



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: 4100NS Product Code: NS1, NS2, NS4, NS9
Product Type: Endothermic Sealant Use: Firestopping Sealant
Chemical Family: Organic/Inorganic

Company Address:
Passive Fire Protection Partners
1412 Derwent Way
Delta, BC V3M 6H9
Canada

Contact Information:
Telephone: 800.810.1788
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.firestop.com

SECTION 2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Physical Hazards: None
Oral: Not Classified
Dermal: Not Classified
Inhalation: Not Classified
Skin Corrosion / Irritation: Not Classified
Serious Eye Damage / Eye Irritation: Not Classified
Respiratory or Skin Sensitization: Not Classified
Germ Cell Mutagenicity: Not Classified
Carcinogenic: Not Classified
Reproductive Toxicology: Not Classified
Target Organ System Toxicity - Single Exposure: Not Classified
Target Organ System Toxicity - Repeated Exposure: Not Classified
Aspiration Toxicity: Not Classified

ENVIRONMENTAL HAZARDS

Hazards to the Aquatic Environment: Not Classified
Acute Aquatic Toxicity: Not Classified
Chronic Aquatic Toxicity: Not Classified
Bioaccumulation Potential: Not Classified
Rapid Degradability: Not Classified

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS:

Hazard Symbols:



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Precautionary Statements:

P102 - Keep Out Of Reach of Children
P264 - Wash Hands Thoroughly After Handling

POTENTIAL HEALTH EFFECTS:

Inhalation: May cause irritation to nose and throat.
Skin contact: May cause slight irritation to skin.
Eye contact: May cause slight irritation to eyes on contact.
Ingestion: Not expected to be harmful by ingestion. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Existing conditions aggravated by exposure: None known
This product is consisted hazardous under 29 CFR 1910.1200 (Hazard Communication).
See Section 11 for additional toxicological information.

SECTION 3. COMPOSITION /INFORMATION ON INGREDIENTS

Hazardous Components	CAS NUMBER	Weight %* Content
Limestone	1317-65-3	40 - 50
EVA Copolymer	Proprietary 20	15 - 20
Triphenyl Phosphate	116-86-6	1 - 4
Di-tert-butylphenyl Phenyl Phosphate	65652-41-7	1 - 3
Propylene Glycol	57-55-6	1 - 4
Dipropylene Glycol Dibenzoate	27138-31-4	1 - 5
Polyethylene Glycol Mono(Octylphenyl) Ether	9036-19-5	1 - 3
Isodecyl Diphenyl Phosphate	29761-21-5	1 - 3
Chlorothalonil	1897-45-6	<0.2
Titanium Dioxide	13463-67-7	0.1 - 1

Note: The product may have different colours (rust red, grey, white, yellow or blue). Titanium Dioxide (CAS no. 13463-67-7) is ingredient only used in grey and white colour products

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protection.

SECTION 4. FIRST AID MEASURES

Inhalation: Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.

Skin contact: Wash affected area immediately with mild soap and warm water. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.

Eye contact: Immediately flush eyes with plenty of water. Remove contact lenses. Flush with water for at least 15 minutes. Hold eyelids apart to rinse properly. If a problem develops or persist, seek medical attention.

Ingestion: Do Not induce vomiting, unless recommended by medical personnel. If victim is conscious wash out mouth with water. Never give anything by mouth if victim is unconscious or convulsing. Seek medical attention or contact a Poison Centre immediately.

Other: No information available.

Symptoms: May cause redness and irritation of the skin and to eyes. May cause an allergic reaction of the skin.

Notes to the physician: Treat symptomatically. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use appropriate extinguisher for surrounding fire.

Specific hazards arising from the chemical: This product is used to contain fire.

Specific protective equipment: Firefighters must wear self contained breathing apparatus with full face mask. Firefighter suit may not be efficient against chemicals.

Specific protective actions for firefighters: Water spray can be used to cool equipment exposed to hear and flame.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Do not touch spilled material. Make sure to wear personal protective equipment mentioned in the Safety Data Sheet.

Environmental precautions: Prevent product from entering drains.

