Safety Data Sheet

Product: **BELZONA® 1221 (Super E-Metal)**
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	N,N'-dialkylaminodiphenylmethane 10-30% Tetrapropoxylated ethylenediamine 1-5%	Hexamethylene diisocyanate 0-2%
3. HAZARDS IDENTIFICATION	Irritating to eyes, skin and respiratory tract. Prolonged or repeated contact can cause skin sensitization. Harmful upon ingestion	Irritating to eyes, respiratory system and skin. Prolonged or repeated contact can cause skin sensitization.
4. FIRST AID MEASURES		
Inhalation	Remove to fresh air.	Remove to fresh air.
Skin	Remove excess with clean cloth and wash skin thoroughly with soap and water. If irritation or inflammation persists seek medical attention.	Remove excess with clean cloth and wash skin thoroughly with soap and water. If irritation persists seek medical attention.
Eyes	Rinse immediately with copious amounts of water for at least 15 minutes. If irritation persists seek medical attention.	Rinse immediately with copious amounts of water for at least 15 minutes. If irritation persists seek medical attention.
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. Seek medical attention promptly.
5. FIRE-FIGHTING MEASURES		
Extinguishing Media	Dry powder. Foam. Carbon dioxide. Water fog.	Dry powder. Foam. Carbon dioxide. Water fog.
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 allow to contaminate water, effluent or soil. Observe Local Bye Laws.	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 away from sources of ignition and out of direct sunlight.	Avoid contact with skin and eyes. When using do not eat, drink or smoke. Store away from sources of ignition and out of direct sunlight.
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	> 200°C	> 200°C
Flash Point (Closed Cup)	> 100°C	> 100°C
Flammability	Non-flammable, but combustible.	Non-flammable, but combustible.
Autoflammability	No information available	Approximately 490°C
Explosive Properties	Not applicable	Not applicable
Oxidising Properties	Not applicable	Not applicable
Vapour Pressure	Not applicable	6.7 Pa at 25°C
Relative Density	2.29	1.21
Solubility in Water	1-10%	Reacts
Other Data	-	-
10. STABILITY AND REACTIVITY	Stable	Stable
Conditions to Avoid	Not applicable	Not applicable
Materials to Avoid	Strong oxidising agents.	Strong oxidising agents, acids, alcohol, amines and water.
Hazardous Decomposition Products	Gaseous combinations of carbon, hydrogen and oxygen.	Gaseous combinations of carbon, hydrogen, oxygen and nitrogen.
11. TOXICOLOGICAL INFORMATION	N,N'dialkylaminodiphenylmethane: Oral LD_{50} (rat) 1.41g kg^{-1} Tetrapropoxylated ethylenediamine: Oral LD_{50} (rat) 3.9g/kg^{-1}	Hexamethylene diisocyante: MEL Long term exposure limit (8hr) 0.02 mg m^{-3} Short term exposure limit (10 min) 0.07 mg m^{-3} Oral LD_{50} (rat) 710 mg kg^{-1} Dermal LD_{50} (rabbit) 570 mg kg^{-1} Inhalation LC_{50} (mouse) 1570 mg m^{-3}
12. ECOLOGICAL INFORMATION	No information available	No information available
WGK Classification	(1) Self classification	(1) Self classification
13. DISPOSAL	Excess product should be mixed and allowed to solidify before disposal. Disposal must be carried out in accordance with Local and National Regulations.	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	Not applicable
UN No.	Not applicable	Not applicable
IMO/IMDG	Not applicable	Not applicable
ICAO/IATA	Not applicable	Not applicable
RID/ADR	Not applicable	Not applicable
15. REGULATORY INFORMATION		
Hazard	Harmful	Harmful
Risk Phrases	Harmful if swallowed.	Harmful by inhalation. May cause sensitization by inhalation and skin contact.
Safety Phrases	Avoid contact with skin and eyes. Wear suitable protective gloves and clothing. After contact with skin, wash immediately with plenty of soap and water.	Contains epoxy constituents. See information supplied by manufacturer. Contains isocyanates. See information supplied by manufacturer. Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe fumes/vapour.
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 © 1998 by Belzona International Limited. All rights reserved. Certain portions of this work copyright © 1992, 1993, 1994, 1995, 1996, 1998 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. 25-2-99

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

BSI REGISTERED
BS EN ISO 9002 : 1994
Certificate No Q/09335

BELZONA®