# SAFETY DATA SHEET

# WEATHERSAFE TWO PACK HARDENER

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

### 1.1. Product identifier

Product name HARDENER

Product number 65B

### 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 Ace Coatings South LTD
Unit 11 Sheddingdean IND EST
Burgess Hill
RH15 8QY

### 1.4. Emergency telephone number

Emergency telephone 01444 870087

## SECTION 2: Hazards identification

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

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 H335 STOT RE 2 - H373

Environmental hazards Not Classified

### 2.2. Label elements

Pictogram

Signal word Warning

Hazard statements H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

| | |
|---|---|
| Precautionary statements | P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>P243 Take precautionary measures against static discharge.<br>P260 Do not breathe vapour/spray.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.<br>Rinse skin with water/shower.<br>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.<br>P314 Get medical advice/attention if you feel unwell.<br>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.<br>P403+P235 Store in a well-ventilated place. Keep cool.<br>P501 Dispose of contents/container in accordance with national regulations. |
| Contains | Hexamethylene-1,6-diisocyanate Homopolymer, xylene, ethylbenzene, hexamethylene-diisocyanate |
| Supplementary precautionary statements | P240 Ground/bond container and receiving equipment.<br>P241 Use explosion-proof electrical equipment.<br>P242 Use only non-sparking tools.<br>P261 Avoid breathing vapour/spray.<br>P264 Wash contaminated skin thoroughly after handling.<br>P271 Use only outdoors or in a well-ventilated area.<br>P272 Contaminated work clothing should not be allowed out of the workplace.<br>P302+P352 IF ON SKIN: Wash with plenty of water.<br>P312 Call a POISON CENTER/doctor if you feel unwell.<br>P321 Specific treatment (see medical advice on this label).<br>P332+P313 If skin irritation occurs: Get medical advice/attention.<br>P337+P313 If eye irritation persists: Get medical advice/attention.<br>P362+P364 Take off contaminated clothing and wash it before reuse.<br>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. |

2.3. Other hazards

## SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | |
|---|---|
| Hexamethylene-1,6-diisocyanate Homopolymer<br>CAS number: 28182-81-2 | 60-100% |
| Classification<br>Acute Tox. 4 - H332<br>Skin Sens. 1 - H317<br>STOT SE 3 - H335 | |
| 2-methoxy-1-methylethyl acetate | 10-30% |

| | |
|---|---|
| CAS number: 108-65-6 | EC number: 203-603-9 |
| Classification<br>Flam. Liq. 3 - H226 | |
| xylene | 10-30% |
| CAS number: 1330-20-7 | EC number: 215-535-7 |
| Classification<br>Flam. Liq. 3 - H226<br>Acute Tox. 4 - H312<br>Acute Tox. 4 - H332<br>Skin Irrit. 2 - H315<br>Eye Irrit. 2 - H319<br>STOT SE 3 - H335<br>STOT RE 2 - H373<br>Asp. Tox. 1 - H304<br>Aquatic Chronic 3 - H412 | |
| ethylbenzene | 1-5% |
| CAS number: 100-41-4 | EC number: 202-849-4 |
| Classification<br>Flam. Liq. 2 - H225<br>Acute Tox. 4 - H332<br>STOT RE 2 - H373<br>Asp. Tox. 1 - H304 | |
| hexamethylene-di-isocyanate | <1% |
| CAS number: 822-06-0 | EC number: 212-485-8 |
| Classification<br>Acute Tox. 3 - H331<br>Skin Irrit. 2 - H315<br>Eye Irrit. 2 - H319<br>Resp. Sens. 1 - H334<br>Skin Sens. 1 - H317<br>STOT SE 3 - H335 | |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

| | |
|---|---|
| General information | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice. |

| | |
|---|---|
| Inhalation | Remove to fresh air. Keep person warm and at rest. If not breathing or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. |
| Ingestion | IF SWALLOWED: Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Keep affected person warm and at rest. Do not induce vomiting. |
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. Do not use organic solvents. |
| Eye contact | Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention. |
| Protection of first aiders | First aid personnel should wear appropriate protective equipment during any rescue. |

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

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|---|---|
| General information | Persons already sensitised to diisocyanates may develop allergic reactions when using this product. |
| Inhalation | Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death. |
| Skin contact | Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. |
| Eye contact | If splashed in eyes, the liquid may cause irritation and reversible damage. |

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

| | |
|---|---|
| Notes for the doctor | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours |
| Specific treatments | No specific treatment |

## SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|---|---|
| Suitable extinguishing media | Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

5.2. Special hazards arising from the substance or mixture

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|---|---|
| Specific hazards | Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. |

5.3. Advice for firefighters

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|---|---|
| Protective actions during firefighting | Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. |
| Special protective equipment required. for firefighters | Appropriate breathing apparatus may be |

## SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Exclude sources of ignition and ventilate the area. Avoid breathing mist or vapour.

