Safety Data Sheet

Product: **BELZONA® 4141 (Magma-Build)**
Date: **FEBRUARY 1999**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	Belzona Polymerics Ltd. Claro Road, Harrogate, HG1 4AY. Tel: +44 (0) 1423 567641 Emergency Tel: +44 (0) 1423 503218		Product Type: Two-pack material for repair and reclamation of machinery and equipment.	
	BASE		**SOLIDIFIER**	
2. COMPOSITION/INFORMATION ON INGREDIENTS	Bisphenol A-Epichlorohydrin (Reaction product) 1,2-Epoxy-3-(tolyloxy) propane	10-30% 5-10%	Isophoronediamine Benzyl alcohol Diethylenetriamine	30-60% 10-30% 5-10%
3. HAZARDS IDENTIFICATION	Irritant. May cause sensitization by skin contact.		Causes burns. Harmful if swallowed. May cause sensitization by skin contact.	
4. FIRST AID MEASURES				
Inhalation	Remove to fresh air		Remove to fresh air. Seek medical attention if recovery is delayed.	
Skin	Remove excess with clean cloth and wash skin thoroughly with soap and water. If irritation persists seek medical attention.		Remove excess with clean cloth and wash skin thoroughly with soap and water. In the event of any irritation seek medical attention immediately.	
Eyes	Rinse immediately with copious amounts of water for at least 15 minutes. Seek medical attention promptly.		Rinse immediately with copious amounts of water for at least 15 minutes. Seek medical attention promptly.	
Ingestion	Do not induce vomiting. Immediately rinse mouth with water. Drink plenty of water. Seek medical attention promptly.		Do not induce vomiting. Immediately rinse mouth with water. Drink 1/3 pint water every 10 minutes for 30 minutes. Seek medical attention promptly.	
5. FIRE-FIGHTING MEASURES				
Extinguishing Media	Dry powder, foam, carbon dioxide, sand.		Dry powder, foam, carbon dioxide, sand.	
Unsuitable	Water jet		Water jet	
Special Procedures	Fire fighters must wear self contained breathing apparatus due to the toxic nature of evolved gases.		Fire fighters must wear self contained breathing apparatus due to the toxic nature of evolved gases.	
6. ACCIDENTAL RELEASE MEASURES				
Personal Precautions	Wear suitable protective gloves and clothing.		Wear suitable protective gloves and clothing.	
Environmental Precautions	Do not empty into drains. Do not allow to contaminate water, effluent or soil. Observe Local Bye Laws.		Do not empty into drains. Do not allow to contaminate water, effluent or soil. Observe Local Bye Laws.	
Cleansing Methods	Absorb with dry inert material such as sand. Place into suitable labelled containers for disposal. Flush contaminated area with detergent and water.		Absorb with dry inert material such as sand. Place into suitable labelled containers for disposal. Flush contaminated area with detergent and water.	
7. HANDLING AND STORAGE	Avoid contact with skin and eyes. When using do not eat, drink or smoke. Store in tightly lidded containers in dry conditions between 5°C and 30°C.		Avoid contact with skin and eyes. When using do not eat, drink or smoke. Store in tightly lidded containers in dry conditions between 5°C and 30°C.	
8. EXPOSURE CONTROLS AND PERSONAL PROTECTION				
Respiratory	In confined areas or where good natural/mechanical ventilation is not available respiratory protection should be used.		In confined areas or where good natural/mechanical ventilation is not available leading to a risk of exceeding the exposure limits indicated, respiratory protection should be used.	
Hands	Impermeable nitrile or neoprene gloves.		Impermeable nitrile or neoprene gloves.	
Eyes	Faceshield/Goggles		Faceshield/Goggles	
Other	Suitable protective clothing.		Suitable protective clothing.	

