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

## **1.1 Product identifier**

Trade name : PureCast T10 Fast Hardener (B)

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

Product use : Tooling system, Product is not intended for consumer use

### 1.3 Details of the supplier of the safety data sheet

Company name of supplier	:	CFSNET Ltd
		United Downs Industrial Park
		St Day, Redruth, Cornwall TR16 5HY
Telephone	:	+44 (0)1209 821028
E-mail address of person	:	sales@cfsnet.co.uk
responsible for the SDS		

### 1.4 Emergency telephone number

+44 (0)1209 821028

## **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

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

Acute toxicity, Category 4 Skin corrosion, Sub-category 1B Serious eye damage, Category 1 Skin sensitisation, Category 1 Long-term (chronic) aquatic hazard, Category 2 H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H318: Causes serious eye damage. H317: May cause an allergic skin reaction.

- H317: May cause an allergic skin reaction.
- H411: Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)				
Hazard pictograms	:			
Signal word		Danger	•	
Hazard statements	:	H302 H314 H317 H411	Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.	
Precautionary statements	:	Prevention:		



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	P273	Avoid release to the e	nvironment.	
	P280	Wear protective gloves eye protection/ face pr		
	Response	:		
	P303 + P3	61 + P353 IF ON SKIN (or ately all contaminated with water.	,	
	P304 + P34	40 + P310 IF INHALED: Re air and keep comfortal mediately call a POIS0	ble for breathing. Im-	
	P305 + P3	51 + P338 + P310 IF IN EY	/ES: Rinse cautiously minutes. Remove con- and easy to do. Con-	
	P391	Collect spillage.		

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

Polyoxypropylentriamine 3-aminomethyl-3,5,5-trimethylcyclohexylamine Adduct IA (epoxy amine adduct)

#### 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.

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

#### 3.2 Mixtures

#### Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Registration number		
Polyoxypropylentriamine	39423-51-3	Acute Tox. 4; H302	>= 25 - < 40
	500-105-6	Acute Tox. 4; H312	
	01-2119556886-20-	Eye Dam. 1; H318	
	XXXX	Aquatic Chronic 2;	
		H411	
3-aminomethyl-3,5,5-	2855-13-2	Acute Tox. 4; H302	>= 25 - < 40
trimethylcyclohexylamine	220-666-8	Acute Tox. 4; H312	
	01-2119514687-32-	Skin Corr. 1B; H314	
	XXXX	Skin Sens. 1A; H317	
		Aquatic Chronic 3;	
		H412	
		Eye Dam. 1; H318	



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Adduct IA (epoxy amine adduct)	68609-08-5 614-657-1 01-2120106013-80- XXXX	Acute Tox. 4; H302 Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 5 - < 10
	,	11411	

For explanation of abbreviations see section 16.

# **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

General advice	:	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	:	Move to fresh air. Consult a physician after significant exposure.
In case of skin co	ntact :	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficul- ty.
In case of eye cor	ntact :	Small amounts splashed into eyes can cause irreversible tis- sue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing.
If swallowed	:	Do not induce vomiting without medical advice. Rinse mouth with water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.
4.2 Most important sy	/mptoms and e	effects, both acute and delayed
Symptoms	:	Gastrointestinal discomfort Allergic reactions Dermatitis See Section 11 for more detailed information on health effects and symptoms.
Risks	:	Health injuries may be delayed. corrosive effects sensitising effects
		Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Causes severe burns.



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

Treatment : Treat symptomatically.

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

5.1	Extinguishing media		
	Suitable extinguishing media :	In case of fire, use water/water spray/water jet/carbon diox- ide/sand/foam/alcohol resistant foam/chemical powder for extinction.	
5.2	Special hazards arising from the	e substance or mixture	
	Specific hazards during fire- : fighting	Do not allow run-off from fire fighting to enter drains or water courses.	
	Hazardous combustion prod- : ucts	No hazardous combustion products are known	
5.3	Advice for firefighters		
	Special protective equipment : for firefighters	In the event of fire, wear self-contained breathing apparatus.	
	Further information :	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.	

# **SECTION 6: Accidental release measures**

<b>6.1 Personal precautions, protect</b> Personal precautions	<ul> <li>tive equipment and emergency procedures</li> <li>Use personal protective equipment. Deny access to unprotected persons.</li> </ul>		
6.2 Environmental precautions			
Environmental precautions	: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.		
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). Keep in suitable, closed containers for disposal.		

# 6.4 Reference to other sections

For personal protection see section 8.



