

# Safety Data Sheet

**multicomp** PRO

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

### 1.1. Product identifier

**Product name:** MP000432 HARDENER

### 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:** Premier Farnell  
150 Armley Road  
Leeds  
LS12 2QQ  
United Kingdom

**Tel:** + 44 (0) 870 129 8608

**Fax:** + 44 (0) 870 129 8611

**Email:** [information@premierfarnell.com](mailto:information@premierfarnell.com)

### 1.4. Emergency telephone number

**Emergency tel:** + 44 (0) 870 120 2530  
(office hours only)

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification under CLP:** Acute Tox. 4: H332; Skin Irrit. 2: H315; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Sens. 1: H317; Carc. 2: H351; STOT RE 2: H373; STOT SE 3: H335

**Most important adverse effects:** Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of causing cancer ([inhalation]). May cause damage to organs ([respiratory system]) through prolonged or repeated exposure ([inhalation (dust/mist)]). May cause respiratory irritation.

### 2.2. Label elements

**Label elements:**

**Hazard statements:** H332: Harmful if inhaled.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317: May cause an allergic skin reaction.  
H351: Suspected of causing cancer ([inhalation]).  
H373: May cause damage to organs ([respiratory system]) through prolonged or repeated exposure ([inhalation (dust/mist)]).  
H335: May cause respiratory irritation.

**Hazard pictograms:** GHS07: Exclamation mark

# Safety Data Sheet

GHS08: Health hazard



**Signal words:** Danger

**Precautionary statements:** P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe mist.

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

P304+P341: IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

P308+P313: IF exposed or concerned: Get medical advice/attention.

**Haz. ingredients (label):** DIPHENYLMETHANEDIISOCYANATE (ISOMERS & HOMOLOGUES); 4,4'-METHYLENEDIPHENYL DIISOCYANATE

## 2.3. Other hazards

**Other hazards:** Danger of serious damage to health by prolonged exposure.

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

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

DIPHENYLMETHANEDIISOCYANATE (ISOMERS & HOMOLOGUES)

EINECS	CAS	PBT / WEL	CLP Classification	Percent
618-498-9	9016-87-9	-	Carc. 2: H351; Acute Tox. 4: H332; Skin Irrit. 2: H315; STOT RE 2: H373; Eye Irrit. 2: H319; STOT SE 3: H335; Resp. Sens. 1: H334; Skin Sens. 1: H317; -: EUH204	50-70%

4,4'-METHYLENEDIPHENYL DIISOCYANATE - REACH registered number(s): 01-2119457014-47-XXXX

202-966-0	101-68-8	-	Carc. 2: H351; STOT RE 2: H373; Acute Tox. 4: H332; Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335; Resp. Sens. 1: H334; Skin Sens. 1: H317	30-50%
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## 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. Consult a doctor.

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

**Inhalation:** Consult a doctor. If conscious, ensure the casualty sits or lies down. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Remove casualty from exposure ensuring one's own safety whilst doing so.

#### 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. Potential potent asthmagen.

#### 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. Eye bathing equipment should be available on the premises.

### 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. Clean-up should be dealt with only by qualified personnel familiar with the specific substance.

#### 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.

### 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.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

#### DIPHENYLMETHANEDIISOCYANATE (ISOMERS & HOMOLOGUES)

**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>	-	-

#### 4,4'-METHYLENEDIPHENYL 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:**

#### 4,4'-METHYLENEDIPHENYL DIISOCYANATE

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	50 ug/m <sup>3</sup>	Workers	Local
DNEL	Inhalation	100 ug/m <sup>3</sup>	Workers	Local
PNEC	Fresh water	1 mg/L	-	-
PNEC	Marine water	100 ug/L	-	-
PNEC	Microorganisms in sewage treatment	1 mg/L	-	-
PNEC	Soil (agricultural)	1 mg/kg	-	-

### 8.2. Exposure controls

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

**Respiratory protection:** Self-contained breathing apparatus must be used in handling.

**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:** Brown  
**Odour:** Characteristic odour  
**Solubility in water:** Reacts with water.  
**Viscosity:** Non-viscous  
**Flash point°C:** 230 **Relative density:** 1.24

### 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.

### 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:

#### DIPHENYLMETHANEDIISOCYANATE (ISOMERS & HOMOLOGUES)

DERMAL	RBT	LD50	>9400	mg/kg
DUST/MIST	RAT	4H LC50	0.49	mg/l
ORAL	RAT	LD50	>10000	mg/kg

#### 4,4'-METHYLENEDIPHENYL DIISOCYANATE

DUST/MIST	RAT	4H LC50	0.368	mg/l
ORAL	RAT	LD50	9200	mg/kg

**Relevant hazards for product:**

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	INH	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	INH DRM	Hazardous: calculated
Carcinogenicity	--	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated
STOT-repeated exposure	-	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. Potential potent asthmagen.

