabbit:	≥ 5,000 mg/kg
	LC50, Inhalation, rat, 4h:	11 mg/l

diisopropyl-1,1'-biphenyl	LD50 oral, rat:	≥ 5,000 mg/kg
	LD50 dermal, rabbit:	≥ 5,000 mg/kg
	LC50, Inhalation, rat, 4h:	≥ 50 mg/l

b) skin corrosion/irritation:

Not classified according to the CLP calculation method

c) serious eye damage/irritation:

Not classified according to the CLP calculation method

d) respiratory or skin sensitisation:

H317 Skin Sens. 1: May cause an allergic skin reaction.

e) germ cell mutagenicity:

Not classified according to the CLP calculation method

f) carcinogenicity:

Not classified according to the CLP calculation method

g) reproductive toxicity:

Not classified according to the CLP calculation method

h) STOT-single exposure:

H335 STOT SE 3: May cause respiratory irritation.

i) STOT-repeated exposure:

Not classified according to the CLP calculation method

i) aspiration hazard:

Not classified according to the CLP calculation method

11.2 Information on other hazards:

No additional data available

SECTION 12: Ecological information:

12.1 Toxicity:

Hexamethylene diisocyanate, oligomers	EC50 (soil microorganisms):	645,7 mg/L (3h)
diisopropyl-1,1'-biphenyl	LC50 (Daphnia):	0,6 mg/L (72h)
	EC50 (Daphnia):	0,17 mg/L (48h)
	EC50 (Algae):	0,15 mg/L (72h)

12.2 Persistence and degradability:

No additional data available

12.3 Bioaccumulative potential:

	Additional data:
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	Additional data:
diisopropyl-1,1'-biphenyl	5,2 - 5,5 (Log Pow)

12.4 Mobility in soil:

Water hazard class, WGK (AwSV): 2
Solubility in water: Not soluble

12.5 Results of PBT and vPvB assessment:

No additional data available

12.6 Endocrine disrupting properties:

No additional data available

12.7 Other adverse effects:

No additional data available

SECTION 13: Disposal considerations:

13.1 Waste treatment methods:

Draining into the sewers is not permitted. Removal should be carried out by licensed services. Possible restrictive regulations by local authority should always be adhered to.

SECTION 14: Transport information:

14.1 UN number:

Not applicable

14.2 UN proper shipping name:

ADR, IMDG, ICAO/IATA not applicable

14.3 Transport hazard class(es):

Class(es): Not applicable
Identification number of the hazard: Not applicable

14.4 Packing group:

Not applicable

14.5 Environmental hazards:

Not dangerous to the environment

14.6 Special precautions for user:

Hazard characteristics: Not applicable
Additional guidance: Not applicable

14.7 Maritime transport in bulk according to IMO instruments:

Not applicable

SECTION 15: Regulatory information:

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

Water hazard class, WGK (AwSV):	2
Volatile organic component (VOC):	/
Volatile organic component (VOC):	0.000 g/l
Composition by regulation (EC) 648/2004:	

15.2 Chemical Safety Assessment:

No data available

SECTION 16: Other information:

Legend to abbreviations used in the safety data sheet:

ADR:	The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE:	Acute Toxicity Estimate
BCF:	Bioconcentration factor
CAS:	Chemical Abstracts Service
CLP:	Classification, Labelling and Packaging of chemicals
EINECS:	European INventory of Existing commercial Chemical Substances
LC50:	median Lethal Concentration for 50% of subjects
LD50:	median Lethal Dose for 50% of subjects
Nr.:	Number
PTB:	Persistent, Toxic, Bioaccumulative
STOT:	Specific Target Organ Toxicity
UFI:	Unique Formula Identifier
vPvB:	very Persistent and very Bioaccumulative substances
WGK:	Water hazard class
WGK 1:	Slightly hazardous for water
WGK 2:	Hazardous for water
WGK 3:	Extremely hazardous for water

Legend to the H Phrases used in the safety data sheet

H304 Asp. Tox. 1: May be fatal if swallowed and enters airways. **H317 Skin Sens. 1:** May cause an allergic skin reaction.
H332 Acute tox. 4: Harmful if inhaled. **H335 STOT SE 3:** May cause respiratory irritation. **H373 STOT RE 2:** May cause damage to organs through prolonged or repeated exposure. **H413 Aquatic Chronic 4:** May cause long lasting harmful effects to aquatic life.

CLP Calculation method

Calculation method

Reason of revision, changes of following items

Sections: 2.1, 2.2, 3, 9.2, 12.4, 15, 15.1

SDS reference number

ECM-110764,00

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2020/878. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.