6.2. Environmental precautions

| | |
|---|---|
| Environmental precautions | Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations. |

6.3. Methods and material for containment and cleaning up

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|---|---|
| Methods for cleaning up | Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material. |

6.4. Reference to other sections

## SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|---|---|
| Usage precautions | Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear anti static footwear and clothing and floors should be of the conducting type. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid inhalation of vapours/spray and contact with skin and eyes. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Put on appropriate personal protective equipment (See section 8) Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original. Comply with health and safety at work laws. Do not allow to enter drains or watercourses Vapours may form explosive mixture with air. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits. |
| Advice on general occupational hygiene | Persons susceptible to allergic reactions should not handle this product. Persons with impaired lung function should not handle this product.. |

7.2. Conditions for safe storage, including any incompatibilities

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|---|---|
| Storage precautions | Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat. Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| Storage class | Flammable liquid storage. |

7.3. Specific end use(s)

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|---|---|
| Specific end use(s) | The identified uses for this product are detailed in Section 1.2. |
| Usage description | Hardener. |

## SECTION 8: Exposure Controls/personal protection

8.1. Control parameters Occupational exposure limits

Hexamethylene-1,6-diisocyanate Homopolymer

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m³

Measured as NCO

Short-term exposure limit (15-minute): WEL 0.07 mg/m³

Measured as NCO

2-methoxy-1-methylethyl acetate

Long-term exposure limit (8-hour TWA): WEL 50 ppm 274 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 548 mg/m³

Sk

xylene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

ethylbenzene

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³

Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³

Sk

hexamethylene-di-isocyanate

Long-term exposure limit (8-hour TWA): 0.02 mg/m³ Measured as NCO

Short-term exposure limit (15-minute): 0.07 mg/m³ Measured as NCO

WEL = Workplace Exposure Limit Sk =

Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment

| | |
|---|---|
| Appropriate engineering controls | As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. Air-fed protective respiratory equipment must be worn by the spray operator, even when good ventilation is provided. |
| Eye/face protection | Chemical splash goggles or face shield. |
| Hand protection | The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It is recommended that gloves are made of the following material: Polyvinyl alcohol (PVA). Neoprene. Butyl rubber. Nitrile rubber. |
| Other skin and body protection | Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear anti-static protective clothing if there is a risk of ignition from static electricity. |
| Respiratory protection | When spraying, wear a suitable supplied-air respirator. By operations other than spraying, Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. |
| Environmental exposure controls | Avoid release to the environment. |

## SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Colour | Colourless to pale yellow. |
| Relative density | 0.98 |

9.2. Other information

## SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|---|---|
| Reactivity | No test data specifically related to reactivity available for this product or its ingredients. |

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous This product reacts with water, resulting in the production of carbon dioxide. In closed reactions containers, pressure build up could result in distortion, expansion and, in extreme cases, bursting of container.

10.4. Conditions to avoid 10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Oxidising agents. Strong alkalis. Strong acids. Amines. Water, moisture.

10.6. Hazardous decomposition products

Hazardous decomposition No known hazardous decomposition products. products

## SECTION 11: Toxicological information

11.1. Information on toxicological effects Acute toxicity - dermal

ATE dermal (mg/kg) 10,526.32

Acute toxicity - inhalation

ATE inhalation (gases ppm) 43,062.2

ATE inhalation (vapours mg/l) 14.31

ATE inhalation (dusts/mists mg/l) 135.14

## SECTION 12: Ecological Information

12.1. Toxicity

Toxicity There is no data available on the mixture itself Do not allow to enter drains or watercourses.

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

12.4. Mobility in soil

Mobility Not available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not applicable.

12.6. Other adverse effects

Other adverse effects No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local

authority requirements. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor.

Disposal methods: Place waste in labelled, sealed containers. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

### 14.1. UN number

| | |
|---|---|
| UN No. (ADR/RID) | 1866 |
| UN No. (IMDG) | 1866 |
| UN No. (ICAO) | 1866 |
| UN No. (ADN) | 1866 |

### 14.2. UN proper shipping name

| | |
|---|---|
| Proper shipping name (ADR/RID) | RESIN SOLUTION |
| Proper shipping name | RESIN SOLUTION (IMDG) |
| Proper shipping name (ICAO) | RESIN SOLUTION |
| Proper shipping name (ADN) | RESIN SOLUTION |

### 14.3. Transport hazard class(es)

| | |
|---|---|
| ADR/RID class | 3 |
| ADR/RID classification code | F1 |
| ADR/RID label | 3 |
| IMDG class | 3 |
| ICAO class/division | 3 |
| ADN class | 3 |

Transport labels


### 14.4. Packing group

| | |
|---|---|
| ADR/RID packing group | III |
| IMDG packing group | III |
| ADN 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-E, S-E |
| ADR transport category | 3 |
| Emergency Action Code | •3Y |

| | |
|---|---|
| Hazard Identification Number (ADR/RID) | 30 |
| Tunnel restriction code | (D/E) |

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

## SECTION 15: Regulatory information

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

| | |
|---|---|
| National regulations | Control of Substances Hazardous to Health Regulations 2002 (as amended).<br>Dangerous Substances and Explosive Atmospheres Regulations 2002.<br>EH40/2005 Workplace exposure limits.<br>Health and Safety at Work etc. Act 1974 (as amended). |
| 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). |
| Guidance | Isocyanates: Health hazards and precautionary measures EH16.<br>Workplace Exposure Limits EH40. |

15.2. Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

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|---|---|
| SDS number | 6332 |
| Hazard statements in full | H225 Highly flammable liquid and vapour.<br>H226 Flammable liquid and vapour.<br>H304 May be fatal if swallowed and enters airways.<br>H312 Harmful in contact with skin.<br>H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H331 Toxic if inhaled.<br>H332 Harmful if inhaled.<br>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br>H335 May cause respiratory irritation.<br>H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure.<br>H373 May cause damage to organs through prolonged or repeated exposure.<br>H412 Harmful to aquatic life with long lasting effects.<br>EUH208 Contains hexamethylene-di-isocyanate. May produce an allergic reaction. |