

SAFETY DATA SHEET BELZONA® 2211 (MP HI-BUILD ELASTOMER) SOLIDIFIER

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

1.1. Product identifier

Product name BELZONA® 2211 (MP HI-BUILD ELASTOMER) SOLIDIFIER

Product number SN2778

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

Identified uses Multi-purpose system for repairing and rebuilding rubber components. For industrial use only.

appropriate Instructions For Use (IFU) leaflet.

1.3. Details of the supplier of the safety data sheet

Supplier Belzona Polymerics Limited

Claro Road Harrogate HG1 4DS United Kingdom +44 1423 567641 sds@belzona.com

Manufacturer Belzona Polymerics Limited

Claro Road, Harrogate

HG1 4DS United Kingdom +44 1423 567641 sds@belzona.com

1.4. Emergency telephone number

Emergency telephone ChemTel: +1 813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319 STOT RE 2 - H373

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411

Reference The full text for all hazard statements is displayed in Section 16.

2.2. Label elements

Pictogram







Signal word Warning

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Hazard statements H319 Causes serious eye irritation.

H373 May cause damage to organs (Pancreas) through prolonged or repeated exposure if

swallowed.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements P273 Avoid release to the environment.

P280 Wear protective gloves, protective clothing and eye protection.

P501 Dispose of contents/ container in accordance with national regulations.

Contains DIETHYLMETHYLBENZENEDIAMINE

2.3. Other hazards

Based on information received from our suppliers no PBT or vPvB substances are intentionally added to this product. May be harmful in contact with skin.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

DIETHYLMETHYLBENZENEDIAMINE 5-15%

CAS number: 68479-98-1 EC number: 270-877-4 REACH registration number: 01-

2119486805-25-xxxx

M factor (Acute) = 1 M factor (Chronic) = 1

Classification

Acute Tox. 4 - H302 Acute Tox. 4 - H312 Eye Irrit. 2 - H319 STOT RE 2 - H373 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

POLYETHER POLYOL 5-10%

CAS number: 25322-69-4

Classification

Acute Tox. 4 - H302

TALLOW PROPYLENEDIAMINE DIOLEATE

<1%

CAS number: 61791-53-5 EC number: 263-186-4

M factor (Acute) = 100

Classification

Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything

by mouth to an unconscious person.

Inhalation Remove to fresh air. Keep the patient warm and at rest. Give nothing by mouth.

Ingestion If accidentally swallowed obtain immediate medical attention. Keep at rest. Rinse mouth with

plenty of water. Do NOT induce vomiting.

Skin contact Remove contaminated clothing. Wash skin thoroughly with soap and water or use a

proprietary skin cleaner. Do NOT use solvents or thinners. If irritation or inflammation

persists, seek medical attention.

Eye contact Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 15

minutes, holding the eyelids apart, and seek medical advice.

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

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged or repeated contact with the skin or mucous membrane may result in irritant

symptoms such as redness, blistering or dermatitis. Onset of symptoms may be delayed. There is a risk of damage to the blood (methaemoglobinaemia) following single exposure to

even small quantities. Onset of symptoms may be delayed.

Eye contact Irritating to eyes.

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

Notes for the doctor None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use: sand, foam, carbon dioxide, chemical powder or water fog for larger fires. Do NOT use

water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion

products

In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon

dioxide, oxides of nitrogen and ammonia may be produced.

5.3. Advice for firefighters

Protective actions during

firefighting

Fire will produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health. Appropriate self-contained breathing apparatus may be required. Cool closed containers exposed to fire with water spray. Do not

allow run-off from fire fighting to enter drains or watercourses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

Environmental precautions Prevent product entering drains or sewers. If the product enters drains or sewers in large

quantities, the local Water Company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the appropriate National regulating agency.

6.3. Methods and material for containment and cleaning up

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Methods for cleaning up

Scrape the majority of the product into a suitable labelled container. Cover the spill area with sand or other suitable inert material and sweep up into the container. Clean surfaces down with a water and detergent mixture. Do not allow spilled product or the associated washings to enter surface water drains or watercourses.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. For waste disposal, see section 13. For information on National regulating agencies refer to Section 16.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Vapours may collect in the container headspace during transit or prolonged storage. Avoid the inhalation of vapour when opening the container. Where possible open containers and mix components in a well ventilated place away from the application area. Avoid skin and eye contact. Smoking, eating and drinking should be prohibited in areas of storage and use. For personal protection see Section 8. Always keep in containers made of the same material as the supply container. Good housekeeping methods and regular safe removal of waste materials should be observed. FIRE/EXPLOSION This product is combustible. Exclude sources of heat, sparks and open flame. SPECIAL In cold conditions to ease mixing, containers should be allowed to reach room temperature in a warm ventilated store inside the work place. Do not breathe vapours/mists.

