

The following Safety Datasheet is provided by **Morrells**

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For purchasing information visit: Morrells Probond Polyurethane Glue



1 IDENTIFICATION OF THE PREPARATION AND THE COMPANY

PRODUCT NAME: F303

INTENDED USE: Liquid Moisture Cure Adhesive

SUPPLIER: Morrells Woodfinishes Ltd

Unit 4B Blenheim Park Blenheim Industrial Estate

Nottingham NG6 8YP

EMERGENCY CONTACT NO.: 0044 161 406 5300 (Office hours)

CONTACT PERSON: HSE Manager

EMAIL: hse.manager@morrells.co.uk

2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

Health hazards 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

Environmental hazards Not Classified

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Classification (67/548/EEC or Xn;R20,R48/20. Carc. Cat. 3;R40. R42/43. Xi;R36/37/38.

1999/45/EC)

Human health May cause sensitisation by inhalation.

Physicochemical Vapours are heavier than air and may travel along the floor and accumulate in the bottom of

containers.

2.2. Label elements



Pictogram





Signal word Danger

H315 Causes skin irritation. Hazard statements

> 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.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements P260 Do not breathe vapour/spray.

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

P308+P313 IF exposed or concerned: Get medical advice/attention. P501 Dispose of contents/container in accordance with national regulations.

Supplemental label

information

EUH204 Contains isocyanates. May produce an allergic reaction.

Contains DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Supplementary precautionary P201 Obtain special instructions before use.

statements

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing vapour/spray.

P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P284 [In case of inadequate ventilation] wear respiratory protection.

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

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

P312 Call a POISON CENTER/doctor if you feel unwell. P314 Get medical advice/attention if you feel unwell. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/attention. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

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

P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.



3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE 30-60%

CAS number: 101-68-8 EC number: 202-966-0 REACH registration number: 01-

2119457014-47

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 Carc. Cat. 3;R40 Xn;R20,R48/20 Xi;R36/37/38 R42/43

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

4 FIRST AID MEASURES

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.

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

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.

Specific treatments Treat symptomatically.



5 FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing

Cristitable extinguisi

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.

6 ACCIDENTAL RELEASE MEASURES

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. 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.

7 HANDLING AND STORAGE

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.

Advice on general occupational hygiene

Wash promptly with soap and water if skin becomes contaminated. Preventive industrial

medical examinations should be carried out.

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.



8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m3(Sen) Short-term exposure limit (15-minute): WEL 0.07 mg/m3(Sen)

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE (CAS: 101-68-8)

DNEL 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

Consumer - Dermal; Short term systemic effects: 25 mg/kg bw/day Workers - Dermal; Short term systemic effects: 50 mg/kg bw/day Consumer - Oral; Short term systemic effects: 20 mg/kg bw/day Consumer - Dermal; Short term local effects: 17.2 mg/cm² Consumer - Inhalation; Short term local effects: 0.05 mg/m³ Consumer - Inhalation; Long term systemic effects: 0.025 mg/m³ Consumer - Inhalation; Long term local effects: 0.025 mg/m³ Consumer - Inhalation; Short term systemic effects: 0.05 mg/m³

PNEC - Marine water; 0.1 mg/l

- STP; 1 mg/l - Fresh water; 1 mg/l - Soil; 1 mg/kg



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: Neoprene.

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. If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the

following cartridge: Combination filter, type A2/P3.

Environmental exposure

controls

Odour threshold

Keep container tightly sealed when not in use.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Not available.

Appearance Coloured liquid.

Colour Various colours.

Odour Musty (mouldy).



рΗ Estimated value. pH (concentrated solution): 7-8

Melting point

Initial boiling point and range 330°C @ mbar

>200°C CC (Closed cup). Flash point

Evaporation rate slow

Evaporation factor Not available. Flammability (solid, gas) Not available.

Upper/lower flammability or

explosive limits

Estimated value. : 0.6% - 11.5%

Not available. Other flammability Vapour pressure 0.01 Pa @ °C

Vapour density 8.5

Relative density 1.12 @ 20°C **Bulk density** Not available.

