

Revised: 28/6/2024

## SAFETY DATA SHEET

This Safety Data Sheet is provided in compliance with the EC Regulations 1907/2006, 1272/2008, 2015/830 and 2020/878

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

- Product Name: RT350 PART B (CURING AGENT)
- UFI: A720-30JQ-3006-VKVN
- Product Part Number: RT350 PART B (CURING AGENT)

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

- Use of the substance/mixture: Curing agent

**1.3 Details of the supplier of the safety data sheet**

- Name of Supplier: Resintech Ltd
- Address of Supplier: Unit 1-2 Horcott Industrial Estate  
Fairford  
Gloucestershire  
GL7 4BX  
UK
- Telephone: +44 (0)1285 712755
- Responsible Person: Alex Paton
- Email: Info@resintech.co.uk

**1.4 Emergency telephone number**

- Emergency Telephone: +44 (0)1285712755 (Monday-Friday 8am-4.30pm)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

- CLP: Skin Sens. 1, Acute Tox. 4, Skin Corr. 1B, STOT SE 3, Aquatic Chronic 2

**2.2 Label elements**

- Signal Word: Danger
- Contains: 2-piperazin-1-ylethylamine

**Hazard statements**

- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H317 - May cause an allergic skin reaction.

**SECTION 2: Hazards identification (....)**

H411 - Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

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.

P501 - Dispose of contents/container to an authorised waste collection point

**Supplemental Hazard information (EU)**

EUH210 - Safety data sheet available on request.

**2.3 Other hazards**

- Not a PBT according to REACH Annex XIII
- Substance not identified as having endocrine disrupting properties

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

	CAS Number	EC Number	REACH Registration Number	Categories	H Statements	Concentration
2-piperazin-1-ylethylamine	140-31-8	205-411-0	Not applicable	Acute Tox. 4 Acute Tox. 4 Skin Corr. 1B Skin Sens. 1 Aquatic Chronic 3	H302 H312 H314 H317 H412	50 - 70%
TOFA, reaction products with TEPA	68953-36-6	273-201-6	Not applicable	Skin Irrit. 2 Skin Sens. 1 Eye Irrit. 2 STOT SE 3 Aquatic Chronic 2	H315 H317 H319 H335 H411	20 - 50%
3,6,9-triazaundecamethylenediamine; tetraethylenepentamine	112-57-2	203-986-2	Not applicable	Acute Tox. 4 Acute Tox. 4 Skin Corr. 1B Skin Sens. 1 Aquatic Chronic 2	H302 H312 H314 H317 H411	<3%

**SECTION 4: First aid measures****4.1 General**

- Use personal protective equipment as required.
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
- Wash contaminated clothing before reuse.

**Contact with eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

**SECTION 4: First aid measures (....)**

If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes

**Contact with skin**

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention.

**Ingestion**

Rinse mouth.

Get medical advice/attention if you feel unwell.

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Get medical advice/attention if you feel unwell.

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

- Causes severe skin burns and eye damage.
- Vapours or aerosols may cause irritation of eyes, nose and respiratory tract
- In cases of severe exposure, allergic reaction in susceptible people may develop

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

- Treat symptomatically
  - IF exposed or concerned: Call a POISON CENTER/doctor.
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**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- In case of fire use water spray or fog, alcohol resistant foam, dry chemical or carbon dioxide

**5.2 Special hazards arising from the substance or mixture**

- Decomposition products may include toxic and irritant fumes
- Nitrogen and carbon oxides may be formed

**5.3 Advice for firefighters**

- Keep container(s) exposed to fire cool, by spraying with water
  - Prevent run off water from entering drains if possible
  - Wear Positive-Pressure Breathing Apparatus
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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

- Wear protective clothing as per section 8
- Wash thoroughly after dealing with spillage
- Avoid contact with skin and eyes

**6.2 Environmental precautions**

- Avoid release to the environment.
- Absorb spillage in suitable inert material
- Do not discharge into drains or the environment, dispose to an authorised waste collection point

**6.3 Methods and material for containment and cleaning up**

- Wear protective clothing as per section 8
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**SECTION 6: Accidental release measures (....)**

- Absorb spillage in suitable inert material
- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Wash thoroughly after dealing with spillage
- Collect spillage.