Advice on general occupational hygiene

Wash at the end of each work shift and before eating, smoking and using the toilet. Ensure eye wash facilities (fountain, bottle, vials, etc.) are readily available. Do not put contaminated articles or equipment e.g. spatulas, applicators, brushes, cloths etc., into pockets. Where necessary, contaminated work clothing and shoes should be removed to prevent cross contamination of surfaces and the risk of inadvertent skin contact and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Observe the label precautions. Store between 5 °C and 30 °C unless otherwise stated in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorised access. Store separately from oxidising agents and strongly alkaline and strongly acidic materials. ENVIRONMENTAL STORAGE PRECAUTIONS Spillage, incorrect storage of chemicals or waste materials or unsuitable disposal activities can result in pollutants seeping through the soil, causing serious harm to groundwater- which is a vital source of drinking water. All wastes, especially liquid wastes, must be securely stored on site in designated areas that are isolated from surface drains and bunded to contain any spillages.

7.3. Specific end use(s)

Specific end use(s)

Application by plastic applicator or spatula provided. Mix with Base component before use. Please refer to the relevant Belzona® Instructions For Use for further information.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Ingredient comments

No exposure limits known for ingredient(s).

8.2. Exposure controls

Appropriate engineering controls

Use in well ventilated areas or provide adequate mechanical ventilation.

Eye/face protection

It is recommended that eye protection, for example safety spectacles or goggles are worn at all times during the handling and use of this material. Eye protection should be selected in accordance with EN 166 Personal eye protection.

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Hand protection Hand protection should be selected in accordance with EN 374 Protective gloves against

chemicals. The breakthrough time of the gloves selected should exceed the expected use period. Where this is not possible gloves should be changed in good time, and in any case before the breakthrough time is exceeded. If any doubt exists, advice should be sought from glove suppliers on appropriate types. Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred. SPECIFIC RECOMMENDATIONS Wear protective gloves made of the following material: Neoprene. Nitrile rubber. STANDARD APPLICATIONS Medium-heavy weight gauntlet type gloves that provide wrist protection are suitable. APPLICATION OF

SMALL QUANTITIES Light weight disposable gloves are normally suitable.

Other skin and body

protection

STANDARD APPLICATIONS Synthetic polyethylene coveralls such as the Tyvek PRO-TECH® or equivalent coveralls manufactured to EN 13034 Type 6, Protective clothing against liquid chemicals. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner. APPLICATION OF SMALL QUANTITIES Cotton overalls are normally suitable.

Respiratory protection Respiratory protection is not normally required, but the hazards of the Base component

should be considered for mixing and application purposes.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Paste.

Colour White.

Odour Odourless.

Odour threshold Not applicable.

pH Not applicable.

Melting point Not available.

Initial boiling point and range >250°C/>482°F @ 760 mm Hg

Flash point >100°C/>212°F CC (Closed cup).

Evaporation rate Not available.

Upper/lower flammability or

Flammability (solid, gas)

explosive limits

Not applicable.

Not applicable.

Vapour pressure Low.
Vapour density > 1

Relative density 1.38 - 1.48 @ 20°C/68°F

Solubility(ies) Partially miscible with water.

Partition coefficient Not available.

Auto-ignition temperature Not available.

Decomposition Temperature Not available.

Viscosity Not available.

Explosive properties Not applicable.

Oxidising properties Not applicable.

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9.2. Other information

Other information This section contains typical values for Health, Safety and Environmental guidance only and is

not intended to represent a technical specification for the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under recommended storage and handling conditions (see Section 7).

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

No hazardous reactions expected when stored and handled as recommended.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Keep away from oxidising agents and strongly alkaline and strongly acidic materials to

prevent the possibility of exothermic reaction.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC50) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitroBased on available data the classification criteria are not met.

Genotoxicity - in vivoBased on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicity Not listed.

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NTP carcinogenicity Not listed.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

Based on available data the classification criteria are not met.

development

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Target organs Pancreas

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Route of entry Ingestion Skin and/or eye contact

SECTION 12: Ecological Information

Ecotoxicity There is no data on the product itself. The following information is provided on the basis of the

individual component data available.

12.1. Toxicity

Toxicity Based on the diethylmethylbenzenediamine content, this product is expected to have

experimental LC50/EC50/IC50 values between 1 and 10 mg/l in most sensitive species.

