according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version **Revision Date:** Date of last issue: 15.09.2020 6.0 SDB GB 02.09.2022 Date of first issue: 27.12.2012

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

1.1 Product identifier

Trade name : AT30 Slow Hardener UFI : YQGX-48VF-A00D-G756

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

Type of Application (Use) **Epoxy Hardener** 

Recommended restrictions For industrial use only.

on use

1.3 Details of the supplier of the safety data sheet

Company Easy Composites Ltd

> Unit 39 Park Hall Business Village, Longton, Stoke-on-Trent, ST3 5XA

Telephone 01782 454499

E-mail address of person

responsible for the SDS

sales@easycomposites.co.uk

### 1.4 Emergency telephone number

01782 4544 499 (office hours only)

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302: Harmful if swallowed.

Skin corrosion, Sub-category 1A H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Long-term (chronic) aquatic hazard, Cat-

egory 3

H412: Harmful to aquatic life with long lasting ef-

fects.

#### 2.2 Label elements

## Labelling (REGULATION (EC) No 1272/2008)

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

Hazard pictograms :





Signal word : Danger

Hazard statements : H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P261 Avoid breathing mist or vapours.P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection/ hearing protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immedi-

ately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a

POISON CENTER/ 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/ doctor.

## Hazardous components which must be listed on the label:

Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -(2-aminomethylethyl)- $\omega$ -(2-aminomethylethoxy)-

3-aminomethyl-3,5,5-trimethylcyclohexylamine

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

according to Regulation (EC) No. 1907/2006



## **AT30 Slow Hardener**

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

## **SECTION 3: Composition/information on ingredients**

## 3.2 Mixtures

Chemical nature : Cycloaliphatic amine based mixture

Components

Chemical name	CAS-No. EC-No. Index-No.	Classification	Concentration (% w/w)
3-aminomethyl-3,5,5- trimethylcyclohexylamine	Registration number 2855-13-2 220-666-8 612-067-00-9 01-2119514687-32	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Chronic 3; H412  specific concentration limit Skin Sens. 1A; H317 >= 0,001 %  Acute toxicity esti-	>= 30 - < 50
Deb feer (method 4.0 others dis 10)	0040 40 0	mate  Acute oral toxicity: 1.030 mg/kg	>= 30 - < 50
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	9046-10-0 01-2119557899-12	Skin Corr. 1C; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 30 - < 50
2,2,4(or 2,4,4)-trimethylhexane- 1,6-diamine	25513-64-8 247-063-2 01-2119560598-25	Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317	>= 7 - < 10
benzyl alcohol	100-51-6 202-859-9 603-057-00-5 01-2119492630-38	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2; H319	>= 1 - < 3

For explanation of abbreviations see section 16.

## **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

General advice : Show this safety data sheet to the doctor in attendance.

Keep warm and in a quiet place.

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB GB 02.09.2022 Date of first issue: 27.12.2012

Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

If breathing is irregular or stopped, administer artificial respira-

tion.

In case of skin contact : Wash off immediately with soap and plenty of water.

Do NOT use solvents or thinners. If on clothes, remove clothes.

Burns must be treated by a physician.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

If eye irritation persists, consult a specialist. If easy to do, remove contact lens, if worn.

If swallowed : Do NOT induce vomiting.

If a person vomits when lying on his back, place him in the

recovery position.

Call a physician immediately.

Give small amounts of water to drink.

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

Symptoms : Burn

superficial burning sensation

Redness Severe irritation

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

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2)

Foam Dry powder Water mist

Unsuitable extinguishing

media

None known.

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

The pressure in sealed containers can increase under the

influence of heat.

Cool closed containers exposed to fire with water spray. Hazardous decomposition products formed under fire condi-

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB GB 02.09.2022 Date of first issue: 27.12.2012

tions.

5.3 Advice for firefighters

Special protective equipment :

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Further information : In the event of fire and/or explosion do not breathe fumes.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Immediately evacuate personnel to safe areas.

Prevent fire extinguishing water from contaminating surface

water or the ground water system.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

Evacuate personnel to safe areas. Use personal protective equipment. Ensure adequate ventilation.

Inform the responsible authorities in case of gas leakage, or of

entry into waterways, soil or drains.

#### 6.2 Environmental precautions

Environmental precautions : Do not allow uncontrolled discharge of product into the envi-

ronment.

Try to prevent the material from entering drains or water

courses.

Local authorities should be advised if significant spillages

cannot be contained.

## 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

Pick up and transfer to properly labelled containers.

#### 6.4 Reference to other sections

For personal protection see section 8.

### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours or spray mist.

Avoid inhalation, ingestion and contact with skin and eyes.

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

Wear personal protective equipment.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Advice on protection against

fire and explosion

Keep away from open flames, hot surfaces and sources of

ignition.

