



SAFETY DATA SHEET

BELZONA® 1341N (SUPERMETALGLIDE) SOLIDIFIER

SECTION 1: Identification: Product identifier and chemical identity

Product identifier

Product name BELZONA® 1341N (SUPERMETALGLIDE) SOLIDIFIER

Product No. SN1800

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

Application A drinking water approved coating system for improving the efficiency of fluid handling systems and protecting metals from the effects of erosion-corrosion. For industrial use only.

Uses advised against The product should not be used for purposes other than those recommended in the appropriate Instructions For Use (IFU) leaflet.

Details of the supplier of the safety data sheet

Supplier	Rezitech Services 9 Southfork Drive Kilsyth 3137, Victoria AUSTRALIA +61 3 8720 8600	Reptech Corporation Ltd 503 Great South Road Penrose, Auckland 1061 NEW ZEALAND 0800 (REPTECH) 737832
Manufacturer	Belzona Polymerics Limited Claro Road, Harrogate HG1 4DS United Kingdom +44 1423 567641 sds@belzona.com	

Emergency telephone number

Emergency telephone Australia: Steven Hunt +61 404 843 835
New Zealand: National Poisons Centre 0800 764 766

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

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

Label elements

Pictogram



Signal word Warning

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Hazard statements	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P260 Do not breathe spray. 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	EPOXY RESIN (Number average MW ≤ 700), EPOXY PHENOL NOVOLAC RESIN

Other hazards

HSNO classification: 6.3A 6.4A 6.5B 9.1B

SECTION 3: Composition and information on ingredients

Mixtures

EPOXY RESIN (Number average MW ≤ 700) CAS number: 25068-38-6	30-60%
Classification Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	
EPOXY PHENOL NOVOLAC RESIN CAS number: 28064-14-4	30-60%
Classification Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	

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

SECTION 4: First aid measures

Description of first aid measures

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. If material is injected under the skin, seek immediate medical attention. Even when there are few or no symptoms do not hesitate to refer the casualty to hospital.

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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.

Most important symptoms and effects, both acute and delayed

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. May cause allergic skin reaction. Release during high pressure use may result in injection of material into the skin causing local necrosis.

Eye contact Irritating to eyes.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor None.

SECTION 5: Firefighting measures

Extinguishing media

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

Special hazards arising from the substance or mixture

Hazardous combustion products In a fire, hazardous decomposition products such as smoke, carbon monoxide and carbon dioxide may be produced.

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

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes.

Environmental precautions

Environmental precautions Prevent spills from 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.

Methods and material for containment and cleaning up

Methods for cleaning up Contain and collect spillages with non-combustible absorbent materials e.g. sand, earth, vermiculite, diatomaceous earth and place into a suitable labelled 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.

Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13. .

SECTION 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

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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. Do not breathe spray during application. Exclude non-essential personnel. Minimise the number of employees exposed and the duration of their exposure. 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. Ensure emergency equipment (for fires, spills, leaks, etc.) is readily available.

FIRE/EXPLOSION This product is combustible. Exclude sources of heat, sparks and open flame. Good housekeeping standards and regular safe removal of waste materials will minimise the risks of spontaneous combustion and other fire hazards. **SPECIAL** When applying the product by heated airless spray, ensure that temperatures are controlled to the minimum that achieves acceptable atomisation. Ensure that containers are loosely covered during pre-heating and application. 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.

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.

Specific end use(s)

Specific end use(s)

Application by stiff bristled brush or plastic applicator provided. May also be applied by spray. Mix with Base component before use. Please refer to the relevant Belzona® Instructions For Use for further information.

SECTION 8: Exposure controls and personal protection

Ingredient comments

In the absence of specific limits in EH40 for individual substances and where there is the possibility of exposure to particulates from sprayed products the following OEL's should be used:

respirable particulates 4 mg/m³; total inhalable particulates 10mg/m³

Exposure controls

Appropriate engineering controls

STANDARD APPLICATIONS Open containers in a well ventilated area. **SPRAY APPLICATIONS** Where reasonably practicable adequate ventilation should be achieved by the use of local exhaust ventilation and good general extraction. Where these controls are not sufficient to maintain concentrations of particulates and/or vapours to an acceptable level, suitable respiratory protective equipment should be worn (see 'Respiratory protection' below).

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. During subsequent machining, grinding, abrasion or removal of this product appropriate eye protection should be selected according to the type of tools or equipment used.