Methods and material for containment and clean-up: Ventilate well the area. Absorb with inert material (soil, sand, vermiculite) or wipe up or scrape up and place in an appropriate waste disposal clearly identified.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Use only in well ventilated area. Avoid contact with skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Wear eye protection, gloves and other protection clothing that are adapted to the task being performed and the risks involved. All items should be warmed to at least 0°C (32°F) prior to installation. Do not eat, do not drink and do not smoke during use. Keep containers tightly closed when not used. After use, wash hands with soap and water. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities: Store tightly close and in properly labelled container. Store away from oxidizing materials and incompatible materials (see section 10). Storage in high heat, high humidity conditions may reduce products shelf life. Keep from freezing.

Storage: 4 to 32°C (39.2 to 90°F)

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Immediately Dangerous to Life or Health **Titanium dioxide: 5000 mg/m³**
Silica - Amorphous, gel: 3000 mg/m³
Triphenyl phosphae: 1000 mg/m³

Hazardous Components					
Limestone:	STEL TWA (8h)	Total Dust Total Dust		20 mg/m ³ 10 mg/m ³	BC ACGIH, BC, ON, RSST
Propylene glycol	TWA (8h)	Mist	50 ppm	10 mg/m ³ 155 mg/m ³	ON, US AIHA ON
Triphenyl phosphate	TWA (8h)			3 mg/m ³	ACGIH, BC, ON, OSHA, RSST
Titanium dioxide	TWA (8h)	Total Dust		10 mg/m ³	ACGIH, BC, ON, RSST

Appropriate engineering controls: Provide sufficient mechanical (general and/or local exhaust) to keep the airborne concentrations of dust below their respective occupational exposure limits. Triphenyl phosphate: 1000 mg/m³

Individual protection measures

Eyes: Safety glasses. If risk of contact with eyes chemical splash goggles.

Hands: Wear nitrile or neoprene gloves. Disposable nitrile gloves can also be used, but discard after single use. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly. Before using, user should confirm impermeability. Discard gloves that show tears, pinholes, or signs of wear.

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Skin:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. Wear an apron, if necessary, to prevent repeated or prolonged contact with skin.
Respiratory:	A respirator is not required in a well ventilated area. Respiratory protection equipment (PPE) must be selected, fitted, maintained and inspected in accordance with regulations and CSA Standard Z 94.4 and approved by NIOSH/MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times the exposure limit: wear a half mask respirator with appropriate cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with appropriate cartridges and P100 filters.
Feet:	Wear safety shoes.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Pasty
Colour:	Grey
Odour:	Mild, aromatic
Odor threshold:	Not available
pH:	8.0 - 9.0
Vapor pressure:	18.52 mm Hg
Boiling point/range:	> 100°C (> 212°F)
Freezing point/range:	0°C (32°F)
Melting point/range:	Not available
Specific gravity:	1.40 - 1.50 at 25°C (77°F)
Vapor density:	Heavier than air, (Air = 1)
Flash point:	Not applicable
Flammable / Explosive limits - lower:	Not applicable
Flammable / Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Evaporation rate:	< 1
Solubility in water:	Not applicable
Partition coefficient (n-octanol/water):	Not applicable
Percent Volatile:	22 to 23%
Viscosity:	400000 to 531400 cst @ 25°C (77°F)
VOC content:	32.5 g/l (calculated)

SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Possibility of hazardous reactions: (Including polymerizations)	Hazardous polymerization will not occur under recommended storage.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced
Incompatible materials:	Strong oxidizing agents (such as nitric acid, perchloric acid peroxides, chlorates and perchlorates), strong acids, strong bases.





Reactivity: Not information available for this product
Conditions to avoid: Do not freeze. Avoid contact with incompatible materials. Avoid contamination with another chemical product.