Hygiene measures : Provide adequate ventilation. Wash hands and face before

breaks and immediately after handling the product.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep containers tightly closed in a dry, cool and wellventilated place. Keep in properly labelled containers. To maintain product quality, do not store in heat or direct sunlight.

Further information on stor-

age conditions

Protect from moisture.

Advice on common storage : Keep away from isocyanates.

Do not store near acids.

Keep away from oxidizing agents.

Further information on stor-

age stability

Stable at normal ambient temperature and pressure.

#### 7.3 Specific end use(s)

Specific use(s) : Consult the technical guidelines for the use of this sub-

stance/mixture.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values. Contains no substances with occupational exposure limit values.

## Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Poly[oxy(methyl-1,2- ethanediyl)], α-(2- aminomethylethyl)-ω- (2- aminomethylethoxy)-	Workers	Skin contact	Long-term systemic effects	2,5 mg/kg
	Workers	Skin contact	Long-term local ef- fects	0,623 mg/cm2
	Consumers	Skin contact	Long-term systemic effects	1,25 mg/kg
	Consumers	Skin contact	Long-term local ef- fects	0,311 mg/cm2

according to Regulation (EC) No. 1907/2006



## **AT30 Slow Hardener**

VersionRevision Date:Date of last issue: 15.09.20206.0 SDB\_GB02.09.2022Date of first issue: 27.12.2012

	Consumers	Ingestion	Long-term systemic effects	0,04 mg/kg
benzyl alcohol	Workers	Inhalation	Short-term exposure, Systemic effects	450 mg/m3
	Workers	Inhalation	Long-term exposure, Systemic effects	90 mg/m3
	Workers	Skin contact	Short-term exposure, Systemic effects	47 mg/kg
	Workers	Skin contact	Long-term exposure, Systemic effects	9,5 mg/kg
	Consumers	Ingestion	Short-term exposure, Systemic effects	25 mg/kg
	Consumers	Ingestion	Long-term exposure, Systemic effects	5 mg/kg
	Consumers	Inhalation	Short-term exposure, Systemic effects	40,55 mg/m3
	Consumers	Inhalation	Long-term exposure, Systemic effects	8,11 mg/m3
	Consumers	Skin contact	Short-term exposure, Systemic effects	28,5 mg/kg
	Consumers	Skin contact	Long-term exposure, Systemic effects	5,7 mg/kg

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -(2-aminomethylethyl)- $\omega$ -(2-aminomethylethoxy)-	Fresh water	0,015 mg/l
	Marine water	0,0143 mg/l
	Fresh water sediment	0,132 mg/kg
	Marine sediment	0,125 mg/kg
	Soil	0,0176 mg/kg
	Intermittent releases	0,15 mg/l
	Sewage treatment plant	7,5 mg/l
3-aminomethyl-3,5,5- trimethylcyclohexylamine	Fresh water	0,06 mg/l
	Marine water	0,006 mg/l
	Intermittent releases	0,23 mg/l
	Fresh water sediment	5,784 mg/kg
	Marine sediment	0,578 mg/kg
	Sewage treatment plant	3,18 mg/l
	Soil	1,121 mg/kg
benzyl alcohol	Fresh water	1 mg/l
	Marine water	0,1 mg/l
	Fresh water sediment	5,27 mg/kg
	Marine sediment	0,527 mg/kg
	Soil	0,456 mg/kg
	Sewage treatment plant	39 mg/l
	Intermittent releases	2,3 mg/l

## 8.2 Exposure controls

## **Engineering measures**

Effective exhaust ventilation system

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

effective ventilation in all processing areas

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Do not wear contact lenses.

Ensure that eyewash stations and safety showers are close

to the workstation location.

Hand protection

Material : Protective gloves complying with EN 374.

Remarks : Nitrile rubber

Skin and body protection : Protective suit

Recommended preventive skin protection

Respiratory protection : Use respirator when performing operations involving potential

exposure to vapour of the product.

The filter class for the respirator must be suitable for the max-

imum expected contaminant concentration

(gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-

contained breathing apparatus must be used.

Recommended Filter type:

ABEK-filter

Equipment should conform to EN 14387

Protective measures : Avoid contact with skin.

