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

1.1. Product identifier
Product name
CHOCKFAST VERSAFLOW HARDENER

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

1.3. Details of the supplier of the safety data sheet
Supplier
ITW Performance Polymers
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
customerservice.shannon@itwpp.com

1.4. Emergency telephone number
Emergency telephone
+44(0)1235 239 670 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards
Not Classified

Health hazards
Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards
Aquatic Chronic 3 - H412

2.2. Label elements
Hazard pictograms

Signal word
Danger

Hazard statements
H302+H312 Harmful if swallowed or in contact with skin.
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
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 IF skin irritation or rash occurs: Get medical advice/ attention.
CHOCKFAST VERSAFLOW HARDENER

Contains

POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY, 2,4,6-tris(dimethylaminomethyl)phenol , TRIETHYLENETETRAMINE

Supplementary precautionary statements

P260 Do not breathe vapour/ spray.
P261 Avoid breathing vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER/ doctor.
P321 Specific treatment (see medical advice on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY 30-60%
CAS number: 9046-10-0

Classification
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Aquatic Chronic 3 - H412

2,4,6-tris(dimethylaminomethyl)phenol 10-30%
CAS number: 90-72-2
REACH registration number: 01-2119560597-27-0000

Classification
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319

TRIETHYLENETETRAMINE 10-30%
CAS number: 112-24-3
EC number: 203-950-6
REACH registration number: 01-2119487919-13-0000

Classification
Acute Tox. 4 - H312
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412
CHOCKFAST VERSAFLOW HARDENER

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Do not breathe vapour/spray. Avoid contact with eyes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation
Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.

Ingestion
Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.

Skin contact
Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if symptoms are severe or persist after washing. If in doubt, get medical attention promptly.

Eye contact
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. May cause permanent damage if eye is not immediately irrigated. Get medical attention.

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

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No adverse effects known.

Ingestion
This product is strongly corrosive. Causes severe burns. May cause chemical burns in mouth, oesophagus and stomach. May cause chemical burns in mouth and throat. May cause severe internal injury.

Skin contact
This product is strongly corrosive. Causes severe skin burns and eye damage. Contact with concentrated chemical may cause severe skin damage. Prolonged contact causes serious tissue damage.

Eye contact
This product is strongly corrosive. Causes severe burns. Causes serious eye damage. Prolonged contact causes serious eye and tissue damage. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

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

Notes for the doctor
No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Extinguish with the following media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

 Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards
Avoid breathing fire gases or vapours.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Harmful gases or vapours.

5.3. Advice for firefighters
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Protective actions during firefighting
Keep up-wind to avoid fumes.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions
Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.

6.2. Environmental precautions
Environmental precautions
Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up
Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections
Reference to other sections
Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Usage precautions
Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Do not breathe vapour. Avoid contact with skin and eyes. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities
Storage precautions
Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from the following materials: Acids. Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)
Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

TRIETHYLENETETRAMINE (CAS: 112-24-3)

DNEL
Workers - Inhalation; Long term systemic effects: 1 mg/m³
Workers - Inhalation; Short term systemic effects: 5380 mg/m³
Workers - Dermal; Long term systemic effects: 0.57 mg/kg/day

8.2. Exposure controls

Protective equipment
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**Appropriate engineering controls**
Provide adequate general and local exhaust ventilation.

**Eye/face protection**
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

**Hand protection**
Use protective gloves. It is recommended that gloves are made of the following material: Neoprene. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). It is recommended that gloves are made of the following material: Butyl rubber. It is recommended that gloves are made of the following material: Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 8 hours.

**Other skin and body protection**
Wear apron or protective clothing in case of contact.

**Hygiene measures**
Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving workplace.

**Respiratory protection**
If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

**Appearance**
Colourless to pale yellow liquid.

**Odour**
Ammonia.

**Initial boiling point and range**
~100°C

**Flash point**
~ 121°C Not specified.

**Vapour pressure**
0.01 hPa @ 20°C

**Relative density**
0.95

**Auto-ignition temperature**
~294°C

#### 9.2. Other information

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity**
Stable at normal ambient temperatures and when used as recommended.

#### 10.2. Chemical stability

**Stability**
Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions**
Not available.
CHOCKFAST VERSAFLOW HARDENER

10.4. Conditions to avoid

Conditions to avoid
Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid
Peroxides. Phenols, cresols.

10.6. Hazardous decomposition products

Hazardous decomposition products
Fire or high temperatures create: Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral
ATE oral (mg/kg) 688.41

Acute toxicity - dermal
ATE dermal (mg/kg) 1,100.0

Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Prolonged or repeated exposure may cause the following adverse effects: Liver and/or kidney damage.

Inhalation
May cause respiratory irritation.

Ingestion
Swallowing concentrated chemical may cause severe internal injury. Causes severe burns. Burning sensation in mouth.

Skin contact
May cause sensitisation by skin contact. This product is corrosive. May cause serious chemical burns to the skin. Contact with concentrated chemical may cause severe skin damage.

Eye contact
This product is strongly corrosive. Causes serious eye damage. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

Toxicological information on ingredients.

POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 475.0

Species Rat

ATE oral (mg/kg) 475.0

2,4,6-tris(dimethylaminomethyl)phenol

Acute toxicity - oral

ATE oral (mg/kg) 500.0

SECTION 12: Ecological information

Ecotoxicity
Avoid releasing into the environment. Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity
Not considered toxic to fish.
12.2. Persistence and degradability

Persistence and degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility

Do not discharge into drains or watercourses or onto the ground.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

Waste class

08 04 09*

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1760

UN No. (IMDG) 1760

UN No. (ICAO) 1760

UN No. (ADN) 1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID) CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE)

Proper shipping name (IMDG) CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE)

Proper shipping name (ICAO) CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE)

Proper shipping name (ADN) CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE)

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID classification code C9

ADR/RID label 8

IMDG class 8

ICAO class/division 8
CHOCKFAST VERSAFLOW HARDENER

ADN class 8

Transport labels

14.4. Packing group

ADR/RID packing group III
IMDG packing group III
ICAO packing group III
ADN packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user

EmS F-A, S-B
ADR transport category 3
Emergency Action Code 2X
Hazard Identification Number (ADR/RID) 80
Tunnel restriction code (E)

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

SECTION 15: Regulatory information

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


15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date 13/01/2020
Revision 0
SDS number 20902

Hazard statements in full

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.