SAFETY DATA SHEET
AB1212
According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

SECTION1:Identificationofthesubstance/mixtureandofthecompany/undertaking

1.1. Product identifier

Product name	AB1212
Product number	AB1212

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

Identified uses	Adhesive.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier	ABRABOND LTD EDWIN AVENUE HOO FARM INDUSTRIAL ESTATE KIDDERMINSTER WORCS DY11 7RA T: +44 (0) 1562 753334 F: +44 (0) 1562 67595

1.4. Emergency telephone number

Emergency telephone	+44 01562 753334 (NOT 24HRS)

SECTION2:Hazardsidentification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373 STOT SE 3 - H335
Environmental hazards	Not Classified

Classification (67/548/EEC or 1999/45/EC)	Xn;R48/20. Carc. Cat. 3;R40. R42/43. Xi;R36/37/38.
Human health	The product contains small amounts of organic solvents. Contains non-volatile isocyanate. Heating may generate vapours which irritate the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Pictogram

Signal word	Danger
Hazard statements	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	EUH204 Contains isocyanates. May produce an allergic reaction. P260 Do not breathe vapour/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P281 Use personal protective equipment as required. P284 [In case of inadequate ventilation] wear respiratory protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P313 Get medical advice/attention. P501 Dispose of contents/container in accordance with national regulations.
Contains	DICHLOROMETHANE, DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

2.3. Other hazards

SECTION3:Composition/informationoningredients

3.2. Mixtures

DICHLOROMETHANE		10-30%
CAS number: 75-09-2	EC number: 200-838-9	REACH registration number: 01-2119480404-41-0000

Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Carc. 2 - H351 STOT SE 3 - H336	Classification (67/548/EEC or 1999/45/EC) Carc. Cat. 3;R40

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)		10-30%
CAS number: 32055-14-4	REACH registration number: 01-2119457024-46-0006	

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373	Xn;R20,R48/20. Carc. Cat. 3;R40. Xi;R36/37/38. R42/43.

2,2'DIMORPHOLINYLDIETHYL ETHER		<1%
CAS number: 6425-39-4	EC number: 229-194-7	REACH registration number: 01-2119969278-20-0000

Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319	Xi;R36.

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

SECTION4:Firstaidmeasures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination.
Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Irritation of nose, throat and airway. Coughing, chest tightness, feeling of chest pressure.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	Severe irritation, burning and tearing.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.

SECTION5:Firefightingmeasures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with 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

Specific hazards	The product is non-combustible. Irritating gases or vapours. Not known.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material.
Special protective equipment for firefighters	Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION6:Accidentalreleasemeasures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with non-combustible, absorbent material. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION7:Handlingandstorage

7.1. Precautions for safe handling

Usage precautions	Avoid inhalation of vapours and spray/mists. Avoid contact with skin and eyes. Do not use in confined spaces without adequate ventilation and/or respirator. Spraying is permitted only in closed systems, spray cabinets or spray boxes with adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in closed original container at temperatures between 5°C and 25°C.
Storage class	Chemical storage.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION8:ExposureControls/personalprotection

8.1. Control parameters

Occupational exposure limits

DICHLOROMETHANE

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 350 mg/m3(Sk)
Short-term exposure limit (15-minute): WEL 300 ppm(Sk) 1060 mg/m3(Sk)

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Long-term exposure limit (8-hour TWA): WEL 0.07 mg/m³

Short-term exposure limit (15-minute): WEL 0.02 mg/m³

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

DICHLOROMETHANE (CAS: 75-09-2)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Consumer - Dermal; Short term systemic effects: 353 mg/m³ Workers - Dermal; Short term systemic effects: 706 mg/m³
PNEC	- Fresh water; 0.54 mg/l - Sediment (Freshwater); 4.47 mg/kg - Intermittent release; 0.27 mg/l - Sediment (Marinewater); 1.61 mg/kg - Marine water; 0.194 mg/l - STP; 26 mg/l - Soil; 0.583 mg/kg