Wear suitable protective equipment.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : light yellow

Odour : ammoniacal

Odour Threshold : not determined

Melting point/freezing point : Not applicable

Boiling point/boiling range : > 150 °C

Upper explosion limit / Upper

flammability limit

Not applicable

Lower explosion limit / Lower

flammability limit

Not applicable

Flash point : 150 °C

according to Regulation (EC) No. 1907/2006



## **AT30 Slow Hardener**

VersionRevision Date:Date of last issue: 15.09.20206.0 SDB\_GB02.09.2022Date of first issue: 27.12.2012

Ignition temperature : Not applicable

Auto-ignition temperature : Not applicable

Decomposition temperature : No data available

pH : 11

Concentration: 1 %

Viscosity

Viscosity, dynamic : 5 - 20 mPa.s (25 °C)

Viscosity, kinematic : not determined

Solubility(ies)

Water solubility : not determined

Solubility in other solvents : not determined

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : not determined

Density : 0,93 g/cm3 (25 °C)

Bulk density : not determined

Relative vapour density : not determined

Particle characteristics

Particle size : Not applicable

9.2 Other information

Explosives : Not applicable

Oxidizing properties : Not applicable

Self-ignition : Not applicable

Evaporation rate : not determined

Surface tension : not determined

Sublimation point : Not applicable

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB GB 02.09.2022 Date of first issue: 27.12.2012

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Stable under recommended storage conditions.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with the following substances:

Acids

Strong oxidizing agents

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : Strong acids

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

This product may release the following:

Nitrogen oxides (NOx) Carbon monoxide Carbon dioxide (CO2)

### **SECTION 11: Toxicological information**

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

## **Acute toxicity**

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 1.571 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Acute toxicity (other routes of :

administration) Remarks: No data available

### **Components:**

### 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Acute oral toxicity : Acute toxicity estimate: 1.030 mg/kg

Method: Acute toxicity estimate according to Regulation (EC)

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

No. 1272/2008

Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -(2-aminomethylethyl)- $\omega$ -(2-aminomethylethoxy)-:

Acute oral toxicity : LD50 (Rat, male and female): 2.885,3 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute dermal toxicity : LD50 (Rabbit, male and female): 2.979,7 mg/kg

Method: OECD Test Guideline 402

GLP: yes

benzyl alcohol:

Acute inhalation toxicity : LC50 (Rat, male and female): 4 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Skin corrosion/irritation

**Product:** 

Remarks : No data available

**Components:** 

Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -(2-aminomethylethyl)- $\omega$ -(2-aminomethylethoxy)-:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Corrosive

benzyl alcohol:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Serious eye damage/eye irritation

**Product:** 

Remarks : No data available

**Components:** 

Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -(2-aminomethylethyl)- $\omega$ -(2-aminomethylethoxy)-:

Method : OECD Test Guideline 405

Result : Risk of serious damage to eyes.

benzyl alcohol:

Species : Rabbit

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

Method : OECD Test Guideline 405

Result : Eye irritation

GLP : yes

Respiratory or skin sensitisation

Product:

Remarks : No data available

Carcinogenicity

**Product:** 

Remarks : No data available

Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

: Remarks: No data available

STOT - single exposure

**Product:** 

Remarks : No data available

STOT - repeated exposure

**Product:** 

Remarks : No data available

Repeated dose toxicity

**Product:** 

Remarks : No data available

**Aspiration toxicity** 

**Components:** 

3-aminomethyl-3,5,5-trimethylcyclohexylamine:

No aspiration toxicity classification

11.2 Information on other hazards

**Endocrine disrupting properties** 

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version **Revision Date:** Date of last issue: 15.09.2020 6.0 SDB GB 02.09.2022 Date of first issue: 27.12.2012

> REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

**Further information** 

**Product:** 

Remarks No data available

## **SECTION 12: Ecological information**

### 12.1 Toxicity

**Product:** 

Toxicity to fish Remarks: No data available

Toxicity to daphnia and other : Remarks: No data available

aquatic invertebrates

#### Components:

3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 110 mg/l

> Exposure time: 96 h Test Type: semi-static test

Method: Directive 67/548/EEC, Annex V, C.1.

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 23 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

ErC50 (Scenedesmus capricornutum (fresh water algae)): >

50 mg/l

Exposure time: 72 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.3.

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 3 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

GLP: yes

Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): > 15 mg/l

> Exposure time: 96 h Test Type: semi-static test

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version **Revision Date:** Date of last issue: 15.09.2020 6.0 SDB GB 02.09.2022 Date of first issue: 27.12.2012

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 80 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,32

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

benzyl alcohol:

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 230 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 770

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

#### 12.2 Persistence and degradability

**Product:** 

Biodegradability Remarks: No data available

ity

Physico-chemical removabil- : Remarks: No data available

#### **Components:**

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Biodegradability Test Type: aerobic

Result: Not readily biodegradable.

Method: Directive 67/548/EEC Annex V, C.4.A.

GLP: yes

### Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-:

Biodegradability Test Type: aerobic

Result: Not readily biodegradable. Method: OECD Test Guideline 301B

GLP: yes

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

#### 12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: No data available

**Components:** 

3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Partition coefficient: n- : log Pow: 0,99

octanol/water Method: OECD Test Guideline 107

GLP: yes

Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -(2-aminomethylethyl)- $\omega$ -(2-aminomethylethoxy)-:

Partition coefficient: n- : log Pow: 1,34 (25 °C)

octanol/water Method: OECD Test Guideline 117

GLP: yes

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

**Product:** 

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

**SECTION 13: Disposal considerations** 

13.1 Waste treatment methods

Product : In accordance with local and national regulations.