**6.4 Reference to other sections**

- Wear protective clothing as per section 8
  - See Section 11 - Toxicological Information
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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

- Avoid release to the environment.
- Wear protective clothing as per section 8
- Take off contaminated clothing and wash it before reuse.
- In cases of severe exposure, allergic reaction in susceptible people may develop
- Do not eat, drink or smoke when using this product.
- After contact with skin, wash immediately with plenty of soap and water
- Wash hands and working surfaces thoroughly after handling.
- Use good personal hygiene practices
- Call a POISON CENTRE or doctor if you feel unwell.
- Wash contaminated clothing before reuse.
- Dispose of contents/container to an authorised waste collection point

**7.2 Conditions for safe storage, including any incompatibilities**

- Keep container tightly closed, in a cool, well ventilated place
- Keep cool. Protect from sunlight.
- Keep away from food, drink and animal feedingstuffs
- Store locked up.

**7.3 Specific end use(s)**

- See Section 1.2
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**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****2-piperazin-1-ylethylamine**

DNEL (Industry; inhalational, long term systemic effects): 3.6 mg/m<sup>3</sup>  
DNEL (Industry; inhalational, short term systemic effects): 21.4 mg/m<sup>3</sup>  
DNEL (Industry; dermal, long term systemic effects): 3.33 mg/kg bw/day  
DNEL (Industry; dermal, short term systemic effects): 20 mg/kg bw/day  
DNEL (Industry; dermal, short term local effects): 0.04 mg/cm<sup>2</sup>  
DNEL (Industry; dermal, long term local effects): 0.006 mg/cm<sup>2</sup>  
DNEL (Consumer; dermal, long term local effects): 0.003 mg/cm<sup>2</sup>  
DNEL (Consumer; dermal, long term systemic effects): 1.7 mg/kg/day  
DNEL (Consumer; oral, short term systemic effects): 1.5 mg/kg/day  
DNEL (Consumer; oral, short term local effects): 0.02 mg/cm<sup>2</sup>  
DNEL (Consumer; oral, long term systemic effects): 0.3 mg/kg/day  
DNEL (Consumer; inhalational, short term systemic effects): 5.3 mg/m<sup>3</sup>  
DNEL (Consumer; inhalational, long term systemic effects): 0.9 mg/m<sup>3</sup>

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**SECTION 8: Exposure controls/personal protection (....)****8.2 Exposure controls**

- This Safety Data Sheet does not constitute a workplace risk assessment
- In case of inadequate ventilation wear respiratory protection.
- Eyewash bottles should be available
- Wear suitable protective clothing, eye/face protection and gloves
- Gloves should be chemical resistant and comply with an approved standard such as EN 455 or EN 374 and made from latex, nitrile or neoprene. Protective clothing should be based on the results of an exposure assessment. A polymer laminate apron is recommended in most cases. Eye and face protection should be chemical resistant and comply with an approved standard such as EN 166. If a respirator is needed following an exposure assessment it should conform to EN 136 or EN 143 (P3)
- Check with personal protection equipment manufacturer
- Use good personal hygiene practices
- Do not eat, drink or smoke when using this product.
- Wash contaminated clothing before reuse.

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**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

- Appearance: Liquid
- Colour: Straw, amber
- Odour: Characteristic odour, Unpleasant odour
- Boiling Point/Range: <200°C
- Flammability: Flash point: >100 °C (CC)
- pH: Not available
- Solubility in water: Partly soluble in water
- Density: Density (water=1): 0.99

**9.2 Other information**

- No information available

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

- Reference to other sections

**10.2 Chemical stability**

- Considered stable under normal conditions

**10.3 Possibility of hazardous reactions**

- No hazardous reactions known if used for its intended purpose

**10.4 Conditions to avoid**

- No hazard expected under normal conditions of use
- Protect from frost
- Keep away from heat

**10.5 Incompatible materials**

**SECTION 10: Stability and reactivity (....)**

- Strong oxidising agent
- Strong acids

**10.6 Hazardous decomposition products**

- No hazardous decomposition products known
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**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Estimated LD<sub>50</sub> (oral) (ATE) : 806.4516 mg/kg  
Estimated LD<sub>50</sub> (dermal) (ATE) : 1774.194 mg/kg  
Estimated LD<sub>50</sub> (inhalational) (ATE) : >20 mg/l/4hr (gas/vapour)

**2-piperazin-1-ylethylamine**

LD<sub>50</sub> (oral, rat): 2,140 mg/kg  
LD<sub>50</sub> (dermal, rabbit): 866 mg/kg

**TOFA, reaction products with TEPA**

LD<sub>50</sub> (oral, rat): 1,600 mg/kg  
LD<sub>50</sub> (skin, rat): 1,700 mg/kg

**3,6,9-triazaundecamethylenediamine; tetraethylenepentamine**

LD<sub>50</sub> (oral, rat): >1000 mg/kg, Estimated Value  
LD<sub>50</sub> (dermal, rabbit): >500 mg/kg, Estimated Value

**Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**Serious eye damage/irritation**

Causes severe skin burns and eye damage.