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# **SECTION 7: Handling and storage**

7.1 Precautions for safe handling	
Advice on safe handling :	<ul> <li>Avoid exceeding the given occupational exposure limits (see section 8).</li> <li>Do not get in eyes, on skin, or on clothing.</li> <li>For personal protection see section 8.</li> <li>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.</li> <li>Smoking, eating and drinking should be prohibited in the application area.</li> <li>Follow standard hygiene measures when handling chemical products</li> </ul>
Advice on protection against : fire and explosion	Normal measures for preventive fire protection.
Hygiene measures :	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
7.2 Conditions for safe storage, in	cluding any incompatibilities
Requirements for storage : areas and containers	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully re- sealed and kept upright to prevent leakage. Store in accord- ance with local regulations.
Further information on stor- : age stability	No decomposition if stored and applied as directed.
7.3 Specific end use(s)	

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

## 8.1 Control parameters

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

Personal protective equ	uipment
Eye protection	<ul> <li>Safety glasses with side-shields conforming to EN166</li> <li>Eye wash bottle with pure water</li> <li>Wear eye/face protection.</li> </ul>
Hand protection	: Chemical-resistant, impervious gloves complying with an ap- proved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manu- facturer specifications.
	Suitable for short time use or protection against splashes:



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	Butyl rubber/nitrile rubber gloves (> 0 Contaminated gloves should be remo Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min.	
Skin and body protection	<ul> <li>Protective clothing (e.g. Safety shoes long-sleeved working clothing, long tra and protective boots are additionally ra and stirring work.</li> <li>No special measures required.</li> </ul>	ousers). Rubber aprons
Respiratory protection		
Environmental exposure c	ontrois	
General advice	: Do not flush into surface water or san If the product contaminates rivers and respective authorities.	

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

### 9.1 Information on basic physical and chemical properties

information on basic physical and chemical properties					
Physical state Colour Odour	: : :	liquid amber amine-like			
Odour Threshold	:	No data available			
рН	:	Not applicable			
Melting point/range / Freezing point	:	No data available			
Boiling point/boiling range	:	No data available			
Flash point	:	> 100 °C Method: closed cup			
Evaporation rate	:	No data available			
Flammability (solid, gas)	:	No data available			
Upper explosion limit / Upper flammability limit	:	No data available			
Lower explosion limit / Lower flammability limit	:	No data available			
Vapour pressure	:	0,02 hPa			
Relative vapour density	:	No data available			
Density	:	1,00 g/cm3 (20 °C)			
Solubility(ies) Water solubility	:	No data available			



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Solubility in other solvents	:	No data available
Partition coefficient: n-		No data available
octanol/water Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

## 9.2 Other information

No data available

# **SECTION 10: Stability and reactivity**

#### **10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

#### 10.2 Chemical stability

The product is chemically stable.

# 10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

#### 10.4 Conditions to avoid

Conditions to avoid : No data available

# 10.5 Incompatible materials

Materials to avoid : No data available

# 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

## **SECTION 11: Toxicological information**

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

## Acute toxicity

Harmful if swallowed.



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<u>Components:</u>		
Polyoxypropylentriamine:		
Acute oral toxicity	: LD50 Oral (Rat): > 550 mg/kg	
Acute dermal toxicity	: LD50 Dermal (Rabbit): > 1.001 mg/kg	
3-aminomethyl-3,5,5-trime	ylcyclohexylamine:	
Acute oral toxicity	: LD50 Oral (Rat): 1.030 mg/kg	
Acute inhalation toxicity	: LC50 (Rat): > 5,01 mg/l Exposure time: 4 h Test atmosphere: dust/mist	
Acute dermal toxicity	: LD50 Dermal (Rabbit): > 2.000 mg/kg	
Adduct IA (epoxy amine a	duct):	
Acute oral toxicity	: LD50 Oral (Rat, female): 300 - 2.000 mg Method: OECD Test Guideline 423	/kg
Skin corrosion/irritation Causes severe burns.		
<b>Serious eye damage/eye ir</b> Causes serious eye damage	itation	
Respiratory or skin sensit	ation	
<b>Skin sensitisation</b> May cause an allergic skin r	action.	
<b>Respiratory sensitisation</b> Not classified based on avai	ble information.	
Germ cell mutagenicity Not classified based on avai	ble information.	
<b>Carcinogenicity</b> Not classified based on avai	ble information.	
<b>Reproductive toxicity</b> Not classified based on avai	ble information.	
STOT - single exposure Not classified based on avai	ble information.	
STOT - repeated exposure Not classified based on avai	ble information.	
Aspiration toxicity Not classified based on avai	ble information.	



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# 11.2 Information on other hazards

# **SECTION 12: Ecological information**

## 12.1 Toxicity

## Components:

	Componentei	
	3-aminomethyl-3,5,5-trimethyl	lcyclohexylamine:
	Toxicity to algae/aquatic : plants	ErC50 (Desmodesmus subspicatus (green algae)): > 10 - 100 mg/l Exposure time: 72 h
	Adduct IA (epoxy amine addu	ict):
	Toxicity to algae/aquatic : plants	EC50 (Pseudokirchneriella subcapitata (algae)): 3,13 mg/l Exposure time: 72 h
	Toxicity to fish (Chronic tox- : icity)	: LC50: 1,62 mg/l Exposure time: 96 h Species: Danio rerio (zebra fish)
	Toxicity to daphnia and other : aquatic invertebrates (Chron- ic toxicity)	EC50: 1,75 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea)
12.	2 Persistence and degradability No data available	/
12.3	<b>3 Bioaccumulative potential</b> No data available	
12.4	<b>4 Mobility in soil</b> No data available	
12.	5 Results of PBT and vPvB ass	essment
	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.
12.0	<b>5 Endocrine disrupting propert</b> i No data available	ies
12.	7 Other adverse effects	
	Product: Additional ecological infor- : mation	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects. 9
		9



