

## SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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### RT350 Hardener

Revision 5

Revision date 2015-10-22

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

##### 1.1. Product identifier

|              |                |
|--------------|----------------|
| Product name | RT350 Hardener |
|--------------|----------------|

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


|           |                                               |
|-----------|-----------------------------------------------|
| Company   | ResinTech Limited                             |
| Address   | Horcott, Fairford,<br>Gloucestershire GL7 4BX |
| Web       | www.resintech.co.uk                           |
| Telephone | +44 (0)1285 712755                            |
| Fax       | +44 (0)1285 712999                            |
| Email     | info@resintech.co.uk                          |

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

|                                      |                                                                                                                                                                                                     |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.1.1. Classification - 1999/45/EC   | C; R34 Xn; R21/22 Xi; R43 R52/53<br>Symbols: C: Corrosive.                                                                                                                                          |
| Main hazards                         | Harmful in contact with skin and if swallowed. Causes burns. May cause sensitisation by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 2.1.2. Classification - EC 1272/2008 | Acute Tox. 4: H302; Acute Tox. 4: H312; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412;                                                                                           |

##### 2.2. Label elements

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard pictograms                   |                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Signal Word                         | Danger                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Hazard Statement                    | Acute Tox. 4: H302 - Harmful if swallowed.<br>Acute Tox. 4: H312 - Harmful in contact with skin.<br>Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.<br>Skin Sens. 1: H317 - May cause an allergic skin reaction.<br>Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.                                                                                                                                                                                       |
| Precautionary Statement: Prevention | P273 - Avoid release to the environment.<br>P280 - Wear protective gloves/protective clothing/eye protection/face protection.                                                                                                                                                                                                                                                                                                                                                                         |
| Precautionary Statement: Response   | P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.<br>P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P312 - Call a POISON CENTER/doctor/ if you feel unwell. |

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## 2.2. Label elements

|                                              |                                                                                                                                                     |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautionary Statement:<br/>Disposal</b> | P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.                                                                        |
|                                              | P501 - Dispose of contents/container to an appropriate waste site or reclaim (in accordance with local/regional/national/international regulation). |

## SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

## 67/548/EEC / 1999/45/EC

| Chemical Name                   | Index No.    | CAS No.    | EC No.    | REACH Registration Number | Conc. (%w/w) | Classification                     | M-factor. |
|---------------------------------|--------------|------------|-----------|---------------------------|--------------|------------------------------------|-----------|
| TOFA Reaction product with TEPA |              | 68953-36-6 | 273-201-6 |                           |              | Xi; R43                            |           |
| N-aminoethylpiperazine          | 612-105-00-4 | 140-31-8   | 205-411-0 |                           |              | Xn; R21/22 C; R34 R43<br>R52/53    |           |
| Tetraethylenepentamine          | 612-060-00-0 | 112-57-2   | 203-986-2 |                           |              | Xn; R21/22 C; R34 R43 N;<br>R51/53 |           |

## EC 1272/2008

| Chemical Name                   | Index No.    | CAS No.    | EC No.    | REACH Registration Number | Conc. (%w/w) | Classification                                                                                                     | M-factor. |
|---------------------------------|--------------|------------|-----------|---------------------------|--------------|--------------------------------------------------------------------------------------------------------------------|-----------|
| TOFA Reaction product with TEPA |              | 68953-36-6 | 273-201-6 |                           |              | Skin Sens. 1: H317;                                                                                                |           |
| N-aminoethylpiperazine          | 612-105-00-4 | 140-31-8   | 205-411-0 |                           |              | Acute Tox. 4: H312; Acute<br>Tox. 4: H302; Skin Corr. 1B:<br>H314; Skin Sens. 1: H317;<br>Aquatic Chronic 3: H412; |           |
| Tetraethylenepentamine          | 612-060-00-0 | 112-57-2   | 203-986-2 |                           |              | Acute Tox. 4: H312; Acute<br>Tox. 4: H302; Skin Corr. 1B:<br>H314; Skin Sens. 1: H317;<br>Aquatic Chronic 2: H411; |           |

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

|                     |                                                                                                                                                           |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Move the exposed person to fresh air. Seek medical attention if irritation or symptoms persist.                                                           |
| <b>Eye contact</b>  | Causes burns. Causes severe inflammation and may damage the cornea. Seek medical attention.                                                               |
| <b>Skin contact</b> | Causes burns. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist. |
| <b>Ingestion</b>    | Ingestion causes burns to the respiratory tract. DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label.  |

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media

|  |                                                               |
|--|---------------------------------------------------------------|
|  | Use as appropriate: Carbon dioxide (CO2), Dry chemical, Foam. |
|--|---------------------------------------------------------------|

## 5.2. Special hazards arising from the substance or mixture

|  |                                                                    |
|--|--------------------------------------------------------------------|
|  | Corrosive. Burning produces irritating, toxic and obnoxious fumes. |
|--|--------------------------------------------------------------------|

## 5.3. Advice for firefighters

|  |                                                     |
|--|-----------------------------------------------------|
|  | Wear suitable respiratory equipment when necessary. |
|--|-----------------------------------------------------|

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

|  |                                                                                                                         |
|--|-------------------------------------------------------------------------------------------------------------------------|
|  | Ensure adequate ventilation of the working area. Evacuate personnel to a safe area. Wear suitable protective equipment. |
|--|-------------------------------------------------------------------------------------------------------------------------|

