



SAFETY DATA SHEET 2 TON CLEAR HARDENER

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

1.1. Product identifier

Product name 2 TON CLEAR HARDENER

Product number X0061

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

Identified uses Hardener.

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
mail@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)

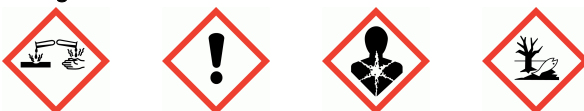
Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361fd

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H410 Very toxic to aquatic life with long lasting effects.
H302+H312 Harmful if swallowed or in contact with skin.

2 TON CLEAR HARDENER

Precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P312 Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p>
Contains	NONYLPHENOL, N-(2-Aminoethyl)piperazine
Supplementary precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P391 Collect spillage.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NONYLPHENOL	60-100%
CAS number: 25154-52-3	EC number: 246-672-0
M factor (Acute) = 1	M factor (Chronic) = 1
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Repr. 2 - H361fd	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

2 TON CLEAR HARDENER

N-(2-Aminoethyl)piperazine	10-30%
CAS number: 140-31-8	
Classification	
Acute Tox. 4 - H302	
Acute Tox. 3 - H311	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove affected person from source of contamination. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.
Ingestion	Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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.
----------------------------	---

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 foam, carbon dioxide or dry powder.
-------------------------------------	---

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Does not decompose when used and stored as recommended.
--------------------------------------	---

5.3. Advice for firefighters

Protective actions during firefighting	Keep up-wind to avoid fumes. Do not use water jet as an extinguisher, as this will spread the fire. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

2 TON CLEAR HARDENER

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Provide adequate ventilation. Avoid heat, flames and other sources of ignition. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid or minimise the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground. 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 Use only in well-ventilated areas. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. 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 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

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

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

It is recommended that chemical-resistant, impervious gloves are worn. Wear protective gloves made of the following material: Butyl rubber. Neoprene. 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.

2 TON CLEAR HARDENER

Other skin and body protection	To prevent repeated or prolonged skin contact, wear impervious clothing and boots.
Hygiene measures	Provide eyewash station and safety shower. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Promptly remove any clothing that becomes wet or contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.
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	Liquid.
Colour	Amber.
Odour	Amine.
pH	pH (concentrated solution): 10.5
Initial boiling point and range	>200°C @
Flash point	101°C
Evaporation rate	<1 (Butyl Acetate = 1)
Vapour pressure	<1 mm Hg @ °C
Vapour density	>1
Relative density	0.97 @ 20°C
Solubility(ies)	Soluble in water.

9.2. Other information

Other information	Not available.
--------------------------	----------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Strong oxidising agents.
-------------------	--------------------------

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.
---	----------------

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid	Avoid contact with oxidising agents. Nitrous acid and other nitrosating agents.
---------------------------	---

2 TON CLEAR HARDENER

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Nitrous gases (NO_x). 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) 574.71

Acute toxicity - dermal

ATE dermal (mg/kg) 1,363.64

Inhalation Breathing of vapour or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Ingestion Harmful if swallowed. Causes burns.

Skin contact May cause sensitisation by skin contact. Corrosive. Prolonged contact causes serious tissue damage.

Acute and chronic health hazards Corrosive. Prolonged contact causes serious eye and tissue damage.

Route of entry Inhalation Ingestion. Skin and/or eye contact

N-(2-Aminoethyl)piperazine

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

SECTION 12: Ecological Information

Ecotoxicity Do not release into the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity Very toxic to aquatic organisms.

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.

2 TON CLEAR HARDENER

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class 08 04 99

SECTION 14: Transport information

General No other information known.

14.1. UN number

UN No. (ADR/RID) 3267

UN No. (IMDG) 3267

UN No. (ICAO) 3267

14.2. UN proper shipping name

Proper shipping name (ADR/RID) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Nonylphenol, N-(2-Aminoethyl)piperazine)

Proper shipping name (IMDG) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Nonylphenol, N-(2-Aminoethyl)piperazine)

Proper shipping name (ICAO) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Nonylphenol, N-(2-Aminoethyl)piperazine)

Proper shipping name (ADN) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Nonylphenol, N-(2-Aminoethyl)piperazine)

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID label 8

IMDG class 8

ICAO class/division 8

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-A, S-B

Emergency Action Code 2X

Hazard Identification Number (ADR/RID) 80

2 TON CLEAR HARDENER

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	03/04/2018
Revision	8
Supersedes date	25/04/2017
Hazard statements in full	H302 Harmful if swallowed. H311 Toxic in contact with skin. 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. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. 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.