

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

1.1 Product identifier

- Rt qf weveqf g TX90
- Vtcf g pco g < **ACRYLIC URETHANE HARDENER**
- 3040Tggxcpvlf g p vllgf wgu qhvj g wduxpeg qt o kwtg cpf wgu cf xlugf ci clpw
Painting product for coating and / or decoration of manufactured articles.
- Crrrtccvqp qhvj g wduxpeg Ij g o kwtg For professional use

1.3 Details of the supplier of the safety data sheet

·Manufacturer/Supplier:

IVM Chemicals srl Viale della Stazione 3 -27020 Parona (PV) Italy tel +39 038425441

1.3.2 Importer

Name: AKZOLUX AUSTRALIA T/as: SUPERIOR TIMBER COATINGS

Address: 13/257 COLCHESTER ROAD KILSYTH, VICTORIA, AUSTRALIA Email:tom@stcoatings.com.au

·Information department:

Environmental Health and safety office hseoffice@ivmchemicals.com

·Emergency telephone number:

From 8.30am to 3.30pm (AEST) +61 03 9761 6899 Out of the above mentioned hours, **Saturdays and Sundays and during periods of closure for holidays please call: +61410 635 016**

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- EncuHecvqp ceeqtf lpi vj Tgi wrcvqp *GE+Pq 3494H22:



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Repr. 2 H361d Suspected of damaging the unborn child.

STOT RE 2 H373 May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Oral and Inhalation.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

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

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

2.2 Label elements

- Ncdgnlpi ceeqtf lpi vj Tgi wrcvqp *GE+Pq 3494H22:

The product is classified and labelled according to the CLP regulation.

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

☞ [] áÈ [-] æ^ FD

· J c/ctf rkwitco u



ÖPÜEG ÖPÜÉ ÖPÜÉ

· **Ui pcny qtf** Danger

· J c/ctf/fgyto kłpi eqo rqpwpwqhwdgnłpi <
HDI Homopolymer
toluene
ethyl acetate
xylene
hexamethylene diisocyanate

· J c/ctf uwvgo gpw

- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H361d Suspected of damaging the unborn child.
- H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
- H373 May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Oral and Inhalation.
- H304 May be fatal if swallowed and enters airways.

· Rtgecwłqpc{ uwvgo gpw

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
- P260 Do not breathe vapours.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P321 Specific treatment (see on this label).
- P331 Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local.

· Cfłkłqpcnłqto cłqpc <

EUH204 Contains isocyanates. May produce an allergic reaction.

· **2.3 Other hazards**

· Tgwnu qhRDV cpf xRxD cuquw gpv

- RDV < Not applicable.
- xRxD < Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· Fguet k vqpc < Mixture: consisting of the following components.

☞ [] áÈ []] æ^ HD

Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90**Trade name: ACRYLIC URETHANE HARDENER**

☐[] ☒[] -] æ^ Ⓓ

· Fcpi gtqwu ego rpgpwwκ		
CAS: 28182-81-2 Reg.nr.: 01-2119485796-17-XXXX	HDI Homopolymer ☠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	25-29.99%
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46-XXXX	ethyl acetate ☠ Flam. Liq. 2, H225 ☠ Eye Irrit. 2, H319; STOT SE 3, H336	25-29.99%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-XXXX	n-butyl acetate ☠ Flam. Liq. 3, H226 ☠ STOT SE 3, H336	20-24.99%
CAS: 108-88-3 EINECS: 203-625-9 Reg.nr.: 01-2119471310-51-XXXX	toluene ☠ Flam. Liq. 2, H225 ☠ Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304 ☠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H336 Aquatic Chronic 3, H412	12.5-15%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29-XXXX	2-methoxy-1-methylethyl acetate ☠ Flam. Liq. 3, H226 ☠ STOT SE 3, H336	2.5-4.99%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-XXXX	xylene ☠ Flam. Liq. 3, H226 ☠ STOT RE 2, H373; Asp. Tox. 1, H304 ☠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Aquatic Chronic 3, H412	2.5-4.99%
CAS: 822-06-0 EINECS: 212-485-8 Reg.nr.: 01-2119457571-37-XXXX	hexamethylene diisocyanate ☠ Acute Tox. 1, H330 ☠ Resp. Sens. 1, H334 ☠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	≥0.1-<0.5%

· Cfjfwkqpcnphqto cvkqp <For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· I gpgtcnphqto cvkqp <

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

personal protective equipment for first aid responders is recommended. (please see section 8)

· Chgt hpj cvkqp <

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· Chgt unhp eqpwcvκ <

Remove contaminated clothing.

