

TS72 Part B Hardener

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 6/30/2021 Revision date: 6/30/2021 Supersedes version of: 6/30/2021 Version: 5.0

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

1.1. Product identifier

Product form : Mixture
Product name : TS72 Part B Hardener
UFI : A300-D0CC-W00P-2GD3

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Component of epoxy coating

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

The Industrial Maintenance Group
Unit M, Riverside Industrial Estate
Fazeley, Tamworth
B78 3RW
T 01827 283 322
sales@img-limited.co.uk - www.img-limited.co.uk

1.4. Emergency telephone number

Emergency number : 01827 283 322

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 1B	H360
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

May damage fertility or the unborn child. Harmful if inhaled. Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Contains :

3-aminomethyl-3,5,5-trimethylcyclohexylamine; BENZYL ALCOHOL; bisphenol A, 4,4'-isopropylidenediphenol; MXDA; salicylic acid

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Hazard statements (CLP)	<ul style="list-style-type: none"> : H302+H332 - Harmful if swallowed or if inhaled. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H360 - May damage fertility.. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	<ul style="list-style-type: none"> : P201 - Obtain special instructions before use. P261 - Avoid breathing vapours, fume. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves, eye protection, face protection. P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER. P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.. Immediately call a POISON CENTER, a doctor. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER, a doctor. P308+P313 - IF exposed or concerned: Get medical advice/attention. P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3-aminomethyl-3,5,5-trimethylcyclohexylamine	(CAS-No.) 2855-13-2 (EC-No.) 220-666-8 (EC Index-No.) 612-067-00-9	≥ 25 – < 50	Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412
BENZYL ALCOHOL	(CAS-No.) 100-51-6 (EC-No.) 202-859-9	≥ 25 – < 50	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332
bisphenol A, 4,4'-isopropylidenediphenol substance listed as REACH Candidate (4,4'- isopropylidenediphenol (bisphenol A; BPA))	(CAS-No.) 80-05-7 (EC-No.) 201-245-8 (EC Index-No.) 604-030-00-0	< 10	Repr. 1B, H360F STOT SE 3, H335 Eye Dam. 1, H318 Skin Sens. 1, H317
MXDA	(CAS-No.) 1477-55-0 (EC-No.) 216-032-5	< 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
salicylic acid	(CAS-No.) 69-72-7 (EC-No.) 200-712-3 (EC Index-No.) 607-732-00-5	< 5	Repr. 2, H361d Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

Full text of H- and EUH-statements: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact	: Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.
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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
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Colour	: No data available
Odour	: Solvent.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 202 °C
Flash point	: 499 °F
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 0.02 kPa
Relative vapour density at 20 °C	: 3.72
Relative density	: 1.04
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: > 2.05 mm ² /s
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Lower explosive limit (LEL)	: 1.1 vol % salicylic acid
Upper explosive limit (UEL)	: 13 vol % Phenylmethanol

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Harmful if inhaled.

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ATE CLP (oral)	500 mg/kg bodyweight
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ATE CLP (dust,mist)	3 mg/l/4h
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MXDA (1477-55-0)	
LD50 dermal rat	> 3100 mg/kg bodyweight Animal: rat

Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility..
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

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Viscosity, kinematic	> 2.05 mm ² /s

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.
Not rapidly degradable	

MXDA (1477-55-0)	
LC50 fish 1	87.6 mg/l Test organisms (species): Oryzias latipes
EC50 Daphnia 1	15.2 mg/l Test organisms (species): Daphnia magna
EC50 72h algae (1)	20.3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h algae (2)	33.3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	15 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	4.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessment

Component	
bisphenol A, 4,4'-isopropylidenediphenol (80-05-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available






SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3066	UN 3066	UN 3066	UN 3066	UN 3066
14.2. UN proper shipping name				
PAINT RELATED MATERIAL (CONTAINS)	PAINT RELATED MATERIAL (CONTAINS)	Paint related material (CONTAINS)	PAINT RELATED MATERIAL (CONTAINS)	PAINT RELATED MATERIAL (CONTAINS)
Transport document description				
UN 3066 PAINT RELATED MATERIAL (CONTAINS), 8, II, (E)	UN 3066 PAINT RELATED MATERIAL (CONTAINS), 8, II	UN 3066 Paint related material (CONTAINS), 8, II	UN 3066 PAINT RELATED MATERIAL (CONTAINS), 8, II	UN 3066 PAINT RELATED MATERIAL (CONTAINS), 8, II
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C9
 Special provisions (ADR) : 163, 367
 Limited quantities (ADR) : 1I
 Excepted quantities (ADR) : E2
 Packing instructions (ADR) : P001, IBC02
 Mixed packing provisions (ADR) : MP15

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Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP2, TP28
Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : 2X

Transport by sea

Special provisions (IMDG) : 163, 367
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2, TP28
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2
Properties and observations (IMDG) : Corrosive content. Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity (IATA) : 0.5L
PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A3, A72, A192, A803
ERG code (IATA) : 8L

Inland waterway transport

Classification code (ADN) : C9
Special provisions (ADN) : 163, 367
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C9
Special provisions (RID) : 163, 367
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP15
Portable tank and bulk container instructions (RID) : T7
Portable tank and bulk container special provisions (RID) : TP2, TP28
Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE6
Hazard identification number (RID) : 80

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

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: 4,4'-isopropylidenediphenol (bisphenol A; BPA) (EC 201-245-8, CAS 80-05-7)

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

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SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child.
H360F	May damage fertility.
H361d	Suspected of damaging the unborn child.
H412	Harmful to aquatic life with long lasting effects.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

