

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

1.1. Product identifier

Product name: MP000423 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

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; -: EUH204

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. Contains isocyanates. May produce an

allergic reaction.

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.

EUH204: Contains isocyanates. May produce an allergic reaction.

Hazard pictograms: GHS07: Exclamation mark

GHS08: Health hazard





Signal words: Danger

Precautionary statements: 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.

 $\textbf{Haz. ingredients (label):} \quad \textbf{DIPHENYLMETHANEDIISOCYANATE (ISOMERS \& HOMOLOGUES); 4,4'-METHYLENEDIPHENYLMETHANEDIISOCYANATE (ISOMERS & HOMOLOGUES); 4,4'-METHYLENEDIPHENYLMETHANEDIPHENY$

DIISOCYANATE

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:

DIPHENYLMETHANEDIISOCYANATE (ISOMERS & HOMOLOGUES)

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

$\textbf{4,4'-METHYLENEDIPHENYL\ DIISOCYANATE-REACH\ registered\ number (s):\ 01-2119457014-47-XXXX}$

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





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. Immediately remove contact lenses if

present. Get medical attention if any discomfort continues.

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. 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. 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. The vision may

become blurred.

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

may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure

may cause coughing or wheezing.

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: Refer to section 8 of SDS for personal protection details. Mark out the contaminated





area with signs and prevent access to unauthorised personnel. If outside keep bystanders upwind and away from danger point.

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: Ensure there is exhaust ventilation of the area. Avoid direct contact with the substance.

Do not handle in a confined space. Avoid the formation or spread of mists in the air.

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/m3	0.07 mg/m3	-	-	
4,4'-METHYLENEDIPHENYL DIISOCYANATE					

UK	0.02 mg/m3	0.07 mg/m3	-	-

DNEL/PNEC Values

Hazardous ingredients:

4,4'-METHYLENEDIPHENYL DIISOCYANATE

Туре	Exposure	Value	Population	Effect
DNEL	Inhalation	50 ug/m3	Workers	Local
DNEL	Inhalation	100 ug/m3	Workers	Local





PNEC	Fresh water	1 mg/L	-	-
PNEC	Marine water	100 ug/L	-	1
PNEC	Microorganisms in sewage	1 mg/L	-	-
	treatment			
PNEC	Soil (agricultural)	1 mg/kg	_	-

8.2. Exposure controls

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

Respiratory protection: When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators. Suitable respiratory protection should be worn when

there is inadequate ventilation.

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: Pale brown

Solubility in water: Reacts with water.

Boiling point/range°C: 245 Flash point°C: 230

Relative density: 1.23

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.

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Moist air. Humidity.

10.5. Incompatible materials

Materials to avoid: Water. Alcohols. Amines. 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

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. The vision may

become blurred.

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

may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure

may cause coughing or wheezing.

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.

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

become blurred.

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

may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure

may cause coughing or wheezing.

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.

 $\textbf{NB:} \quad \text{The user's attention is drawn to the possible existence of regional or national} \\$

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)]).

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

1.1. Product identifier

Product name: MP000423 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

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): CALCIUM CARBONATE; ZEOLITES; KAOLIN

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:

CALCIUM CARBONATE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
207-439-9	471-34-1	Substance with a Community workplace exposure limit.	-	30-50%
ZEOLITES				
215-283-8	1318-02-1	Substance with a Community workplace exposure limit.	-	1-10%
KAOLIN				
310-194-1	1332-58-7	Substance with a Community	-	1-10%

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. Get medical attention if any discomfort

continues.

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 mild irritation at the site of contact.

Eye contact: There may be irritation and redness. **Ingestion:** There may be irritation of the throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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: Refer to section 8 of SDS for personal protection details. Mark out the contaminated

area with signs and prevent access to unauthorised personnel. If outside keep

bystanders upwind and away from danger point.

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: Ensure there is exhaust 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.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients: CALCIUM CARBONATE

Workplace exposure limits:

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

Respirable dust

ZEOLITES

UK	10 mg/m3	-	4 mg/m3	-





KAOLIN

	UK	2 mg/m3	-	-	_
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DNEL/PNEC Values

Hazardous ingredients:

CALCIUM CARBONATE

Туре	Exposure	Value	Population	Effect
DNEL	Inhalation	10 mg/m3	Workers	Systemic
PNEC	Microorganisms in sewage	100 mg/L	-	-
	treatment			

8.2. Exposure controls

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

Respiratory protection: When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators. Suitable respiratory protection should be worn when

there is inadequate ventilation.

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: Viscous
Relative density: 1.32

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.

Decomposition may occur on exposure to conditions or materials listed below.

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

Hazardous ingredients:

CALCIUM CARBONATE

DERMAL	RAT	LD50	>2000	mg/kg
DUST/MIST	RAT	4H LC50	>3	mg/l
ORAL	RAT	LD50	>2000	mg/kg

KAOLIN

DERMAL	RAT	LD50	>5000	mg/kg
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: There may be irritation of the throat with a feeling of tightness in the chest.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

CALCIUM CARBONATE

Daphnia magna	48H EC50	>100	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	>100	mg/l
Scenedesmus Subspicatus	72H ErC50	>14	mg/l

ZEOLITES

Daphnia magna	48H EC50	>1400	mg/l
FISH	96H LC50	>680	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: Non-volatile.

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 04 10

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

MP000423

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