Container hazardous when empty. Do not dispose of with domestic refuse.

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

Do not mix waste streams during collection.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

## **SECTION 14: Transport information**

14.1 UN number or ID number

 ADR/RID/ADN
 : UN 2735

 IMDG
 : UN 2735

 IATA
 : UN 2735

14.2 UN proper shipping name

ADR/RID/ADN : AMINES, LIQUID, CORROSIVE, N.O.S.

(Isophorone diamine)

**IMDG** : AMINES, LIQUID, CORROSIVE, N.O.S.

(ISOPHORONEDIAMINE)

**IATA** : Amines, liquid, corrosive, n.o.s.

(Isophorone diamine)

14.3 Transport hazard class(es)

ADR/RID/ADN : 8
IMDG : 8
IATA : 8

14.4 Packing group

ADR/RID/ADN

Packing group : III
Classification Code : C7
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : E

**IMDG** 

Packing group : III Labels : 8

EmS Code : F-A, S-B

Remarks : IMDG Code segregation group 18 - Alkalis

IATA (Cargo)

Packing instruction (cargo : 856

aircraft)

Packing group : III

Labels : Corrosive

IATA (Passenger)

Packing instruction (passen: 852

ger aircraft)

Packing instruction (LQ) : Y841

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version **Revision Date:** Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

Packing group Ш

Corrosive Labels

14.5 Environmental hazards

ADR/RID/ADN

Environmentally hazardous nο

**IMDG** 

Marine pollutant no

14.6 Special precautions for user

Remarks The transport of dangerous goods, including their loading and

unloading, must be done by people who received the neces-

sary training required by Modal Regulations.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### **SECTION 15: Regulatory information**

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

Regulation (EU) 2019/1021 on persistent organic pollutants (recast)

UK REACH List of substances subject to authorisation (Annex XIV)

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors

Conditions of restriction for the following entries should be considered:

Number on list 3

Conditions of restriction for the following entries should be considered:

Number on list: 3

Not applicable

Not applicable

Not applicable

Not applicable

Not applicable

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

International Chemical Weapons Convention (CWC)

Schedules of Toxic Chemicals and Precursors

Not applicable

Council Regulation (EC) No 111/2005 laying down rules

for the monitoring of trade between the Community and

third countries in drug precursors

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

Seveso III Directive (2012/18/EU) implemented by Control of Major Accident Hazards Regula-

tions 2015 (COMAH)

Not applicable

Not applicable

#### 15.2 Chemical safety assessment

Not applicable

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

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.
H319 : Causes serious eve irritation.

H332 : Harmful if inhaled.

H412 : Harmful to aquatic life with long lasting effects.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation
Skin Corr. : Skin corrosion
Skin Sens. : Skin sensitisation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China;

according to Regulation (EC) No. 1907/2006



## AT30 Slow Hardener

Version Revision Date: Date of last issue: 15.09.2020 6.0 SDB\_GB 02.09.2022 Date of first issue: 27.12.2012

IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

Training advice : Provide adequate information, instruction and training for op-

erators.

#### Classification of the mixture:

#### Classification procedure:

Aquatic Chronic 3	H412	Calculation method
Skin Sens. 1	H317	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Corr. 1A	H314	Calculation method
Acute Tox. 4	H302	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

GB / EN

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

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

1.1 Product identifier

Trade name : AT30 FAST Epoxy Hardener UFI : E47X-H8UR-P00W-A2VR

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

Type of Application (Use) : Epoxy Hardener

Recommended restrictions

on use

Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company : Easy Composites Ltd

Unit 39 Park Hall Business Village, Longton, Stoke-on-Trent, ST3 5XA

Telephone : 01782 454 499

E-mail address of person : sales@easycomposites.co.uk

### 1.4 Emergency telephone number

01782 454 499 (office hours only)

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302: Harmful if swallowed.

Skin corrosion, Sub-category 1A H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Specific target organ toxicity - repeated

exposure, Category 2

H373: May cause damage to organs through pro-

longed or repeated exposure.

Long-term (chronic) aquatic hazard, Cat-

egory 2

H411: Toxic to aquatic life with long lasting effects.

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

#### 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms









Signal word : Danger

Hazard statements : H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or

repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Supplemental Hazard

Statements

EUH071

Corrosive to the respiratory tract.

Precautionary statements : Prevention:

P260 Do not breathe mist or vapours.P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection/ hearing protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immedi-

ately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a

POISON CENTER/ 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/ doctor.

P391 Collect spillage.

