

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

Product name: HL420AR/NC

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

Use of substance / mixture: PC1: Adhesives, sealants.

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

Company name: Robnor ResinLab Ltd

31 Athena Avenue

Elgin Industrial Estate

Swindon

Wiltshire

SN2 8EJ

United Kingdom

Tel: +44(0) 1793 823741

Fax: +44(0) 1793 827033

Email: [eusds@robnor.co.uk](mailto:eusds@robnor.co.uk)**1.4. Emergency telephone number**

Emergency tel: +44(0) 1793 823741

(office hours only)

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

Classification under CLP: Acute Tox. 4: H332; Skin Sens. 1: H317; STOT SE 3: H335; -: EUH208

Most important adverse effects: Harmful if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.

Contains hexamethylene diisocyanate. May produce an allergic reaction.

**2.2. Label elements**

Label elements:

Hazard statements: H332: Harmful if inhaled.

H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

EUH208: Contains hexamethylene diisocyanate. May produce an allergic reaction.

Hazard pictograms: GHS07: Exclamation mark



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Signal words: Warning

Precautionary statements: P260: Do not breathe mist.

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

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

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

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

## 2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

Hazardous ingredients:

POLY(HEXAMETHYLENE DIISOCYANATE)

EINECS	CAS	PBT / WEL	CLP Classification	Percent
500-060-2	28182-81-2	-	Acute Tox. 4: H332; STOT SE 3: H335; Skin Sens. 1: H317	>90%

HEXAMETHYLENE DIISOCYANATE

217-485-8	822-06-0	-	Acute Tox. 4: H302; Acute Tox. 1: H330; Skin Corr. 1C: H314; Skin Sens. 1: H317; Resp. Sens. 1A: H334	<1%
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## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. If irritation occurs or persists, seek medical attention. Transfer to hospital if necessary.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Do not induce vomiting. Wash out mouth with water. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

**Skin contact:** There may be irritation and redness at the site of contact. May cause sensitisation in susceptible individuals.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** Exposure may cause coughing or wheezing. There may be irritation of the throat with a feeling of tightness in the chest.

[cont...]

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## 4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Show this safety data sheet to the doctor in attendance.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

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

Exposure hazards: In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

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

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

### 6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

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

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Avoid the formation or spread of mists in the air. Ensure there is sufficient ventilation of the area. Do not handle in a confined space.

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

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

### 7.3. Specific end use(s)

Specific end use(s): PC1: Adhesives, sealants.

[cont...]

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## Section 8: Exposure controls/personal protection

## 8.1. Control parameters

Hazardous ingredients:

POLY(HEXAMETHYLENE DIISOCYANATE)

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	0.02 mg/m <sup>3</sup>	0.07 mg/m <sup>3</sup>	-	-

HEXAMETHYLENE DIISOCYANATE

UK	0.02 mg/m <sup>3</sup>	0.07 mg/m <sup>3</sup>	-	-
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## DNEL/PNEC Values

Hazardous ingredients:

POLY(HEXAMETHYLENE DIISOCYANATE)

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	0.5 mg/m <sup>3</sup>	Workers	Local
PNEC	Fresh water	127 ug/L	-	-
PNEC	Marine water	12.7 ug/L	-	-
PNEC	Microorganisms in sewage treatment	38.3 mg/L	-	-
PNEC	Fresh water sediments	266700 mg/kg	-	-
PNEC	Marine sediments	26670 mg/kg	-	-
PNEC	Microorganisms in sewage treatment	53182 mg/kg	-	-

HEXAMETHYLENE DIISOCYANATE

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	35ug/m <sup>3</sup>	Workers	Systemic
DNEL	Inhalation	70ug/m <sup>3</sup>	Workers	Local
PNEC	Fresh water	77.4ug/L	-	-
PNEC	Marine water	7.74ug/L	-	-
PNEC	Microorganisms in sewage treatment	8.42mg/L	-	-
PNEC	Fresh water sediments	13.34ug/kg	-	-
PNEC	Marine sediments	1.334ug/kg	-	-
PNEC	Soil (agricultural)	2.6ug/kg	-	-

## 8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

[cont...]

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Hand protection: Impermeable gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless to Yellow

Odour: Odourless

Solubility in water: Reacts with water.

Also soluble in: Most organic solvents.

Melting point/range°C: -20

Flash point°C: 228

Relative density: 1.13

### 9.2. Other information

Other information: No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4. Conditions to avoid

Conditions to avoid: Heat. Moist air. Humidity.