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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/SPRAY 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/SPRAY 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	STANDARD APPLICATIONS Respiratory protection is not normally required, but the hazards of the Base component should be considered for mixing and application purposes. SPRAY APPLICATIONS Where necessary, it is recommended that respiratory protective equipment that complies with EN 14594 (compressed airline breathing apparatus) is worn if exposure to the applicator or other people nearby cannot be controlled to below the occupational exposure limit and engineering methods cannot reasonably be improved. It is essential that the concentration of the contaminant(s) in the application environment does not exceed the applicable Occupational Exposure Limit(s) (OELs) multiplied by the Assigned Protection Factor (APF) quoted for the respiratory protective equipment selected.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Colourless to pale yellow.
Odour	Epoxy.
Odour threshold	Not applicable.
pH	Not applicable.
Melting point	-15°C/5°F
Initial boiling point and range	>100°C/>212°F @ 760 mm Hg
Flash point	>240°C/>464°F CC (Closed cup).
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Flammability Limit - Lower(%)	Not applicable.
Vapour pressure	< 0.01 mm Hg @ 25°C/77°F
Vapour density	> 1
Relative density	1.13 - 1.23 @ 20°C/68°F
Solubility Value (g/100g H₂O 20°C)	Immiscible with water.
Partition coefficient	Not available.

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Auto-ignition temperature	>300°C/>572°F
Decomposition Temperature	>100°C/>212°F
Viscosity	4500 - 6500 cPs @ 25°C/77°F
Explosive properties	Not applicable.
Oxidising properties	Not applicable.
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

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of exothermic reaction.
Hazardous decomposition products	None at ambient temperatures. In a fire, hazardous decomposition products such as smoke, carbon monoxide and carbon dioxide may be produced.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity - oral

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

Acute toxicity - dermal

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 Irritating to skin.

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 the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitizer. Repeated skin contact may lead to sensitisation with possibly cross-sensitisation to other epoxies.

Germ cell mutagenicity

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

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Genotoxicity - in vivo	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	Not listed.
NTP carcinogenicity	Not listed.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Not relevant.
<u>Route of entry</u>	
Route of entry	Injection. Skin and/or eye contact
Medical considerations	Skin contact constitutes a pronounced hazard. Persons with a history of skin sensitisation problems should only be employed in processes in which this product is used under appropriate medical supervision.

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.
Toxicity	Based on the epoxy resin content, this product is expected to have experimental LC50/EC50/IC50 values between 1 and 10 mg/l in most sensitive species.
<u>Persistence and degradability</u>	
Persistence and degradability	Based on the epoxy resin content, this product is not expected to be rapidly biodegradable according to OECD/EC guidelines.
<u>Bioaccumulative potential</u>	
Bioaccumulative Potential	Based on the epoxy resin content, this product is expected to bioaccumulate.
Partition coefficient	Not available.
<u>Mobility in soil</u>	
Mobility	There is no data available on the product itself.
<u>Other adverse effects</u>	
Other adverse effects	Not applicable.

SECTION 13: Disposal considerations

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 (LoW) code: 08 01 11*. *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.
<u>UN number</u>	
UN No. (ADG)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
<u>UN proper shipping name</u>	
Proper shipping name (ADG)	Environmentally hazardous substance, liquid, n.o.s. (containing Epoxy resin mixture)
Proper shipping name (IMDG)	Environmentally hazardous substance, liquid, n.o.s. (containing Epoxy resin mixture)
Proper shipping name (ICAO)	Environmentally hazardous substance, liquid, n.o.s. (containing Epoxy resin mixture)
<u>Transport hazard class(es)</u>	
ADG class	9
IMDG class	9
ICAO class/division	9
<u>Packing group</u>	
ADG packing group	III
IMDG packing group	III
ICAO packing group	III
<u>Environmental hazards</u>	

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Environmentally hazardous substance/marine pollutant

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

Special precautions for user

Not applicable.

Transport in bulk according to Not carried in bulk.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations GROUP STANDARD: Surface coatings and colourants (Subsidiary)
HSNO APPROVAL NUMBER: HSR002670

Inventories

Australia - AICS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

SECTION 16: Any other relevant 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
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, 2, 4, 7, 8, 9, 11, 12, 13, 14, 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	22/11/2016
Revision	7.2
SDS No.	10320
SDS status	English. Approved.
Hazard statements in full	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.