## Hazardous components which must be listed on the label:

3-aminomethyl-3,5,5-trimethylcyclohexylamine

m-phenylenebis(methylamine)

4,4'-methylenebis(cyclohexylamine)

3,6,9,12-tetra-azatetradecamethylenediamine

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

VersionRevision Date:Date of last issue: 28.11.20206.0 SDB\_GB08.09.2022Date of first issue: 03.11.2014

3,6,9-triazaundecamethylenediamine

3-aminopropyltriethoxysilane

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Chemical nature : Cycloaliphatic and aliphatic amine based mixture

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
3-aminomethyl-3,5,5- trimethylcyclohexylamine	2855-13-2 220-666-8 612-067-00-9 01-2119514687-32	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Chronic 3; H412 ————————————————————————————————————	>= 20 - < 25
m-phenylenebis(methylamine)	1477-55-0 216-032-5	Acute Tox. 4; H302 Acute Tox. 4; H332	>= 20 - < 25

according to Regulation (EC) No. 1907/2006



# AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

	01-2119480150-50	Skin Corr. 1B; H314 Skin Sens. 1B; H317 Aquatic Chronic 3; H412 EUH071	
4,4'- methylenebis(cyclohexylamine)	1761-71-3 217-168-8 01-2119541673-38	Acute Tox. 4; H302 Skin Corr. 1A; H314 Skin Sens. 1; H317 STOT RE 2; H373	>= 20 - < 25
benzyl alcohol	100-51-6 202-859-9 603-057-00-5 01-2119492630-38	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2; H319	>= 12,5 - < 20
3,6,9,12-tetra- azatetradecamethylenediamine	4067-16-7 223-775-9 612-064-00-2	Skin Corr. 1B; H314 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Acute Tox. 4; H302 Acute Tox. 4; H312  M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 7 - < 10
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	38294-64-3 500-101-4 01-2119965165-33- 0011	Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Chronic 3; H412	>= 1 - < 2,5
3,6,9- triazaundecamethylenediamine	112-57-2 203-986-2 612-060-00-0	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 1 - < 2,5
		Acute toxicity estimate  Acute oral toxicity: 500 mg/kg Acute dermal toxicity: 1.100 mg/kg	
3-aminopropyltriethoxysilane	919-30-2 213-048-4 612-108-00-0 01-2119480479-24	Acute Tox. 4; H302 Skin Corr. 1B; H314 Skin Sens. 1; H317	>= 0,25 - < 0,5

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice : Show this safety data sheet to the doctor in attendance.

Keep warm and in a quiet place.

Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

If breathing is irregular or stopped, administer artificial respira-

tion.

In case of skin contact : Wash off immediately with soap and plenty of water.

Do NOT use solvents or thinners. If on clothes, remove clothes.

Burns must be treated by a physician.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

If eye irritation persists, consult a specialist. If easy to do, remove contact lens, if worn.

If swallowed : Do NOT induce vomiting.

If a person vomits when lying on his back, place him in the

recovery position.

Call a physician immediately.

Give small amounts of water to drink.

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

Symptoms : Burn

superficial burning sensation

Redness Severe irritation

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

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

#### **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2)

Foam Dry powder Water mist

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

Unsuitable extinguishing

media

None known.

## 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

The pressure in sealed containers can increase under the

influence of heat.

Cool closed containers exposed to fire with water spray. Hazardous decomposition products formed under fire condi-

tions.

#### 5.3 Advice for firefighters

Special protective equipment :

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Further information : In the event of fire and/or explosion do not breathe fumes.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Immediately evacuate personnel to safe areas.

Prevent fire extinguishing water from contaminating surface

water or the ground water system.

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

Evacuate personnel to safe areas. Use personal protective equipment.

Ensure adequate ventilation.

Inform the responsible authorities in case of gas leakage, or of

entry into waterways, soil or drains.

#### 6.2 Environmental precautions

Environmental precautions : Do not allow uncontrolled discharge of product into the envi-

ronment.

Try to prevent the material from entering drains or water

courses.

Local authorities should be advised if significant spillages

cannot be contained.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

Pick up and transfer to properly labelled containers.

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version **Revision Date:** Date of last issue: 28.11.2020 6.0 SDB GB 08.09.2022 Date of first issue: 03.11.2014

#### 6.4 Reference to other sections

For personal protection see section 8.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Advice on safe handling Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours or spray mist.

Avoid inhalation, ingestion and contact with skin and eyes.

Wear personal protective equipment.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Advice on protection against

fire and explosion

Keep away from open flames, hot surfaces and sources of

ignition.

Provide adequate ventilation. Wash hands and face before Hygiene measures

breaks and immediately after handling the product.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

Keep containers tightly closed in a dry, cool and wellventilated place. Keep in properly labelled containers. To

maintain product quality, do not store in heat or direct sunlight.