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES) (CAS: 32055-14-4)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Workers - Dermal; Short term systemic effects: 50 mg/kg Workers - Inhalation; Short term systemic effects: 0.1 mg/m³ Workers - Dermal; Short term local effects: 28.7 mg/cm² Workers - Inhalation; Short term local effects: 0.1 mg/m³ Workers - Inhalation; Long term systemic effects: 0.05 mg/m³ Workers - Inhalation; Long term local effects: 0.05 mg/m³ General population - Dermal; Short term systemic effects: 25 mg/kg General population - Inhalation; Short term systemic effects: 0.05 mg/m³ General population - Oral; Short term systemic effects: 20 mg/kg General population - Dermal; Short term local effects: 17.2 mg/cm² General population - Inhalation; Short term local effects: 0.05 mg/m³ General population - Inhalation; Long term systemic effects: 0.025 mg/m³ General population - Inhalation; Long term local effects: 0.025 mg/m³
PNEC	- Fresh water; 1 mg/l - Marine water; 0.1 mg/l - Soil; 1 mg/kg dry weight - STP; 1 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls: Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection	Wear chemical splash goggles.
Hand protection	It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Wash hands after handling. When using do not eat, drink or smoke.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type AX.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION9:PhysicalandChemicalProperties

9.1. Information on basic physical and chemical properties

Appearance	Coloured liquid.
Colour	Various colours.
Odour	Chlorinated hydrocarbons.
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Initial boiling point and range	39-40°C @
Flash point	Not applicable.
Evaporation rate	fast
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not available.
Vapour pressure	Not applicable.
Vapour density	Not available.
Relative density	1.10 @ 20°C
Bulk density	Not available.
Solubility(ies)	Insoluble in water. Hardens in contact with water.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Kinematic viscosity > 20.5 mm²/s.
Explosive properties	Not available.

Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not available.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	No information required.
Refractive index	Not available.
Particle size	Not available.
Molecular weight	Not available.
Volatility	Not available.
Saturation concentration	Not available.
Critical temperature	Not available.

SECTION10:Stabilityandreactivity

10.1. Reactivity

Reactivity	The product will harden into a solid mass in contact with water and moisture.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not applicable. May polymerise.

10.4. Conditions to avoid

Conditions to avoid	Avoid contact with water.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

SECTION11:Toxicologicalinformation

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	10,000.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	10,000.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	0.493

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Species	Rat
ATE inhalation (vapours mg/l)	50.0

Skin corrosion/irritation

Animal data	Irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Moderately irritating.

Respiratory sensitisation

Respiratory sensitisation	Sensitising.

Carcinogenicity

Carcinogenicity	Suspected carcinogen based on limited evidence.
Target organ for carcinogenicity	No specific target organs known.

Reproductive toxicity

Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Morphological changes that are potentially reversible but provide clear evidence of marked organ dysfunction.

Aspiration hazard

Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

Inhalation	Irritating to respiratory system. May cause sensitisation by inhalation.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Irritation of eyes and mucous membranes.
Acute and chronic health hazards	May cause sensitisation by skin contact. The product contains small quantities of isocyanate. May cause respiratory allergy. May cause respiratory system irritation. May cause respiratory system irritation. Frequent inhalation of vapours may cause respiratory allergy.
Route of entry	Inhalation Skin and/or eye contact
Medical symptoms	Irritation of eyes and mucous membranes. Coughing, chest tightness, feeling of chest pressure.
Medical considerations	Chronic respiratory and obstructive airway diseases.

Toxicological information on ingredients.

DICHLOROMETHANE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,000.0
Species	Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	86.0
Species	Rat
ATE inhalation (vapours mg/l)	86.0

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	10,000.0
Species	Rat
ATE oral (mg/kg)	10,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	9,400.0
Species	Rabbit
ATE dermal (mg/kg)	9,400.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	0.493
Species	Rat
Acute toxicity inhalation (LC_{50} dust/mist mg/l)	0.31
Species	Rat
ATE inhalation (vapours mg/l)	11.0
ATE inhalation (dusts/mists mg/l)	1.5

Skin corrosion/irritation

Animal data	Irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Moderately irritating.

Respiratory sensitisation

Respiratory sensitisation	Sensitising.