12.2. Persistence and degradability

Persistence and degradability Based on the individual component data, the product is not expected to be rapidly

biodegradable according to OECD/EC guidelines.

12.3. Bioaccumulative potential

Bioaccumulative potential Based on the individual component data, the product is expected to bioaccumulate.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility There is no data available on the product itself.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

Based on information received from our suppliers no PBT or vPvB substances are

intentionally added to this product.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Disposal methods

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Controlled wastes include non-hazardous industrial and hazardous chemical wastes. All controlled wastes should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act. In addition, hazardous chemical wastes should be disposed of in accordance with the Hazardous Waste Regulations. When in doubt, using information provided in this safety data sheet, advice should be obtained from the National regulating agency whether the Hazardous Waste Regulations apply. Refer to information sources listed in Section 16. COMPONENT DISPOSAL TRANSIT PACKAGING: shrink or stretch wrap, boxes and fittings that have not been contaminated with product should be re-used or recycled. UNREACTED PRODUCT and empty uncleaned containers should be disposed of as hazardous chemical waste. REACTED PRODUCT, contaminated mixing boards, spatulas, applicators, brushes, nominally empty containers and mixing bowls- once fully cured- should be disposed of as non-hazardous waste.

Waste class

List of Waste Code: 08 04 09* *Hazardous waste pursuant to Directive 91/689/EEC. The LoW code quoted in this section is a general entry. LoW codes should be assigned based on the end use of the product. Where a more specific code is available it should be used in preference to the code given above. Where in doubt refer to the List of Wastes, your local licensed waste contractor or the National regulating agency. Refer to information sources listed in Section 16.

SECTION 14: Transport information

General Labelling and packaging requirements may vary with pack and load size. Please refer to the

> current transport regulations. Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know

what to do in the event of accident or spillage.

14.1. UN number

UN No. (ADR/RID) 3082 UN No. (IMDG) 3082 UN No. (ICAO) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID)

Environmentally hazardous substance, liquid, n.o.s. (containing Diethylmethylbenzenediamine mixture)

Proper shipping name (IMDG) Environmentally hazardous substance, liquid, n.o.s. (containing Diethylmethylbenzenediamine

Proper shipping name (ICAO)

Environmentally hazardous substance, liquid, n.o.s. (containing Diethylmethylbenzenediamine mixture)

14.3. Transport hazard class(es)

ADR/RID class 9 **IMDG class** 9 ICAO class/division 9

14.4. Packing group

ADR/RID packing group Ш IMDG packing group Ш ICAO packing group Ш

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14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

Yes. Labelling requirements will vary with hazardous net quantity. Please refer to the current transport regulations.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not carried in bulk.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

National regulations The provisions of the Health and Safety at Work Act and the Control of Substances

Hazardous to Health Regulations with amendments apply to the use of this product at work. This product may add to the calculation for determining whether a site is within scope of the Control of Major Accident Hazards Regulations.

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).

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. In accordance with Regulation (EC) No 453/2010.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information

The information contained within this safety data sheet does not constitute the users own assessment of workplace risks as required by other health and safety legislation. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant National legislation are complied with. The information contained within this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

Key literature references and sources for data

Provision and Use of Personal Protective Equipment Regulations 1992 (SI 1992: 2932). PPG18: Control of Spillages and fire fighting run-off. HSG53 The selection, use and maintenance of respiratory protective equipment, as amended. HSG97 A step by step guide to COSHH assessment. Working with ADR: An introduction to the carriage of dangerous goods by road. UK ENVIRONMENTAL REGULATING AGENCIES: England and Wales-Environment Agency; Scotland- Scottish Environment Protection Agency (SEPA); Northern Ireland- Environment and Heritage Service.

Classification procedures according to Regulation (EC) 1272/2008

Where there is no test data available for the mixture, the classification has been determined based on the individual component hazard data in accordance with EC 1272/2008.

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Training advice For further information please contact your supplier, Belzona consultant or Belzona direct.

Revision comments REVISION. This safety data sheet has been revised in the following Section(s): 1, 3, 7, 8, 9,

12, 13, 16, Please observe the REVISION DATE. Should you be reading a safety data sheet that is more than 24 months old or have concerns over its validity, please contact your local Belzona consultant or Belzona direct (sds@belzona.com) and the most current information

will be sent to you.

Revision date 11/08/2016

Revision 2.2

SDS number 11557

SDS status English. Approved.

Hazard statements in full H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed. H373 May cause damage to organs (Pancreas) through prolonged or repeated exposure if

swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.