Immediately wash with water and soap, or a recognized skin cleanser, and rinse thoroughly.

Take off immediately all contaminated clothing, include underwear and shoes (if necessary).

Rinse thoroughly with plenty of water for at least 20 minutes and take medical advise. If medical advise is needed have products container or label at hand.

☐[] ☒[]] æ^ I D

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and
supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

☐ [] áĒ [-] æ^ HD

- *Chgt g{g eqpwεκ*
Rinse opened eye for several minutes under running water. Then consult a doctor.
- *Chgt uy cnyq ħpi* <Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
For symptoms and effects caused by substances, see chap. 11th
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
 - *Uwłε dīg gz vħpi wħj ħpi ci gpυε* <Alcohol resistant foam, CO, powder, water spray/mist.
 - *Hqt uħgvĳ tgcıppu wpıwłε dīg gz vħpi wħj ħpi ci gpυε*
Do not use a jet water stream as it may scatter and spread fire.
- **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.
 - *Rt qyge vħxg gs wħr o gpυε*
Hardhat with visor, fireproof clothing, suitable gloves and if necessary mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
Protect against electrostatic charges.
Keep respiratory protective device available.
Use explosion-proof apparatus / fittings and spark-proof tools.

☐ [] áĒ [] æ^ Í D

Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

☐ [] ãĒ [-] æ^ I D

- Ķpĥto cĥqp cdqwwĥġ / cpġ gźrĥqĥqp rġqġġĥqp<
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

- Uĥtci g<
· Tgsĥġgo ġpvuġ dg o ġvd{ ũqġgtqgo ucġġ tġegrwengġ<
Store in a cool, well-ventilated area, away from heat and sources of ignition
Provide solvent resistant, sealed floor.
Observe the label precautions, the expiration date for the use, if indicated, is from delivery date.
In cases there is no reported deadline, it means that the product must be used within 8 months.
- Ķpĥto cĥqp cdqwwĥtci g ĥp qġg eqo o qġ ũqġci g ĥcġĥġ<Not required.
- Ĥwtġ ġt ĥpĥto cĥqp cdqwwĥtci g eqġġĥĥqpġ<
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

7.3 Specific end use(s)

Those typical of the product and the instructions in the data sheet if required.

SECTION 8: Exposure controls/personal protection

- Cġġĥĥqġncĥpĥto cĥqp cdqwwġġi p qĥġej ġġcĥġġġġġġ<No further data; see item 7.

8.1 Control parameters

· Ķpġtgġġpvuġ ġġ ťo ġxcġġġġġ cvtgsĥġg o qġġqġĥi cvġġ ġy qġġġġġġ<	
141-78-6 ethyl acetate (25-29.99%)	
WEL	Short-term value: 1468 mg/m , 400 ppm Long-term value: 734 mg/m , 200 ppm
123-86-4 n-butyl acetate (20-24.99%)	
WEL	Short-term value: 966 mg/m , 200 ppm Long-term value: 724 mg/m , 150 ppm
100-41-4 ethylbenzene (0.5-1%)	
WEL	Short-term value: 552 mg/m , 125 ppm Long-term value: 441 mg/m , 100 ppm Sk

· FPGNu

28182-81-2 HDI Homopolymer

Inhalative	DNEL acuto/agudo/ostre/aigu/acute/akut DNEL	1 mg/mc (Workers) 0.5 mg/mc (Workers)
141-78-6 ethyl acetate		
Oral	DNEL	4.5 mg/kg bw/d (population)
Inhalative	DNEL acuto/agudo/ostre/aigu/acute/akut	1,468 mg/mc (Workers) 734 mg/mc (population)
	DNEL	734 mg/mc (Workers) 367 mg/mc (population)
Irritation of skin	DNEL	63 mg/kg bw/d (Workers) 37 mg/kg bw/d (population)

☐ [] ãĒ [] æ^ I D

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and
supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

