



SAFETY DATA SHEET
Chockfast Orange Hardener

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME Chockfast Orange Hardener
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 SHANNON INDUSTRIAL ESTATE
 CO. CLARE
 IRELAND.
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2 HAZARDS IDENTIFICATION

Harmful in contact with skin. Causes burns. May cause sensitisation by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION (1999/45) Xn;R21. C;R34. R43. R52/53.

HUMAN HEALTH

Corrosive. Prolonged contact causes serious eye and tissue damage.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
TRIETHYLENETETRAMINE	203-950-6	112-24-3	60-100%	C;R34 Xn;R21 R43 R52/53

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

Do not breathe vapour. Avoid contact with skin and eyes. Seek medical attention for all burns, regardless how minor they may seem.

INHALATION

Move the exposed person to fresh air at once. Consult a physician for specific advice.

INGESTION

DO NOT INDUCE VOMITING! Drink plenty of water. Get medical attention immediately!

SKIN CONTACT

Remove affected person from source of contamination. Wash skin thoroughly with soap and water for several minutes. Get medical attention if any discomfort continues.

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Contact physician if discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Fire can be extinguished using: Foam, carbon dioxide or dry powder. Water spray, fog or mist.

SPECIAL FIRE FIGHTING PROCEDURES

Keep up-wind to avoid fumes. Keep run-off water out of sewers and water sources. Dike for water control.

SPECIFIC HAZARDS

Avoid breathing fire vapours.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

Chockfast Orange Hardener

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Absorb spillage with non-combustible, absorbent material. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry and cool place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT



PROCESS CONDITIONS

Provide eyewash, quick drench.

ENGINEERING MEASURES

Provide adequate ventilation.

RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION

The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved chemical safety goggles where eye exposure is reasonably probable.

HYGIENE MEASURES

Eating, smoking and water fountains prohibited in immediate work area. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

SKIN PROTECTION

Wear apron or protective clothing in case of splashes.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOUR	Colourless to pale yellow		
ODOUR	Ammonia		
SOLUBILITY	Miscible with water		
BOILING POINT (°C)	277 760 mm Hg	RELATIVE DENSITY	0.98 20
VAPOUR DENSITY (air=1)	5.0	VAPOUR PRESSURE	<0.001 kPa 20
pH-VALUE, DILUTED SOLUTION	12 100g/l water @ 20oC	VISCOSITY	30 mPas 20
FLASH POINT (°C)	122 CC (Closed cup).	AUTO IGNITION	335
		TEMPERATURE (°C)	
FLAMMABILITY LIMIT - LOWER(%)	N/D	FLAMMABILITY LIMIT - UPPER(%)	N/D
PARTITION COEFFICIENT (N-Octanol/Water)	LOG Pow:<0		

10 STABILITY AND REACTIVITY

Chockfast Orange Hardener

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time. Avoid exposure to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition.

MATERIALS TO AVOID

Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures create: Nitrous gases (NOx). Oxides of: Carbon dioxide (CO2). Carbon monoxide (CO). Vapours/gases/fumes of: Ammonia or amines.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 2, 500-4300 mg/kg (oral rat)

INHALATION

Vapours irritate the respiratory system, and may cause coughing and difficulties in breathing.

INGESTION

Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

SKIN CONTACT

Corrosive. Prolonged contact causes serious tissue damage.

EYE CONTACT

Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative.

HEALTH WARNINGS

This chemical may cause skin/eye irritation and burns (corrosive).

ROUTE OF ENTRY

Inhalation. Skin absorption. Ingestion.

TARGET ORGANS

Central nervous system. Respiratory system, lungs. Liver. Kidneys.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

LC 50, 96 Hrs, FISH mg/l 570

EC 50, 48 Hrs, DAPHNIA, mg/l 31

IC 50, 72 Hrs, ALGAE, mg/l 20

DEGRADABILITY

The product is not readily biodegradable.

WATER HAZARD CLASSIFICATION

WGK 2

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

WASTE CLASS

08 04 99

14 TRANSPORT INFORMATION

Chockfast Orange Hardener



UK ROAD CLASS	8	UK ROAD PACK GR.	II
PROPER SHIPPING NAME	TRIETHYLENETETRAMINE		
UN NO. ROAD	2259	ADR CLASS	Class 8: Corrosive substances.
ADR CLASS NO.	8	TUNNEL RESTRICTION CODE	(E)
ADR PACK GROUP	II	ADR LABEL NO.	8
HAZARD No. (ADR)	80	CEFIC TEC(R) NO.	80GC7-II+III
HAZCHEM CODE	2X	RID PACK GROUP	II
RID CLASS NO.	8	IMDG CLASS	8
UN NO. SEA	2259	EMS	F-A, S-B
IMDG PACK GR.	II	AIR CLASS	8
UN NO. AIR	2259		
AIR PACK GR.	II		

15 REGULATORY INFORMATION

LABELLING



Corrosive



Harmful

CONTAINS TRIETHYLENETETRAMINE

RISK PHRASES

R21	Harmful in contact with skin.
R34	Causes burns.
R43	May cause sensitisation by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

16 OTHER INFORMATION

REVISION DATE 06/05/2010

REV. NO./REPL. SDS GENERATED 2

RISK PHRASES IN FULL

R34	Causes burns.
R21	Harmful in contact with skin.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R43	May cause sensitisation by skin contact.

DISCLAIMER

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.