	BASE	SOLIDIFIER
9. PHYSICAL AND CHEMICAL PROPERTIES		
Boiling point	Decomposes	> 175°C
Flash Point (Closed Cup)	> 140°C	> 98°C
Flammability	Non-flammable, but combustible	Non-flammable, but combustible
Autoflammability	No information available	No information available
Explosive Properties	Not applicable	Not applicable
Oxidising Properties	Not applicable	Not applicable
Vapour Pressure	Not known	30-53.3 Pa at 25°C
Relative Density	0.81 g/cm^3	0.99 g/cm^3
Solubility in Water	Insoluble	Insoluble
Other Data	Exothermic reactions occur when components are mixed. Avoid storage of mixed material in sealed containers.	Exothermic reactions occur when components are mixed. Avoid storage of mixed material in sealed containers.
10. STABILITY AND REACTIVITY		
Conditions to Avoid	Stable Not applicable	Stable Not applicable
Materials to Avoid	Strong oxidising agents, acids, bases and amines.	Strong oxidising agents, acids, epoxy resins and isocyanates under uncontrolled conditions.
Hazardous Decomposition Products	Decomposition products may include toxic and irritant fumes.	Decomposition products may include toxic and irritant fumes.
11. TOXICOLOGICAL INFORMATION	Base component calculated: Oral LD_{50} (rat) > 4000 mg/kg^{-1} Dermal LD_{50} (rat) > 2100 mg/kg^{-1}	Benzyl Alcohol: Oral LD_{50} (rat) 1230 mg kg^{-1} Inhal LD_{50} (rat) 1000 ppm (8hr TWA) Diethylenetriamine: OES (8hr TWA) 1 ppm, 4 mg m^{-3} Oral LD_{50} (rat) 1080 mg kg^{-1} Dermal LD_{50} (rabbit) 1090 mg kg^{-1}
12. ECOLOGICAL INFORMATION	Bisphenol A-epichlorohydrin (Reaction product) LC_{50} (Fish): 3.1 mgL^{-1} Harmful to aquatic organisms.	No information available
WGK Classification	0 (Self Assessment)	2 (Self Assessment)
13. DISPOSAL	Do not empty into drains. Excess product should be mixed and allowed to solidify before disposal. Disposal must be carried out in accordance with Local and National Regulations.	Do not empty into drains. Excess product should be mixed and allowed to solidify before disposal. Disposal must be carried out in accordance with Local and National Regulations.
14. TRANSPORT INFORMATION		
Hazard Warning	Not applicable	Corrosive
UN No.	Not applicable	1760
IMO/ IMDG	Not applicable	Class 8/8147
EMS	-	8-15
MFAG	-	760/320
ICAO/IATA	Not applicable	Class 8 1760 III
RID/ADR	Not applicable	Class 8 No 53° (c)
15. REGULATORY INFORMATION		
Hazard	Irritant	Corrosive.
Risk Phrases	Irritating to eyes and skin. May cause sensitization by skin contact.	Harmful by inhalation and skin contact. Harmful if swallowed . Causes burns. May cause sensitization by skin contact.
Safety Phrases	Contains epoxy constituents. See information supplied by manufacturer. Avoid contact with skin and eyes. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection .	In case of contact with eyes rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. Wear suitable gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
16. OTHER INFORMATION	Adequate ventilation is that which ensures that the oxygen content of the air being breathed is greater than 18% and that any airborne contaminants with occupational exposure limits do not exceed quoted MEL or OES values.	Adequate ventilation is that which ensures that the oxygen content of the air being breathed is greater than 18% and that any airborne contaminants with occupational exposure limits do not exceed quoted MEL or OES values.

Copyright © 1997 by Belzona International Limited. All rights reserved. Certain portions of this work copyright © 1992, 1993, 1994, 1995, 1996 by Belzona International Limited. No part of this work covered by the copyrights hereon may be reproduced or used in any form or by any means - graphic, electronic or mechanical including photocopying, recording, taping or information storage and retrieval systems - without written permission of the publisher.

Belzona® is a registered trademark

Printed in England Publication No. 6-2-99

Belzona Polymerics Ltd.,
Claro Road,
Harrogate, HG1 4AY,
England.
Tel: +44 (0) 1423 567641
Fax: +44 (0) 1423 505967

Belzona Inc.,
2000 N.W. 88 Court,
Miami, Florida 33172,
U.S.A.
Tel: +1 (305) 594 4994
Fax: +1 (305) 599 1140

BS EN ISO 9002 : 1994
Certificate No Q/09335