☐ } ǎĒ }] æ^ Ī D

123-86-4 n-butyl acetate		
Oral	DNEL	2 mg/kg bw/d (population)
Inhalative	DNEL acuto/agudo/ostre/aigu/acute/akut	600 mg/mc (Workers)
	DNEL	300 mg/mc (population)
Irritation of skin	DNEL	300 mg/mc (Workers)
	DNEL acuto/agudo/ostre/aigu/acute/akut	35.7 mg/mc (population)
	DNEL	11 mg/kg bw/d (Workers)
	DNEL	6 mg/kg bw/d (population)
	DNEL	11 mg/kg bw/d (Workers)
	DNEL	6 mg/kg bw/d (population)
108-88-3 toluene		
Inhalative	DNEL acuto/agudo/ostre/aigu/acute/akut	384 mg/mc (Workers)
	DNEL	192 mg/mc (Workers)
Irritation of skin	DNEL	384 mg/kg bw/d (Workers)
108-65-6 2-methoxy-1-methylethyl acetate		
Inhalative	DNEL	275 mg/mc (Workers)
Irritation of skin	DNEL	153.5 mg/kg bw/d (Workers)
1330-20-7 xylene		
Inhalative	DNEL acuto/agudo/ostre/aigu/acute/akut	289 mg/mc (Workers)
	DNEL	77 mg/mc (Workers)
Irritation of skin	DNEL	180 mg/kg bw/d (Workers)
100-41-4 ethylbenzene		
Inhalative	DNEL acuto/agudo/ostre/aigu/acute/akut	293 mg/mc (Workers)
	DNEL	77 mg/mc (Workers)
Irritation of skin	DNEL	180 mg/kg bw/d (Workers)
822-06-0 hexamethylene diisocyanate		
Inhalative	DNEL acuto/agudo/ostre/aigu/acute/akut	0.07 mg/mc (Workers)
	DNEL	0.035 mg/mc (Workers)

· RPGEu

28182-81-2 HDI Homopolymer		
PNEC Acqua dolce/water/woda sĵpdka/eau/agua/		127 mg/L ()
141-78-6 ethyl acetate		
PNEC Acqua dolce/water/woda sĵpdka/eau/agua/		0.24 mg/L ()
PNEC Suolo/earth/suelo/ /		0.148 mg/kg ()
123-86-4 n-butyl acetate		
PNEC Acqua dolce/water/woda sĵpdka/eau/agua/		0.18 mg/L ()
PNEC Suolo/earth/suelo/ /		0.0903 mg/kg ()
108-88-3 toluene		
PNEC Acqua dolce/water/woda sĵpdka/eau/agua/		0.68 mg/L ()
PNEC Suolo/earth/suelo/ /		2.89 mg/kg ()
108-65-6 2-methoxy-1-methylethyl acetate		
PNEC Acqua dolce/water/woda sĵpdka/eau/agua/		0.635 mg/L ()
PNEC Suolo/earth/suelo/ /		0.29 mg/kg ()

☐ } ǎĒ }] æ^ Ī D

Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90**Trade name: ACRYLIC URETHANE HARDENER**

GHS 07:01

1330-20-7 xylene	
PNEC Acqua dolce/water/woda słodka/eau/agua/水	0.327 mg/L (-)
PNEC Suolo/earth/suolo/ /地面	2.31 mg/kg (-)
100-41-4 ethylbenzene	
PNEC Acqua dolce/water/woda słodka/eau/agua/水	0.1 mg/L (-)
PNEC Suolo/earth/suolo/ /地面	2.68 mg/kg (-)
822-06-0 hexamethylene diisocyanate	
PNEC Acqua dolce/water/woda słodka/eau/agua/水	75 mg/L (-)
PNEC Suolo/earth/suolo/ /地面	2.6 mg/kg (-)

· Cf fklkqpcnkphqto cvkqp < The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Rgtuqpcnrtqvevkxg gs wlr o gpv<

· I gpgtcnrtqvevkxg cpf j {i kpkle o gcwvt gu<

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Pregnant women should strictly avoid inhalation or skin contact.

· Tgur kcvqt { rtqvevkqp <

Short term filter device:

Filter AX



Suitable respiratory protective device recommended. (EN140)

· Rtqvevkqp qhj cpf v<



Protective gloves

The glove material has to be impermeable and resistant to the product and in accordance with EN 374 and Directive 89/686/EEC.

Due to missing tests no recommendation to the glove material can be given for the product.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· O cvgt knqhi nqxgu

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Rpgvvcvqp vto g qhi nqxg o cvgt kn

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

GHS 07:01

06

Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

☉ [] á È [-] æ ^ Ī D

· G { g r t q v e w t q p <



Glasses (EN166) or other protective equipment

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· I g p g t c n k p h q t o c w k q p

· C r r g t c p e g <

· H q t o <

Fluid

· E q u q w t <

According to product specification

· Q f q w t <

Characteristic

· Q f q w t v j t g u j q i f <

Not determined.