**Respiratory or skin sensitisation**

May cause an allergic skin reaction.

**Germ cell mutagenicity**

Based on the available data, the classification criteria are not met

**Carcinogenicity**

Based on the available data, the classification criteria are not met

**Reproductive toxicity**

Based on the available data, the classification criteria are not met

**STOT (specific target organ toxicity) - single exposure**

Based on the available data, the classification criteria are not met

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**SECTION 11: Toxicological information (....)****STOT (specific target organ toxicity) - repeated exposure**

Based on the available data, the classification criteria are not met

**Aspiration hazard**

Based on the available data, the classification criteria are not met

**11.2 Information on other hazards**

- No information available
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**SECTION 12: Ecological information****12.1 Toxicity****2-piperazin-1-ylethylamine**

EC<sub>50</sub> (Daphnia magna): 58 mg/l (48 hr)  
LC<sub>50</sub> (fish): 2.19 mg/l (96 hr)  
PNEC (Fresh water): 0.058 mg/l  
PNEC (intermittent): 0.58 mg/l  
PNEC (Marine water): 0.0058 mg/l  
PNEC (STP): 250 mg/l  
PNEC (Sediment; fresh water): 215 mg/kg  
PNEC (Sediment; marine water): 21.5 mg/kg

**TOFA, reaction products with TEPA**

LC<sub>50</sub> (fish): >100 mg/l (96 hr), Estimated Value

**3,6,9-triazaundecamethylenediamine; tetraethylenepentamine**

IC<sub>50</sub> (algae): 2 mg/l (72 hr)  
EC<sub>50</sub> (daphnia): 24 mg/l (48 hr)  
LC<sub>50</sub> (fish): 420 mg/l (96 hr)

**12.2 Persistence and degradability**

- Not readily biodegradable

**12.3 Bioaccumulative potential**

- Bioaccumulation is insignificant

**12.4 Mobility in soil**

- Partly soluble in water

**12.5 Results of PBT and vPvB assessment**

- Not a PBT according to REACH Annex XIII

**12.6 Endocrine disrupting properties**

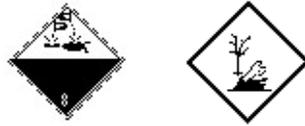
- Substance not identified as having endocrine disrupting properties

**12.7 Other adverse effects**

- No information available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

- Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
  - Wear protective clothing as per section 8
  - Dispose of contents/container to an authorised waste collection point
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**SECTION 14: Transport information****14.1 UN number or ID number**

- UN No.: 1760

**14.2 UN proper shipping name**

- Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (N-Amindethylpiperzine Solution)

**14.3 Transport hazard class(es)**

- Hazard Class: 8

**14.4 Packing group**

- Packing Group: III

**14.5 Environmental hazards**

- Marine Pollutant
- Environmentally hazardous

**14.6 Special precautions for user**

- IMDG EmS: F-A, S-B
- Tunnel Code: (E)
- Emergency Action Code: 2X

**14.7 Maritime transport in bulk according to IMO instruments**

- Not applicable
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**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- This Safety Data Sheet is provided in compliance with the Health and Safety at Work Act
- This Safety Data Sheet is provided in compliance with the EC Regulations 1907/2006, 1272/2008, 2015/830 and 2020/878

**15.2 Chemical safety assessment**

- This product is either exempt from REACH or does not meet the minimum volume threshold for a chemical safety assessment (CSA)
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**SECTION 16: Other information**

Text not given with phrase codes where they are used elsewhere in this safety data sheet: - 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. H319: Causes serious eye irritation. H335: May cause respiratory

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**SECTION 16: Other information (....)**

**irritation. H411: Toxic to aquatic life with long lasting effects.**

Sections updated: 1.1, 8.2

**This information relates only to the 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 themselves as to the suitability of such information for their own use.**