MATERIAL SAFETY DATA SHEET
In compliance with OSHA 29 CFR 1910.1200
N.ap means Not Applicable NIA means No Information Available

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EMERGENCY PHONE NUMBERS
(Spill, Leak, Fire, Exposure or Accident)
800 424 9300 - Toll free in United States
202 483 7616 - For calls from outside the United States
INFORMATION PHONE NUMBER
305 594 4994 - Working hours only

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER : 2207/1182
PRODUCT NAME : Belzona® 3111 (Flexible Membrane)
PRODUCT CLASS : Styrene acrylic emulsion

SECTION II - HAZARDOUS INGREDIENTS/TOXICOLOGICAL DATA

Hazardous Components	% by Weight	CAS Number	Exposure Limits OSHA PEL mg/m^3	ACGIH TLV ppm	ACGIH TLV mg/m^3	Toxicity LD_{50} Oral mg/Kg	LD_{50} Dermal mg/Kg	LC_{50} Inhal ppm
Titanium dioxide	3-7	13463-67-7	10	N.ap	10	NIA	NIA	NIA
Silicon dioxide	10-30	7631-86-9	0.1	N.ap	0.1	NIA	NIA	NIA
Zinc oxide	1-5	1314-13-2	10	N.ap	10	NIA	NIA	NIA
Ammonium zirconyl carbonate	1-5	68309-95-5	5	N.ap	5	2900	NIA	NIA
2,2,4-trimethyl-1,3-pentanediolmono-(2-methylpropionate)	1-5	25265-77-4	NIA	NIA	NIA	3200	10000	NIA

CARCINOGENICITY
No data is available for the mixture, however, none of the ingredients are listed as carcinogens by OSHA, NTP, ACGIH or IARC.

SECTION III - PHYSICAL DATA

APPEARANCE AND ODOR : White or gray thixotropic liquid with ammoniacal odor.
BOILING POINT : 100°C
SPECIFIC GRAVITY : 1.27
VAPOR PRESSURE : 17.9 mmHg @20°C
VAPOR DENSITY : NIA
EVAPORATION RATE : N.ap
% VOLATILE BY VOLUME : N.ap
SOLUBILITY IN WATER : Miscible

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT : N.ap
TEST METHOD : N.ap

EXPLOSION LIMITS LOWER : NIA
UPPER : NIA

OSHA FLAMMABILITY CLASS : N.ap
FLAMMABILITY INDEX (NFPA) : 0 Minimal
REACTIVITY INDEX (NFPA) : 0 Minimal
HEALTH HAZARD (NFPA) : 1 Slight
EXTINGUISHING MEDIA : N.ap

SPECIAL FIRE FIGHTING PROCEDURES

Not flammable but if involved in a fire this product may contribute to the combustible material. Wear protective clothing and use self-contained breathing apparatus to protect against any toxic fumes evolved. Full bunker gear should be worn in extreme cases. Use sand to contain burning material.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Decomposition and combustion products may be hazardous.

SECTION V - HEALTH HAZARDS

ROUTE(S) OF ENTRY : Skin contact and eye contact.
PRIME HAZARD(S) : Skin and eye irritation.

EFFECTS OF EXPOSURE

Acute : Skin and eye irritation.
Chronic : Irritation.

EMERGENCY AND FIRST AID PROCEDURES

Inhalation : Not applicable under normal conditions of use.

Eye contact : Flush eyes with water for 15 minutes. Seek medical advice if any irritation persists.

Skin contact : Immediately remove excess with a clean cloth and wash skin thoroughly with soap and water. If irritation or inflammation persists, seek medical advice.

Ingestion : If swallowed, do not induce vomiting. Rinse mouth with water and drink plenty of water. Call TAMPA BAY Regional Poison Center (Tel.No.1-800-282-3171) and/or seek medical advice.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Skin and eye conditions.

SECTION VI - REACTIVITY DATA

STABILITY : Stable
STABILITY CONDITIONS TO AVOID : N.ap

INCOMPATIBILITY (MATERIALS TO AVOID CONTACT WITH)
Strong oxidizing agents and acids.

HAZARDOUS DECOMPOSITION PRODUCTS
Gaseous combinations of carbon, hydrogen, nitrogen, oxygen, sulphur & chlorine may occur at elevated temperatures.

HAZARDOUS POLYMERIZATION
Hazardous polymerization will not occur when stored and used as directed.

POLYMERIZATION CONDITIONS TO AVOID
N.ap

SECTION VII - SPILL AND LEAK PROCEDURES

SPILLAGE
Absorb with an inert material (e.g. earth or sand). Sweep up, place into suitable labelled containers, seal and dispose of properly. Flush area with detergent and water.

WASTE DISPOSAL METHODS
Dispose of in accordance with Local, State and Federal Regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE MEASURES

RESPIRATORY : Not normally necessary unless spraying the product. If spraying then an appropriate NIOSH or MSHA approved respirator should be worn.

SKIN : Impermeable gloves, such as Neoprene or Nitrile. Wash hands with soap and water and use hand cream. Suitable protective clothing to minimize skin contact. Remove contaminated clothing and wash before reuse.

EYE : Safety glasses or goggles. Eyewash station.

MECHANICAL PROTECTIVE MEASURES

VENTILATION : Where adequate natural ventilation is not available provide suitable local exhaust ventilation.

OTHER PROTECTIVE EQUIPMENT

: Where there is a risk of contamination of footwear, safety boots should be worn and cleaned thoroughly before reuse.

OTHER COMMENTS

: Where abrading of cured material leads to the production of respirable and/or nuisance dust, an appropriate NIOSH or MSHA approved respirator should be worn.

SECTION IX - SAFE HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS

HANDLING

Avoid contact with skin and eyes.

STORAGE

Overheating may cause containers to rupture. Containers should be stored under cool, dry conditions. Empty containers will retain residue and may be dangerous. Check all containers for leaks at regular intervals and before use.

HYGIENE PRACTICES

When using, do not eat, drink or smoke. Remove contaminated clothing and launder before reuse. Wash hands with soap and water after handling this product.

SECTION X - REGULATORY INFORMATION

SARA TITLE III - NOTIFICATION OF TOXIC CHEMICALS

Zinc oxide, CAS No.1314-13-2, a constituent of this product at 2.14% by weight, is subject to reporting requirements under section 313 of the Superfund Amendment and Reauthorization Act of 1986 (40 CFR Part 372).

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, some of the information presented and conclusions drawn are derived from sources other than direct test data on the product itself and while Belzona Inc. believe such sources to be reliable, the information is provided without any warranty regarding its correctness.
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