· r J / x c m w g <

Not determined.

· E j c p i g h p e q p f k k q p

· O g n k p i r q k p v l t g g / h p i r q k p <

Undetermined.

· K p k e n d q k k p i r q k p v c p f d q k k p i t c p i g <

77 °C

· H r e u j r q k p <

-4 °C

· H r e o o c d k k k f * u q i k f . i c u k <

Not applicable.

· K p k k q p v g o r g t c w t g <

315 °C

· F e g e q o r q u k k q p v g o r g t c w t g <

Not determined.

· C w a q / k i p k k q p v g o r g t c w t g <

Product is not selfigniting.

· G z r i q u k x g r t q r g t v k u k <

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· G z r i q u k q p i k o k u k <

· N q y g t <

1.1 Vol %

· W r r g t <

11.5 Vol %

· X c r q w t r t g u w t g e v 42 °C:

97 hPa

· Density at 20 °C:

0.943 g/cm

· Relative density

Not determined.

· Vapour density

Not determined.

· Evaporation rate

Not determined.

· Solubility in / Miscibility with

· water:

Not miscible or difficult to mix.

· Partition coefficient: n-octanol/water:

Not determined.

· Viscosity:

· Dynamic:

Not determined.

· Kinematic at 20 °C:

29 s (ISO 3 mm)

· Oxidising properties :

N.A.

· Solvent content:

· VOC and Total VOC

(organic solvents + reactive solvents if any) 70.10 %

(Contd. on page 9)

GB

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and
supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

(Contd. of page 8)

· VOC (EC)	661.0 g/l
· Solids content:	29.9 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Typical of the product as indicated in the data sheet
- **10.2 Chemical stability**
The product is stable in normal conditions of storage and use recommended
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Reacts with strong acids and oxidising agents.
Vapours may form explosive mixtures with air
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**

In case of possible formation of combustion:
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:		
28182-81-2 HDI Homopolymer		
Oral	LD50	2,501 mg/kg (mouse)
Dermal	LD50	2,001 mg/kg (rabbit)
141-78-6 ethyl acetate		
Oral	LD50	4,934 mg/kg (rabbit)
Dermal	LD50	20,001 mg/kg (rabbit)
Inhalative	LC50/4 h	1,600 mg/l (mouse)
	LC0	22.6 ppm (mouse)
123-86-4 n-butyl acetate		
Oral	LD50	10,760 mg/kg (mouse)
Dermal	LD50	14,000 mg/kg (rabbit)
Inhalative	LC50/4 h	21.1 mg/l (mouse)
108-88-3 toluene		
Oral	LD50	5,000 mg/kg (mouse)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	25.7 mg/l (mouse)
108-65-6 2-methoxy-1-methylethyl acetate		
Oral	LD50	8,532 mg/kg (mouse)
Dermal	LD50	5,001 mg/kg (rabbit)
Inhalative	LC50/4 h	35.7 mg/l (mouse)

(Contd. on page 10)

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and
supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

(Contd. of page 9)

1330-20-7 xylene		
Oral	LD50.	3,523 mg/kg (mouse)
Dermal	LD50.	12,126 mg/kg (rabbit)
Inhalative	LC50/4h.	27.571 mg/l (mouse)
100-41-4 ethylbenzene		
Oral	LD50	3,500 mg/kg (mouse)
Dermal	LD50	15,486 mg/kg (rabbit)
Inhalative	LC50/4 h	17.2 mg/l (mouse)
822-06-0 hexamethylene diisocyanate		
Oral	LD50	738 mg/kg (mouse)
Dermal	LD50	7,001 mg/kg (mouse)
Inhalative	LC50/4 h	0.124 mg/l (mouse)

· **Primary irritant effect:**

- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.

- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
 - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - **Carcinogenicity** Based on available data, the classification criteria are not met.
 - **Reproductive toxicity**
Suspected of damaging the unborn child.

- **STOT-single exposure**
May cause respiratory irritation. May cause drowsiness or dizziness.

- **STOT-repeated exposure**
May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Oral and Inhalation.

- **Aspiration hazard**
May be fatal if swallowed and enters airways.

· **More information**

Monomers / polymers isocyanate

Particular characteristics / effects; Over-exposure there is a danger, as a function of concentration, irritation of the eyes, nose, throat and respiratory tract.