Solubility(ies) Insoluble in water. Hardens in contact with water.

Partition coefficient Not available.

>600°C Auto-ignition temperature

Decomposition Temperature Not available. >2000 cP @ 25°C Viscosity

Explosive properties Not available.

Explosive under the influence Not considered to be explosive.

of a flame

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.

Volatile organic compound No information available.

10 STABILITY AND REACTIVITY

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

products

mg/l)

Not applicable. May polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with water.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours. Oxides of carbon. Oxides of nitrogen.

11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological effects No information available.

Other health effects There is no evidence that the product can cause cancer.

Acute toxicity - inhalation

ATE inhalation (dusts/mists

1.11

Skin corrosion/irritation

Animal data Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Moderately irritating.

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Skin sensitisation

Skin sensitisation Not determined.

Carcinogenicity

Carcinogenicity Suspected carcinogen based on limited evidence.

Target organ for No specific target organs known.

carcinogenicity

development

Reproductive toxicity

Reproductive toxicity - fertility Not available.

Reproductive toxicity -

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.

General information No specific health hazards known.

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.

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Acute toxicity - oral

Acute toxicity oral (LD₅o

10,000.0

Species

mg/kg)

Rat

ATE oral (mg/kg) 10,000.0

Acute toxicity - dermal

Acute toxicity dermal (LDso 9,400.0

mg/kg)

Species Rabbit

ATE dermal (mg/kg) 9,400.0

Acute toxicity - inhalation

Acute toxicity inhalation

0.49

(LC₅₀ dust/mist mg/l)

Species Rat

ATE inhalation

0.49

(dusts/mists mg/l)



12 ECOLOGICAL INFORMATION

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

EC₅o, 48 hours: >500 mg/l, Daphnia magna

invertebrates

Acute toxicity - aquatic plants EC50, 72 hours, 72 hours: ~ 1640 mg/l, Scenedesmus subspicatus

Ecological information on ingredients.

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

LC₅₀, 96 hours: >1000 mg/l, Fish Acute toxicity - fish

Acute toxicity - aquatic

invertebrates

EC50, 24 hours: >1000 mg/l, Daphnia magna

invertebrates

Chronic toxicity - aquatic 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 O₂/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.

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Partition coefficient log Pow: 4.51

12.4. Mobility in soil

Mobility The product is non-volatile.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

12.6. Other adverse effects

Other adverse effects None known.



13 DISPOSAL CONSIDERATIONS

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.

local Waste Disposal Authority.

14 TRANSPORT INFORMATION

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

UN No. (IMDG)

UN No. (ICAO)

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

ADR/RID class

ADR/RID subsidiary risk

ADR/RID label

IMDG class

IMDG subsidiary risk

ICAO class/division

ICAO subsidiary risk

Transport labels

14.4. Packing group

Not applicable.

ADR/RID packing group

IMDG packing group

ICAO packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.



14.6. Special precautions for user

Not applicable.

EmS

Emergency Action Code

Hazard Identification Number (ADR/RID)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

15 REGULATORY INFORMATION

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

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as

amended).

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009

No. 716).

Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Commission Directive 91/322/EEC of 29 May 1991 on establishing indicative limit values by

implementing Council Directive 80/1107/EEC on the protection of workers from the risks

related to exposure to chemical, physical and biological agents at work.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

16 OTHER INFORMATION

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.

H330 Fatal if inhaled. 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.

H373 May cause damage to organs through prolonged or repeated exposure.

Store Between 5'c - 25'c

Contains SVHC NO

Legal disclaimer:

The information contained in this Data Sheet does not constitute the user's own assessment of work place risks as required by other health and safety legislation. As the specific conditions of use of the product are outside the suppliers control the user is responsible for ensuring that the requirements of the relevant legislation are complied with. This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information contained herein is based on the current state of our knowledge and is intended to describe products from the point of view of safety requirements and thus should not be construed as guaranteeing specific properties.