### 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids. Strong bases. Water. Alcohols. Amines.

### 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

Hazardous ingredients:

[cont...]

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## POLY(HEXAMETHYLENE DIISOCYANATE)

DERMAL	RAT	LD50	>2000	mg/kg
DUST/MIST	RAT	4H LC50	0.39	mg/l
ORAL	RAT	LD50	>2500	mg/kg

## HEXAMETHYLENE DIISOCYANATE

DERMAL	RAT	LD50	>7000	mg/kg
ORAL	RAT	LD50	959	mg/kg
VAPOURS	RAT	4H LC50	0.124	mg/l

## Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	INH	Hazardous: calculated
Respiratory/skin sensitisation	DRM	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

## Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact. May cause sensitisation in susceptible individuals.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** Exposure may cause coughing or wheezing. There may be irritation of the throat with a feeling of tightness in the chest.

## Section 12: Ecological information

## 12.1. Toxicity

## Hazardous ingredients:

## POLY(HEXAMETHYLENE DIISOCYANATE)

Daphnia magna	48H EC50	127	mg/l
Scenedesmus Subspicatus	72H ErC50	>1000	mg/l
ZEBRAFISH (Brachydanio rerio)	96H LC50	>100	mg/l

## HEXAMETHYLENE DIISOCYANATE

Scenedesmus Subspicatus	72H ErC50	>77.4	mg/l
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## 12.2. Persistence and degradability

**Persistence and degradability:** Not readily biodegradable.

[cont...]

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## 12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

## 12.4. Mobility in soil

Mobility: Reacts with water.

## 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

## 12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Waste code number: 08 05 01

Disposal of packaging: Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

Transport class: This product does not require a classification for transport.

## Section 15: Regulatory information

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

Specific regulations: Not applicable.

### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

\* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: EUH208: Contains hexamethylene diisocyanate. May produce an allergic reaction.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H330: Fatal if inhaled.

[cont...]

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H332: Harmful if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



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

Product name: RL420AR/NC

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

Use of substance / mixture: PC1: Adhesives, sealants.

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

Company name: Robnor ResinLab Ltd

31 Athena Avenue

Elgin Industrial Estate

Swindon

Wiltshire

SN2 8EJ

United Kingdom

Tel: +44(0) 1793 823741

Fax: +44(0) 1793 827033

Email: [eusds@robnor.co.uk](mailto:eusds@robnor.co.uk)**1.4. Emergency telephone number**

Emergency tel: +44(0) 1793 823741

(office hours only)

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

Classification under CLP: -: EUH208

Most important adverse effects: Contains reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

**2.2. Label elements**

Label elements:

Hazard statements: EUH208: Contains reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

**2.3. Other hazards**

PBT: This product is not identified as a PBT/vPvB substance.

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## Section 3: Composition/information on ingredients

### 3.2. Mixtures

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water. If irritation occurs or persists, seek medical attention. Transfer to hospital if necessary.

**Eye contact:** Bathe the eye with running water for 15 minutes.

**Ingestion:** Do not induce vomiting. Wash out mouth with water. Consult a doctor.

**Inhalation:** Consult a doctor.

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

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Not applicable.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

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

**Exposure hazards:** In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

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

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

[cont...]

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## 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: Not applicable.

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

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

### 7.3. Specific end use(s)

Specific end use(s): PC1: Adhesives, sealants.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

Workplace exposure limits: No data available.

### DNEL/PNEC Values

DNEL / PNEC No data available.

### 8.2. Exposure controls

Engineering measures: Not applicable.

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Barely perceptible odour

Solubility in water: Soluble

Relative density: 1.1

### 9.2. Other information

Other information: No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

[cont...]

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## 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

## 10.4. Conditions to avoid

Conditions to avoid: Heat.

## 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids. Strong bases.

## 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

Toxicity values: No data available.

### Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

## Section 12: Ecological information

### 12.1. Toxicity

Ecotoxicity values: No data available.

### 12.2. Persistence and degradability

Persistence and degradability: Readily biodegradable.

### 12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

### 12.4. Mobility in soil

Mobility: Soluble in water.

### 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

[cont...]

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## Section 13: Disposal considerations

### 13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

Transport class: This product does not require a classification for transport.

## Section 15: Regulatory information

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

Specific regulations: Not applicable.

### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

\* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: EUH208: Contains reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.