Further information on stor-

age conditions

Protect from moisture.

Advice on common storage Keep away from isocyanates.

Do not store near acids.

Keep away from oxidizing agents.

Further information on stor-

age stability

Stable at normal ambient temperature and pressure.

### 7.3 Specific end use(s)

Specific use(s) Consult the technical guidelines for the use of this sub-

stance/mixture.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values. Contains no substances with occupational exposure limit values.

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef-	Value
			fects	
benzyl alcohol	Workers	Inhalation	Short-term exposure, Systemic effects	450 mg/m3

according to Regulation (EC) No. 1907/2006



# **AT30 FAST Epoxy Hardener**

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

	Workers	Inhalation	Long-term exposure, Systemic effects	90 mg/m3
	Workers	Skin contact	Short-term exposure, Systemic effects	47 mg/kg
	Workers	Skin contact	Long-term exposure, Systemic effects	9,5 mg/kg
	Consumers	Ingestion	Short-term exposure, Systemic effects	25 mg/kg
	Consumers	Ingestion	Long-term exposure, Systemic effects	5 mg/kg
	Consumers	Inhalation	Short-term exposure, Systemic effects	40,55 mg/m3
	Consumers	Inhalation	Long-term exposure, Systemic effects	8,11 mg/m3
	Consumers	Skin contact	Short-term exposure, Systemic effects	28,5 mg/kg
	Consumers	Skin contact	Long-term exposure, Systemic effects	5,7 mg/kg
3- aminopropyltriethox- ysilane	Workers	Skin contact	Acute systemic ef- fects, Long-term systemic effects	8,3 mg/kg
	Workers	Inhalation	Acute systemic ef- fects, Long-term systemic effects	59 mg/m3
4,4'- Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	Workers	Inhalation	Long-term systemic effects	0,493 mg/m3
	Workers	Dermal	Long-term systemic effects	0,14 mg/kg
	Consumers	Inhalation	Long-term systemic effects	0,074 mg/m3
	Consumers	Dermal	Long-term systemic effects	0,05 mg/m3
	Consumers	Oral	Long-term systemic effects	0,05 mg/m3

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
3-aminomethyl-3,5,5- trimethylcyclohexylamine	Fresh water	0,06 mg/l
	Marine water	0,006 mg/l
	Intermittent releases	0,23 mg/l
	Fresh water sediment	5,784 mg/kg
	Marine sediment	0,578 mg/kg
	Sewage treatment plant	3,18 mg/l
	Soil	1,121 mg/kg
benzyl alcohol	Fresh water	1 mg/l

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

	Marine water	0,1 mg/l
	Fresh water sediment	5,27 mg/kg
	Marine sediment	0,527 mg/kg
	Soil	0,456 mg/kg
	Sewage treatment plant	39 mg/l
	Intermittent releases	2,3 mg/l
3-aminopropyltriethoxysilane	Fresh water	0,33 mg/l
	Marine water	0,033 mg/l
	Intermittent releases	3,3 mg/l
	Fresh water sediment	0,26 mg/kg
	Soil	0,04 mg/kg
	Sewage treatment plant	13 mg/l
4,4'-Isopropylidenediphenol,	Fresh water	0,011 mg/l
oligomeric reaction products with		
1-chloro-2,3-epoxypropane, reac-		
tion products with 3-		
aminomethyl-3,5,5-		
trimethylcyclohexylamine		
	Marine water	0,001 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	4320 mg/kg
	Marine sediment	432 mg/kg
	Soil	864 mg/kg

#### 8.2 Exposure controls

#### **Engineering measures**

Effective exhaust ventilation system effective ventilation in all processing areas

## Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Do not wear contact lenses.

Ensure that eyewash stations and safety showers are close

to the workstation location.

Hand protection

Material : Protective gloves complying with EN 374.

Remarks : Nitrile rubber

Skin and body protection : Protective suit

Recommended preventive skin protection

Respiratory protection : Use respirator when performing operations involving potential

exposure to vapour of the product.

The filter class for the respirator must be suitable for the max-

imum expected contaminant concentration

(gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-

contained breathing apparatus must be used.

Recommended Filter type:

ABEK-filter

Equipment should conform to EN 14387

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

Protective measures : Avoid contact with skin.

Wear suitable protective equipment.