## 6.2. Environmental precautions

|  |                                                                         |
|--|-------------------------------------------------------------------------|
|  | Do not allow product to enter drains. Prevent further spillage if safe. |
|--|-------------------------------------------------------------------------|

## 6.3. Methods and material for containment and cleaning up

|  |                                                                                                      |
|--|------------------------------------------------------------------------------------------------------|
|  | Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean |
|--|------------------------------------------------------------------------------------------------------|

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## 6.3. Methods and material for containment and cleaning up

|  |                                                |
|--|------------------------------------------------|
|  | spillage area thoroughly with plenty of water. |
|--|------------------------------------------------|

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

|  |                                                                                    |
|--|------------------------------------------------------------------------------------|
|  | Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. |
|--|------------------------------------------------------------------------------------|

## 7.2. Conditions for safe storage, including any incompatibilities

|  |                                                                            |
|--|----------------------------------------------------------------------------|
|  | Keep in a cool, dry, well ventilated area. Keep containers tightly closed. |
|--|----------------------------------------------------------------------------|

## SECTION 8: Exposure controls/personal protection

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

|  |                                                  |
|--|--------------------------------------------------|
|  | Ensure adequate ventilation of the working area. |
|--|--------------------------------------------------|

## 8.2.2. Individual protection measures

|  |                                    |
|--|------------------------------------|
|  | Wear chemical protective clothing. |
|--|------------------------------------|

## Eye / face protection

|  |                          |
|--|--------------------------|
|  | Approved safety goggles. |
|--|--------------------------|

## Skin protection - Handprotection

|  |                                  |
|--|----------------------------------|
|  | Chemical resistant gloves (PVC). |
|--|----------------------------------|

## Respiratory protection

|  |                                                                                                                  |
|--|------------------------------------------------------------------------------------------------------------------|
|  | Do not breathe gas/fumes/vapour/spray. In case of insufficient ventilation, wear suitable respiratory equipment. |
|--|------------------------------------------------------------------------------------------------------------------|

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

|            |                |
|------------|----------------|
| Appearance | Liquid         |
| Colour     | Amber          |
| Odour      | Characteristic |

## SECTION 10: Stability and reactivity

## 10.2. Chemical stability

|  |                                 |
|--|---------------------------------|
|  | Stable under normal conditions. |
|--|---------------------------------|

## SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

## Skin corrosion/irritation

|  |               |
|--|---------------|
|  | Causes burns. |
|--|---------------|

## SECTION 12: Ecological information

## SECTION 13: Disposal considerations

## General information

|  |                                                                   |
|--|-------------------------------------------------------------------|
|  | Dispose of in compliance with all local and national regulations. |
|--|-------------------------------------------------------------------|

## SECTION 14: Transport information

## Hazard pictograms



## 14.1. UN number

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|                                         |                                                   |
|-----------------------------------------|---------------------------------------------------|
| <b>14.1. UN number</b>                  |                                                   |
|                                         | UN1760                                            |
| <b>14.2. UN proper shipping name</b>    |                                                   |
|                                         | CORROSIVE LIQUID, N.O.S. (N-aminoethylpiperazine) |
| <b>14.3. Transport hazard class(es)</b> |                                                   |
| ADR/RID                                 | 8                                                 |
| Subsidiary risk                         | -                                                 |
| IMDG                                    | 8                                                 |
| Subsidiary risk                         | -                                                 |
| IATA                                    | 8                                                 |
| Subsidiary risk                         | -                                                 |
| <b>14.4. Packing group</b>              |                                                   |
| Packing group                           | III                                               |
| <b>14.5. Environmental hazards</b>      |                                                   |
| Environmental hazards                   | No                                                |
| Marine pollutant                        | No                                                |
| <b>ADR/RID</b>                          |                                                   |
| Hazard ID                               | 80                                                |
| Tunnel Category                         | (E)                                               |
| <b>IMDG</b>                             |                                                   |
| EmS Code                                | F-A S-B                                           |
| <b>IATA</b>                             |                                                   |
| Packing Instruction (Cargo)             | 856                                               |
| Maximum quantity                        | 60 L                                              |
| Packing Instruction (Passenger)         | 852                                               |
| Maximum quantity                        | 5 L                                               |

**SECTION 15: Regulatory information****SECTION 16: Other information**

|                                               |                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Other information</b>                      |                                                                                                                                                                                                                                                                                                                                                    |
| <b>Revision</b>                               | This document differs from the previous version in the following areas:.<br>2 - Precautionary Statement: Response.<br>2 - Precautionary Statement: Disposal.                                                                                                                                                                                       |
| <b>Text of risk phrases in Section 3</b>      | R21/22 - Harmful in contact with skin and if swallowed.<br>R34 - Causes burns.<br>R43 - May cause sensitisation by skin contact.<br>R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.<br>R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| <b>Text of Hazard Statements in Section 3</b> | Skin Sens. 1: H317 - May cause an allergic skin reaction.<br>Acute Tox. 4: H302 - Harmful if swallowed.<br>Acute Tox. 4: H312 - Harmful in contact with skin.<br>Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.<br>Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.                                    |

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**Other information**

|  |                                                                            |
|--|----------------------------------------------------------------------------|
|  | Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects. |
|--|----------------------------------------------------------------------------|

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**Further information**

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process. |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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