Carcinogenicity

Carcinogenicity	Suspected carcinogen based on limited evidence.
Target organ for carcinogenicity	No specific target organs known.

Reproductive toxicity

Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Morphological changes that are potentially reversible but provide clear evidence of marked organ dysfunction.

Aspiration hazard

Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

Inhalation	Irritating to respiratory system. May cause sensitisation by inhalation.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Irritation of eyes and mucous membranes.
Acute and chronic health hazards	May cause sensitisation by skin contact. The product contains small quantities of isocyanate. May cause respiratory allergy. May cause respiratory system irritation. May cause respiratory system irritation. Frequent inhalation of vapours may cause respiratory allergy.
Route of entry	Inhalation Skin and/or eye contact
Medical symptoms	Irritation of eyes and mucous membranes. Coughing, chest tightness, feeling of chest pressure.
Medical considerations	Chronic respiratory and obstructive airway diseases.

SECTION12:EcologicalInformation

Ecotoxicity The product is not expected to be hazardous to the environment.

Ecological information on ingredients.

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Ecotoxicity The product is not expected to be hazardous to the environment.

12.1. Toxicity

Acute toxicity - fish	LC50, 96 hours, 96 hours: > 1000 mg/l, Freshwater fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >500 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours, 72 hours: ~ 1640 mg/l, Scenedesmus subspicatus

Ecological information on ingredients.

DICHLOROMETHANE

Acute toxicity - fish	LC50, 96 hours, 96 hours: > 93 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 27 mg/l, Daphnia magna

Acute toxicity - aquatic plants	IC_{50}, 72 hours: 550 mg/l, Algae

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Acute toxicity - fish	LC50, 96 hours, 96 hours: > 1000 mg/l, Freshwater fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >500 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours, 72 hours: ~ 1640 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC_{50}, 3 hours: 100 mg/l, Activated sludge
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 10 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability	The product is not readily biodegradable.
Stability (hydrolysis)	Reacts with water.
Biological oxygen demand	< 10 g O_2/g substance

Ecological information on ingredients.

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Persistence and degradability	The product is not readily biodegradable.
Stability (hydrolysis)	Reacts with water.
Biological oxygen demand	< 10 g O_2/g substance

12.3. Bioaccumulative potential

Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.
Partition coefficient	Not available.

Ecological information on ingredients.

DICHLOROMETHANE

Bioaccumulative potential	The product is not bioaccumulating.

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility	The product is non-volatile.

Ecological information on ingredients.

DICHLOROMETHANE

Mobility	The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Mobility	The product is non-volatile.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

DICHLOROMETHANE

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Ecological information on ingredients.

DICHLOROMETHANE

Other adverse effects	Not applicable.

SECTION13:Disposalconsiderations

13.1. Waste treatment methods

General information	Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Waste class	070208

SECTION14:Transportinformation

14.1. UN number

UN No. (ADR/RID)	2810
UN No. (IMDG)	2810
UN No. (ICAO)	2810
UN No. (ADN)	2810

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	TOXIC LIQUID, ORGANIC, N.O.S.
Proper shipping name (IMDG)	TOXIC LIQUID, ORGANIC, N.O.S.

Proper shipping name (ICAO) TOXIC LIQUID, ORGANIC, N.O.S.

Proper shipping name (ADN) TOXIC LIQUID, ORGANIC, N.O.S.

14.3. Transport hazard class(es)

ADR/RID class	6.1
ADR/RID classification code	T1
ADR/RID label	6.1
IMDG class	6.1
ICAO class/division	6.1
ADN class	6.1

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-A, S-A
ADR transport category	2
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	60
Tunnel restriction code	(E)

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

SECTION15:Regulatoryinformation

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

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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION16:Otherinformation

AB1212

Issued by	Compliance
Revision date	01/06/2015
Revision	20
Risk phrases in full	R20 Harmful by inhalation. R36/37/38 Irritating to eyes, respiratory system and skin. R40 Limited evidence of a carcinogenic effect. R42/43 May cause sensitisation by inhalation and skin contact. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Hazard statements in full	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. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer. H373 May cause damage to organs through prolonged or repeated exposure.
Store Between	Store Between 5'c - 25'c
Contains SVHC	NO