**Section 12: Ecological information**

**12.1. Toxicity**

**Hazardous ingredients:**

**DIPHENYLMETHANEDIISOCYANATE (ISOMERS & HOMOLOGUES)**

Daphnia magna	48H EC50	>1640	mg/l
ZEBRAFISH (Brachydanio rerio)	96H LC50	>1000	mg/l

**4,4'-METHYLENEDIPHENYL DIISOCYANATE**

Scenedesmus Subspicatus	72H ErC50	>1640	mg/l
ZEBRAFISH (Brachydanio rerio)	96H ErC50	>1000	mg/l

**12.2. Persistence and degradability**

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

**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:** EUH204: Contains isocyanates. May produce an allergic reaction.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

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

H335: May cause respiratory irritation.

H351: Suspected of causing cancer ([inhalation]).

H373: May cause damage to organs ([respiratory system]) through prolonged or repeated exposure ([inhalation (dust/mist)]).

# Safety Data Sheet



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

### 1.1. Product identifier

Product name: MP000432 RESIN

### 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: Premier Farnell

150 Armley Road

Leeds

LS12 2QQ

United Kingdom

Tel: + 44 (0) 870 129 8608

Fax: + 44 (0) 870 129 8611

Email: [information@premierfarnell.com](mailto:information@premierfarnell.com)

### 1.4. Emergency telephone number

Emergency tel: + 44 (0) 870 120 2530

(office hours only)

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.

### 2.2. Label elements

Label elements: This product has no label elements.

Haz. ingredients (label): ALUMINIUM HYDROXIDE; KAOLIN; ZEOLITES; TITANIUM DIOXIDE

### 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:

#### ALUMINIUM HYDROXIDE (2)

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	-	Substance with a Community workplace exposure limit.	-	50-70%

#### KAOLIN

310-194-1	1332-58-7	Substance with a Community workplace exposure limit.	-	1-10%
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## ZEOLITES

215-283-8	1318-02-1	Substance with a Community workplace exposure limit.	-	1-10%
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## TITANIUM DIOXIDE

236-675-5	13463-67-7	Substance with a Community workplace exposure limit.	-	1-10%
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### Section 4: First aid measures

#### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water.

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

**Ingestion:** Wash out mouth with water.

**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.

**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**

**Hazardous ingredients:**

**ALUMINIUM HYDROXIDE (2)**

**Workplace exposure limits:** **Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	4 mg/m3	10 mg/m3	-	-

**KAOLIN**

UK	2 mg/m3	-	-	-
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**ZEOLITES**

UK	10 mg/m3	-	4 mg/m3	-
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**TITANIUM DIOXIDE**

UK	10 mg/m3	-	4 mg/m3	-
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**DNEL/PNEC Values**

**Hazardous ingredients:**

**ALUMINIUM HYDROXIDE (2)**

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	10.76 mg/m3	Workers	Systemic
DNEL	Inhalation	3.59 mg/m3	Workers	Local

**TITANIUM DIOXIDE**

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	10 mg/m3	Workers	Systemic
PNEC	Fresh water	127 ug/L	-	-
PNEC	Marine water	1 mg/L	-	-
PNEC	Microorganisms in sewage treatment	100 mg/L	-	-
PNEC	Fresh water sediments	1000 mg/kg	-	-
PNEC	Marine water	100 mg/kg	-	-
PNEC	Soil (agricultural)	100 mg/kg	-	-
PNEC	Food chain	1667 mg/kg	-	-

**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:** Various
- Viscosity:** Highly viscous
- Relative density:** 1.57

**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.

**10.5. Incompatible materials**

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

## 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:**

**ALUMINIUM HYDROXIDE (2)**

ORAL	RAT	LD50	>2000	mg/kg
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**KAOLIN**

DERMAL	RAT	LD50	>5000	mg/kg
ORAL	RAT	LD50	>5000	mg/kg

**TITANIUM DIOXIDE**

DERMAL	RBT	LD50	>5000	mg/kg
DUST/MIST	RAT	4H LC50	>6.8	mg/l
ORAL	RAT	LD50	>5000	mg/kg

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

**Hazardous ingredients:**

**ALUMINIUM HYDROXIDE (2)**

Daphnia magna	48H EC50	>100	mg/l
FISH	96H LC50	>100	mg/l
GREEN ALGA (Selenastrum capricornutum)	72H ErC50	>100	mg/l

**ZEOLITES**

Daphnia magna	48H EC50	>1400	mg/l
FISH	96H LC50	>680	mg/l

**TITANIUM DIOXIDE**

Daphnia magna	48H EC50	>100	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	>100	mg/l
Scenedesmus Subspicatus	72H ErC50	16	mg/l

## 12.2. Persistence and degradability

**Persistence and degradability:** No data available.

## 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No data available.

## 12.4. Mobility in soil

**Mobility:** No data available.

## 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.

**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.

**Part Number**

MP000432

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