## **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : light yellow

Odour : ammoniacal

Odour Threshold : not determined

Melting point/freezing point : Not applicable

Boiling point/boiling range : > 150 °C

Upper explosion limit / Upper

flammability limit

Not applicable

Lower explosion limit / Lower :

flammability limit

Not applicable

Flash point : 100 °C

Ignition temperature : Not applicable

Auto-ignition temperature : Not applicable

Decomposition temperature : No data available

pH : 11

Concentration: 1 %

Viscosity

Viscosity, dynamic : 30 - 80 mPa.s (25 °C)

Viscosity, kinematic : not determined

Solubility(ies)

Water solubility : not determined

Solubility in other solvents : not determined

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : not determined

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

Density : 1,04 g/cm3 (25 °C)

Bulk density : not determined

Relative vapour density : not determined

Particle characteristics

Particle size : Not applicable

9.2 Other information

Explosives : Not applicable

Oxidizing properties : Not applicable

Self-ignition : Not applicable

Evaporation rate : not determined

Surface tension : not determined

Sublimation point : Not applicable

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Stable under recommended storage conditions.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

## 10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with the following substances:

Acids

Strong oxidizing agents

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : Strong acids

Strong oxidizing agents

### 10.6 Hazardous decomposition products

This product may release the following: Nitrogen oxides (NOx) Carbon monoxide Carbon dioxide (CO2)

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

## **SECTION 11: Toxicological information**

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

### **Acute toxicity**

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 622,24 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Acute toxicity (other routes of :

administration)

Remarks: No data available

## **Components:**

## 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Acute oral toxicity : Acute toxicity estimate: 1.030 mg/kg

Method: Acute toxicity estimate according to Regulation (EC)

No. 1272/2008

benzyl alcohol:

Acute inhalation toxicity : LC50 (Rat, male and female): 4 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

## 3,6,9-triazaundecamethylenediamine:

Acute oral toxicity : Acute toxicity estimate: 500 mg/kg

Method: Converted acute toxicity point estimate

Acute dermal toxicity : Acute toxicity estimate: 1.100 mg/kg

Method: Converted acute toxicity point estimate

#### Skin corrosion/irritation

**Product:** 

Remarks : No data available

**Components:** 

benzyl alcohol:

Species : Rabbit

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Species : human skin
Assessment : Causes burns.

Method : OECD Test Guideline 431

Result : Causes burns.

GLP : yes

#### Serious eye damage/eye irritation

**Product:** 

Remarks : No data available

**Components:** 

benzyl alcohol:

Species : Rabbit

Method : OECD Test Guideline 405

Result : Eye irritation

GLP : yes

#### Respiratory or skin sensitisation

**Product:** 

Remarks : No data available

## **Components:**

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Assessment : May cause sensitisation by skin contact.

### 3-aminopropyltriethoxysilane:

Test Type : Buehler Test Exposure routes : Dermal Species : Guinea pig

Method : OECD Test Guideline 406

Result : May cause sensitisation by skin contact.

GLP : yes

## Germ cell mutagenicity

## **Components:**

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

Genotoxicity in vitro : Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative GLP: yes

Carcinogenicity

Product:

Remarks : No data available

Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

#### **Components:**

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Effects on foetal develop-

ment

Test Type: Pre-natal

Species: Rat

Strain: Sprague-Dawley Application Route: Oral

General Toxicity Maternal: NOAEL: 100 mg/kg body weight

Teratogenicity: NOAEL: 250 mg/kg body weight

Developmental Toxicity: NOAEL: 250 mg/kg body weight Embryo-foetal toxicity: NOAEL: 250 mg/kg body weight

Method: OECD Test Guideline 414

GLP: yes

STOT - single exposure

Product:

Remarks : No data available

STOT - repeated exposure

**Product:** 

Remarks : No data available

Repeated dose toxicity

**Product:** 

Remarks : No data available

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version **Revision Date:** Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

### **Components:**

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

**Species** Rat, male and female

**NOAEL** 10 mg/kg LOAEL 100 mg/kg Application Route Oral Exposure time 90 d

Method **OECD Test Guideline 408** 

**GLP** : yes

**Species** Rat, male and female

NOAEL 30 mg/kg Application Route Oral Exposure time 28 d

Method OECD Test Guideline 407

**GLP** yes

## **Aspiration toxicity**

### **Components:**

## 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

No aspiration toxicity classification

### 11.2 Information on other hazards

## **Endocrine disrupting properties**

## **Product:**

The substance/mixture does not contain components consid-Assessment

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

### **Further information**

**Product:** 

Remarks No data available

## **SECTION 12: Ecological information**

## 12.1 Toxicity

**Product:** 

: Remarks: No data available Toxicity to fish

Toxicity to daphnia and other : Remarks: No data available

aquatic invertebrates

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

**Components:** 

3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 110 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: Directive 67/548/EEC, Annex V, C.1.

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 23 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

ErC50 (Scenedesmus capricornutum (fresh water algae)): >

50 mg/l

Exposure time: 72 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.3.