Possible the delayed appearance of disorders and development of a form of hypersensitivity (respiratory disorders, cough, asthma). In the case of persons hypersensitive reactions may occur already at concentrations of isocyanate very low, even below the TLV value. In case of prolonged contact with the skin are possible irritant effects and dehydrating.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

28182-81-2 HDI Homopolymer

EC50	1,001 mg/l (algae) (72 h)
	127 mg/l (daphnia) (48 h)
LC50 (96h)	100 mg/l (Fish)

(Contd. on page 11)

Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

(Contd. of page 10)

141-78-6 ethyl acetate	
EC50	165 mg/l (daphnia) (48 h)
LC50 (96h)	230 mg/l (Fish)
123-86-4 n-butyl acetate	
EC50	397 mg/l (algae) (72 h)
	44 mg/l (daphnia) (48 h)
LC50 (96h)	18 mg/l (Fish)
108-88-3 toluene	
EC50	134 mg/l (algae) (96 h)
	3.78 mg/l (daphnia) (48 h)
LC50 (96h)	5.5 mg/l (Fish)
108-65-6 2-methoxy-1-methylethyl acetate	
EC50	1,001 mg/l (algae) (72 h)
	501 mg/l (daphnia) (48 h)
LC50 (96h)	134 mg/l (Fish)
1330-20-7 xylene	
EC50	2.2 mg/l (algae) (72h)
LC50 48h	1 mg/l (daphnia)
LC50 (96h)	2.6 mg/l (Fish)
100-41-4 ethylbenzene	
EC50	438 mg/l (algae) (72h)
	1.8 mg/l (daphnia) (48 h)
LC50 (96h)	12.1 mg/l (Fish)
822-06-0 hexamethylene diisocyanate	
EC50	77.5 mg/l (algae) (72 h)
	89.2 mg/l (daphnia) (48 h)
LC50 (96h)	82.9 mg/l (Fish)

- **12.2 Persistence and degradability** Easily biodegradable
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
 - **Additional ecological information:**
 - **General notes:**
 - Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
 - Do not allow product to reach ground water, water course or sewage system.
 - Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**
 - Must not be disposed together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 12)

Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020


Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

(Contd. of page 11)

Hand over to hazardous waste disposers.
 The code number of the product as is 080111

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA 	UN1263
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR, IMDG, IATA 	PAINT
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG, IATA 	<div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	3 Flammable liquids. 3
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: 	II No
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category 	Warning: Flammable liquids. 33 F-E, S-E B
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code 	5L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml 2 D/E
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	5L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

(Contd. on page 13)

Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90
Trade name: ACRYLIC URETHANE HARDENER

(Contd. of page 12)

· UN "Model Regulation": UN 1263 PAINT, 3, II

SECTION 15: Regulatory information

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

Directive n. : 80/1107/CEE, n. 82/605/CEE, n. 83/477/CEE, n. 86/188/CEE e n. 88/642/CEE, 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2002/44,2003/10/CE, 2003/18/CE , 2004/40/CE,2006/25

DIRECTIVE 2012/18/EU

P5c Flammable

Limit 1: 5000 t

Limit 2: 50000 t

· *Various regulations* For uses not regulated by D. 2004/42/EC-For professional use only

- *Qualifying quantity (tonnes) for the application of lower-tier requirements* 5,000 t
- *Qualifying quantity (tonnes) for the application of upper-tier requirements* 50,000 t
- *REGULATION (EC) No 1907/2006 ANNEX XVII* Conditions of restriction: 3, 48

· *National regulations:*

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

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.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Oral and Inhalation.

H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** IVM Chemicals Srl

· **Contact:** Claudia Zanella

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

(Contd. on page 14)

Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 05.02.2020

Version number 351

Revision: 03.02.2020

Product code TX90**Trade name: ACRYLIC URETHANE HARDENER**

(Contd. of page 13)

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids . Category 2

Flam. Liq. 3: Flammable liquids . Category 3

Acute Tox. 1: Acute toxicity . Category 1

Acute Tox. 4: Acute toxicity . Category 4

Skin Irrit. 2: Skin corrosion/irritation . Category 2

Eye Irrit. 2: Serious eye damage/eye irritation . Category 2

Resp. Sens. 1: Respiratory sensitisation . Category 1

Skin Sens. 1: Skin sensitisation . Category 1

Repr. 2: Reproductive toxicity . Category 2

STOT SE 3: Specific target organ toxicity (single exposure) . Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) . Category 2

Asp. Tox. 1: Aspiration hazard . Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard . Category 3

- **Sources**

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL and following amendments

Agency ECHA web site

INRS Fiche Toxicologique

- *** Data compared to the previous version altered.**