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# **SECTION 13: Disposal considerations**

13.1 Waste treatment methods		
Product	<ul> <li>The generation of waste should be avoided or minimized wherever possible.</li> <li>Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.</li> <li>Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.</li> <li>Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.</li> <li>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.</li> </ul>	
European Waste Catalogue	: 20 01 27* paint, inks, adhesives and resins containing dan- gerous substances	
Contaminated packaging	: 15 01 10* packaging containing residues of or contaminated by dangerous substances	

# **SECTION 14: Transport information**

14.1 UN number		
ADR	:	UN 2735
IMDG	:	UN 2735
ΙΑΤΑ	:	UN 2735
14.2 UN proper shipping name		
ADR		POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
IMDG	-	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
ΙΑΤΑ	:	Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3 Transport hazard class(es)		
ADR	:	8
IMDG	:	8
ΙΑΤΑ	:	8
14.4 Packing group		



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## ADR

C H L	Packing group Classification Code Iazard Identification Number abels Funnel restriction code	:	III C7 80 8 (E)
P	<b>MDG</b> Packing group abels EmS Code	: : :	III 8 F-A, S-B
Р	<b>ATA (Cargo)</b> Packing instruction (cargo ircraft)	:	856
P P	Packing instruction (LQ) Packing group abels	:	Y841 III Corrosive
P g P P	ATA (Passenger) Packing instruction (passen- er aircraft) Packing instruction (LQ) Packing group abels	:	852 Y841 III Corrosive
14.5 E	Environmental hazards		
-	<b>DR</b> Invironmentally hazardous	:	yes
	MDG /arine pollutant	:	yes

#### IATA (Passenger) Environmentally hazardous

- IATA (Cargo)
- Environmentally hazardous : yes

## 14.6 Special precautions for user

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

: yes

Not applicable for product as supplied.

# **SECTION 15: Regulatory information**

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



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International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors		:	Not applicable
Regulation (EC) No 649/2012 of ment and the Council concerning of dangerous chemicals		:	Not applicable
REACH - Candidate List of Subs Concern for Authorisation (Article		:	None of the components are listed (=> 0.1 %).
REACH - List of substances sub (Annex XIV)		:	Not applicable
Regulation (EC) No 1005/2009 c plete the ozone layer	on substances that de-	:	Not applicable
Regulation (EU) 2019/1021 on p tants (recast)	ersistent organic pollu-	:	Not applicable
REACH Information:	All substances contain - registered by our ups - registered by us, and - excluded from the reg - exempted from the reg	strea I/or gula	am suppliers, and/or ation, and/or
Seveso III: Directive 2012/18/EU jor-accident hazards involving da E2			t and of the Council on the control of ma- NRDS
Volatile organic compounds :	Law on the incentive ta (VOCV) no VOC duties	ax f	or volatile organic compounds
			4 November 2010 on industrial ution prevention and control)
Occupational Illnesses (R- : 461-3, France)	49 bis, 49		
Installations classified for the : protection of the environment (Environment Code R511-9)	4511		

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

### **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.



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H411	:	Toxic to aquatic life with long lasting effects.		
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		
Skin Corr.	:	Skin corrosion		
Skin Sens.	:	Skin sensitisation		
ADR	:	European Agreement concerning the International Carriage of		
		Dangerous Goods by Road		
CAS	:	Chemical Abstracts Service		
DNEL	:	Derived no-effect level		
EC50	:	Half maximal effective concentration		
GHS	:	Globally Harmonized System		
IATA	:	International Air Transport Association		
IMDG	:	International Maritime Code for Dangerous Goods		
LD50	:	Median lethal dosis (the amount of a material, given all at		
		once, which causes the death of 50% (one half) of a group of test animals)		
LC50		Median lethal concentration (concentrations of the chemical in		
2000	•	air that kills 50% of the test animals during the observation		
		period)		
MARPOL	:	International Convention for the Prevention of Pollution from		
		Ships, 1973 as modified by the Protocol of 1978		
OEL	:	Occupational Exposure Limit		
PBT	:	Persistent, bioaccumulative and toxic		
PNEC	:	Predicted no effect concentration		
REACH	:	Regulation (EC) No 1907/2006 of the European Parliament		
		and of the Council of 18 December 2006 concerning the Reg-		
		istration, Evaluation, Authorisation and Restriction of Chemi-		
0.410		cals (REACH), establishing a European Chemicals Agency		
SVHC	:	Substances of Very High Concern		
vPvB		Very persistent and very bioaccumulative		

# Further information

Classification of the mixture:		Classification procedure:
Acute Tox. 4	H302	Calculation method
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 2	H411	Calculation method

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Changes as compared to previous version !



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