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 3 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

GLP: yes

benzyl alcohol:

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 230 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 770

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

3,6,9,12-tetra-azatetradecamethylenediamine:

M-Factor (Acute aquatic tox- :

icity)

M-Factor (Chronic aquatic

toxicity)

: 1

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 70,7 mg/l

Exposure time: 96 h

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 11,1 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): 79,4

mg/i

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

Toxicity to microorganisms : (activated sludge): > 1.000 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

GLP: yes

3-aminopropyltriethoxysilane:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 934 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 331 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

EC50 (Scenedesmus subspicatus): > 1.000 mg/l

Exposure time: 72 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.3.

GLP: yes

## 12.2 Persistence and degradability

**Product:** 

Components:

Biodegradability : Remarks: No data available

Physico-chemical removabil- :

: Remarks

Remarks: No data available

# ity

## 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

Biodegradability : Test Type: aerobic

Result: Not readily biodegradable.

Method: Directive 67/548/EEC Annex V, C.4.A.

GLP: yes

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reac-

tion products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge Result: Not biodegradable Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301F

GLP: yes

3-aminopropyltriethoxysilane:

Biodegradability : Test Type: aerobic

Result: Not readily biodegradable.

Method: Directive 67/548/EEC Annex V, C.4.A.

GLP: yes

12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: No data available

**Components:** 

3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Partition coefficient: n- : log Pow: 0,99

octanol/water Method: OECD Test Guideline 107

GLP: yes

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reac-

tion products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Bioaccumulation : Species: Fish

Bioconcentration factor (BCF): 5,13

Method: estimated

Partition coefficient: n- : log Pow: 3,6 (25 °C)

octanol/water pH: 7

Method: Regulation (EC) No. 440/2008, Annex, A.8

GLP: no

12.4 Mobility in soil

**Components:** 

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Distribution among environ: log Koc: > 5,16

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

mental compartments Method: OECD Test Guideline 121

#### 12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

## 12.6 Endocrine disrupting properties

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### 12.7 Other adverse effects

**Product:** 

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : In accordance with local and national regulations.

Container hazardous when empty.

Do not dispose of with domestic refuse.

Do not mix waste streams during collection.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

## **SECTION 14: Transport information**

## 14.1 UN number or ID number

 ADR/RID/ADN
 : UN 2735

 IMDG
 : UN 2735

 IATA
 : UN 2735

14.2 UN proper shipping name

ADR/RID/ADN : AMINES, LIQUID, CORROSIVE, N.O.S.

(Isophorone diamine, Pentaethylenehexamine)

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

IMDG : AMINES, LIQUID, CORROSIVE, N.O.S.

(ISOPHORONEDIAMINE, Pentaethylenehexamine)

**IATA** : Amines, liquid, corrosive, n.o.s.

(Isophorone diamine, Pentaethylenehexamine)

14.3 Transport hazard class(es)

 ADR/RID/ADN
 : 8

 IMDG
 : 8

 IATA
 : 8

14.4 Packing group

ADR/RID/ADN

Packing group : III
Classification Code : C7
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : E

**IMDG** 

Packing group : III Labels : 8

EmS Code : F-A, S-B

Remarks : IMDG Code segregation group 18 - Alkalis

IATA (Cargo)

Packing instruction (cargo : 856

aircraft)

Packing group : III

Labels : Corrosive

IATA (Passenger)

Packing instruction (passen: 852

ger aircraft)

Packing instruction (LQ) : Y841
Packing group : III

Labels : Corrosive

14.5 Environmental hazards

ADR/RID/ADN

Environmentally hazardous : yes

**IMDG** 

Marine pollutant : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

Remarks : The transport of dangerous goods, including their loading and

unloading, must be done by people who received the neces-

sary training required by Modal Regulations.

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered: Number on list 3

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be considered: Number on list: 3

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast)

Not applicable

UK REACH List of substances subject to authorisation (Annex XIV)

Not applicable

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors

: Not applicable

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors

Not applicable

Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

ENVIRONMENTAL HAZARDS

E2

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

Seveso III Directive (2012/18/EU) implemented E2 by Control of Major Accident Hazards Regulations 2015 (COMAH)

**ENVIRONMENTAL HAZARDS** 

#### 15.2 Chemical safety assessment

Not applicable

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

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.
H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H373 : May cause damage to organs through prolonged or repeated

exposure if swallowed.

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

EUH071 : Corrosive to the respiratory tract.

## Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation
Skin Corr. : Skin corrosion
Skin Sens. : Skin sensitisation

STOT RE : Specific target organ toxicity - repeated exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Ef-

according to Regulation (EC) No. 1907/2006



## AT30 FAST Epoxy Hardener

Version Revision Date: Date of last issue: 28.11.2020 6.0 SDB\_GB 08.09.2022 Date of first issue: 03.11.2014

fect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

Training advice : Provide adequate information, instruction and training for op-

erators.

## Classification of the mixture: Classification procedure:

Acute Tox. 4	H302	Calculation method
Skin Corr. 1A	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Chronic 2	H411	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

GB / EN