Safety Data Sheet

Product: **BELZONA® 9411 (Release Agent)**
Date: **NOVEMBER 1996**

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: Release agent
2. COMPOSITION/INFORMATION ON INGREDIENTS	1,1-Dichloro-1-fluoroethane Naptha (petroleum) hydrodesulphurized, heavy (White Spirit)	30-60% 30-60%
3. HAZARDS IDENTIFICATION	Irritating to eyes and skin. Prolonged or repeated contact may cause dermatitis and dying of the skin. Prolonged inhalation of mist may cause lung inflammation.	
4. FIRST AID MEASURES		
Inhalation	Remove to fresh air. Seek medical attention promptly.	
Skin	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. If irritation persists seek medical attention.	
Ingestion	Do not induce vomiting. Immediately rinse mouth with water. Drink plenty of water. Seek medical attention promptly.	
5. FIRE-FIGHTING MEASURES		
Extinguishing Media	Dry powder, foam, carbon dioxide.	
Unsuitable	Water jet	
Special Procedures	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.	
Environmental Precautions	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.	
7. HANDLING AND STORAGE	Avoid breathing vapour. 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.	
Hands	Impermeable nitrile or neoprene gloves.	
Eyes	Faceshield/Goggles	
Other	Suitable protective clothing	

9. PHYSICAL AND CHEMICAL PROPERTIES	
Boiling point	>32°C
Flash Point (Closed Cup)	Not normally flammable
Flammability	Not normally flammable
Autoflammability	Auto ignition temperature > 230°C
Explosive Properties	Lel: 0.8% Uel: 17.7%
Oxidising Properties	Not applicable
Vapour Pressure	6.9×10^{-2} Pa at 20°C
Relative Density	0.94
Solubility in Water	Insoluble
Other Data	Open with care. Pressure build-up may occur due to low boiling point solvent contained within this product.
10. STABILITY AND REACTIVITY	Stable
Conditions to Avoid	Not applicable
Materials to Avoid	Strong oxidising agents, halogens, acids and bases. Avoid sources of ignition and high energy sources.
Hazardous Decomposition Products	Gaseous combinations of carbon, oxygen, hydrogen, hydrogen chlorine, hydrogen fluoride and carbon halides.
11. TOXICOLOGICAL INFORMATION	1,1-Dichloro-1-fluoroethane: Maximum Exposure Limit: MEL 8 hr TWA = 500 ppm Immediate (Acute) Effects Acute inhalation: Albino rats (Spraque-Dawley) 4 hr LC_{50} 62000 ppm Subchronic inhalation: Increase Cholesterol/Decrease bodyweight 20000 ppm Oral LD_{50} (rat) > 5 gm kg^{-1} White Spirit: OES (8 hr TWA) 100 ppm, 575 mg m^{-3} (10 min STEL) 125 ppm, 720 mg m^{-3}
12. ECOLOGICAL INFORMATION	1,1-Dichloro-1-fluoroethane: Biodegradability: minimal Daphnia and fish - 31.2 - 126 mgl^{-1} Moderately toxic Alga - not toxic up to 44 mgl^{-1} Octanol Water Partition Coefficient: Low Pow = 2.3 White spirit is classified as a Marine Pollutant. Slightly toxic to aquatic organisms, but in most systems is unlikely to pose a significant hazard.
13. DISPOSAL	Disposal must be carried out in accordance with Local and National Regulations.
14. TRANSPORT INFORMATION	
Hazard Warning	Not applicable
UN No.	Not applicable
IMO/IMDG	Not applicable
ICAO/IATA	Not applicable
RID/ADR	Not applicable
15. REGULATORY INFORMATION	
Hazard	Harmful
Risk Phrases	Harmful may cause lung damage if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases	Do not breathe the vapour/spray. Avoid contact with skin and eyes. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Avoid release to the environment. Refer to special instructions/Safety Data Sheets.
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.

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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

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