

# **ITW** Performance Polymers

## SAFETY DATA SHEET 2 TON CLEAR HARDENER

### 1. Identification

#### Product identifier

Product name 2 TON CLEAR HARDENER

Product number 14260H, 20222H

#### Recommended use of the chemical and restrictions on use

Application Hardener.

#### 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

#### Emergency telephone number

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

### 2. Hazard(s) identification

#### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Acute Tox. 3 - H311 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361fd STOT RE 1 - H372

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

#### Label elements

##### Hazard symbols



##### Signal word

Danger

##### Hazard statements

H302 Harmful if swallowed.  
H311 Toxic in contact with skin.  
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.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.

## 2 TON CLEAR HARDENER

### Precautionary statements

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P260 Do not breathe vapor/ spray.  
 P261 Avoid breathing vapor/ spray.  
 P264 Wash contaminated skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P272 Contaminated work clothing must not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P301+P312 If swallowed: Call a poison center/ 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.  
 P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308+P313 If exposed or concerned: Get medical advice/ attention.  
 P310 Immediately call a poison center/ doctor.  
 P314 Get medical advice/ attention if you feel unwell.  
 P321 Specific treatment (see medical advice on this label).  
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P361+P364 Take off immediately all contaminated clothing and wash it before reuse.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P363 Wash contaminated clothing before reuse.  
 P391 Collect spillage.  
 P405 Store locked up.  
 P501 Dispose of contents/ container in accordance with national regulations.

### Contains

2-PIPERAZIN-1-YLETHYLAMINE, 4-NONYLPHENOL, Branched

### Other hazards

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

### 3. Composition/information on ingredients

#### Mixtures

<b>2-PIPERAZIN-1-YLETHYLAMINE</b>	<b>30-60%</b>
CAS number: 140-31-8	
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 3 - H311	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Repr. 2 - H361	
STOT RE 1 - H372	
Aquatic Chronic 3 - H412	

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<b>4-NONYLPHENOL, Branched</b>	<b>30-60%</b>
CAS number: 84852-15-3	
M factor (Acute) = 10	M factor (Chronic) = 10
<b>Classification</b> Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Repr. 2 - H361fd Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	

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

### 4. First-aid measures

#### Description of first aid measures

<b>Inhalation</b>	Remove affected person from source of contamination. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.
<b>Ingestion</b>	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.
<b>Skin Contact</b>	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.
<b>Eye contact</b>	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.

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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#### Indication of immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	No specific recommendations. If in doubt, get medical attention promptly.
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### 5. Fire-fighting measures

#### Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide or dry powder.
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#### Special hazards arising from the substance or mixture

<b>Hazardous combustion products</b>	Does not decompose when used and stored as recommended.
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#### Advice for firefighters

<b>Protective actions during firefighting</b>	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.
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<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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### 6. Accidental release measures

#### 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.

#### Environmental precautions

**Environmental precautions** Avoid or minimize 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.

#### 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 labeled with correct contents and hazard symbol.

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

### 7. Handling and storage

#### 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.

#### 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).

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.

### 8. Exposure controls/Personal protection

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

#### 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 OSHA 1910.133.

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<b>Hand protection</b>	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 OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. The selected gloves should have a breakthrough time of at least 8 hours.
<b>Other skin and body protection</b>	To prevent repeated or prolonged skin contact, wear impervious clothing and boots.
<b>Hygiene measures</b>	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.
<b>Respiratory protection</b>	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 OSHA 1910.134.

### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Color</b>	Amber.
<b>Odor</b>	Amine.
<b>pH</b>	pH (concentrated solution): 10.5
<b>Initial boiling point and range</b>	>200°C @
<b>Flash point</b>	101°C
<b>Evaporation rate</b>	<1 (Butyl Acetate = 1)
<b>Vapor pressure</b>	<1 mm Hg @ °C
<b>Vapor density</b>	>1
<b>Relative density</b>	0.97 @ 20°C
<b>Solubility(ies)</b>	Soluble in water.
<b>Other information</b>	Not available.

### 10. Stability and reactivity

<b>Reactivity</b>	Strong oxidizing agents.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
<b>Possibility of hazardous reactions</b>	Not available.
<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
<b>Materials to avoid</b>	Avoid contact with oxidizing agents. Nitrous acid and other nitrosating agents.

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**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances: Nitrous gases (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Vapours/gases/fumes of: Ammonia or amines.

### 11. Toxicological information

#### Information on toxicological effects

##### Acute toxicity - oral

ATE oral (mg/kg) 505.1

##### Acute toxicity - dermal

ATE dermal (mg/kg) 600.12

**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 exposure** Inhalation Ingestion. Skin and/or eye contact

### 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.

**Toxicity** Very toxic to aquatic organisms.

#### Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

#### Bioaccumulative potential

**Bio-Accumulative Potential** No data available on bioaccumulation.

#### Mobility in soil

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

#### Other adverse effects

**Other adverse effects** Not available.

### 13. Disposal considerations

#### 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 09\*

### 14. Transport information

**General** No other information known.

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### UN Number

UN No. (TDG)	3267
UN No. (IMDG)	3267
UN No. (ICAO)	3267
UN No. (DOT)	3267

### UN proper shipping name

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

### Transport hazard class(es)

TDG class	8
TDG label(s)	8
IMDG Class	8
ICAO class/division	8

### Transport labels



### Packing group

TDG Packing Group	III
IMDG packing group	III
ICAO packing group	III
DOT packing group	III

### Environmental hazards

#### Environmentally Hazardous Substance



### Special precautions for user

EmS F-A, S-B

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

### 15. Regulatory information

### 16. Other information

Revision comments Revised classification.

## 2 TON CLEAR HARDENER

<b>Revision date</b>	11/30/2022
<b>Revision</b>	11
<b>Supersedes date</b>	3/9/2021
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H361 Suspected of damaging fertility or the unborn child. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. 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.