SECTION 11. TOXICOLOGICAL INFORMATION

Relevant Routes of Exposure: Inhalation, Skin Contact, Eyes, Ingestion

Potential Health Effects / Symptoms

Inhalation: May cause irritation to nose and throat

Numerical measures of toxicity:	Limestone	Ingestion	6450 mg/kg	Rat	LD50
	EVA Copolymer	Ingestion	>2000 mg/kg	Rat	LD50
		Skin	>2000 mg/kg	Rabbit	LD50
	Dipropylene glycol dibenzoate	Ingestion	3914 mg/kg	Rat	LD50
		Inhalation	>200 mg/l/4h	Rat	LC50
		Skin	>2000 mg/kg	Rabbit	LD50
	Polyethylene glycol mono(octylphenyl) ether	Ingestion	2800 mg/kg	Rat	LD50
		Inhalation	>21.5 mg/l/4h	Rat	LC50
		Skin	>3000 mg/kg	Rabbit	LD50
	Propylene glycol	Ingestion	18000 mg/kg	Rat	LD50
		Inhalation	>20 mg/l/4h	Rat	LC50
		Skin	20800 mg/kg	Rabbit	LD50
	Isodecyl diphenyl phosphate	Ingestion	>15800 mg/kg	Rat	LD50
			>15.8 mg/l/1h	Rat	LC50
		Inhalation	>7900 mg/kg	Rabbit	LD50
	Di-tert-butylphenyl phenyl phosphate	Ingestion	2140 mg/kg	Rat	LD50
		Skin	5000 mg/kg	Rabbit	LD50
	Triphenyl phosphate	Ingestion	3500 mg/kg	Rat	LD50
		Skin	7900 mg/kg	Rabbit	LD50
	Chlorothalonil	Ingestion	>10000 mg/kg	Rat	LD50
		Inhalation	0.1 mg/l/4h	Rat	LC50
		Skin	>2500 mg/kg	Rat	LD50
	Titanium dioxide	Ingestion	>10000 mg/kg	Rat	LD50
		Inhalation	>6.82 mg/l/4h	Rat	LC50
		Skin	>10000 mg/kg	Rabbit	LD50

Delayed, immediate and chronic effects

Skin contact: May cause redness and slight irritation of the skin. Skin Irritation/Corrosion, Rabbit : tests performed with each ingredient of this mixture gave not irritating to slightly irritating results..

Eye contact: May cause redness and irritation to eyes. Polyethylene glycol mono(octylphenyl) ether (CAS no 9036-19-5) is irritating in rabbit eyes (Draize test). Eye Irritation/Corrosion, Rabbit: tests performed with each ingredient of this mixture gave not irritating to slightly irritating results.

Inhalation: Generally speaking, working cleanly and following basic precautionary measures will greatly minimize the potential for harmful exposure to this product under normal use conditions. Overexposure may cause nose, throat and respiratory tract irritation

Ingestion: Not expected to be harmful by ingestion. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea and diarrhea.

Respiratory or skin sensitization IARC: Chlorothalonil (CAS No. 1897-45-6) is a skin sensitizer (TOXNET). May cause an allergic reaction of the skin. This product is not a respiratory sensitizer.

NTP Classification:

Common name	IARC	NTP
Chlorothalonil	2B	-
Titanium dioxide	2B	-

IARC : 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic.
 NTP : K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens.

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Carcinogenicity:	Contains a substance that can cause cancer based on animal data. The risk of cancer depends on duration and level of exposure. Titanium dioxide in dust form can cause cancer based on animal data. Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint and caulk
Mutagenicity:	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effect.
Reproductive Toxicity:	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause effects on reproduction.
Specific target organ toxicity (single exposure):	No target organ is listed.
Specific target organ toxicity (repeated exposure):	No target organ is listed.
Interactive effects:	No information available for this product.
Other information:	The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. The acute toxicity estimate (ATE) by inhalation (dust/mist) of the mixture was calculated to be greater than 5 mg/L/4h. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.

SECTION 12. ECOLOGICAL INFORMATION

Ecological information: Not applicable

SECTION 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only:

Recommend method of disposal:	Dispose should be in accordance with applicable regional, national, Federal, State and local governmental regulations.
Waste disposal:	The generation of waste should be avoided or minimized wherever possible. Empty containers may retain some product residues. This material and its containers must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product should at all times must comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Hazardous waste number:	It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.





SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	Proper Shipping Name	Classes	PG*	Label	Additional Information
DOT Classification	Not regulated	-	-	-	-	-
TDG Classification	Not regulated	-	-	-	-	-
Mexico Classification	Not regulated	-	-	-	-	-
ADR / RID Class	Not regulated	-	-	-	-	-
IMDG Class	Not regulated	-	-	-	-	-
IATA-DGR Class	Not regulated	-	-	-	-	-

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

SECTION 15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory
TSCA 12 (b) Export Notification: None above reporting de minimus
CERCLA / SARA Section 302 EHS: None above reporting de minimus
CERCLA / SARA Section 311/312: Immediate health
CERCLA / SARA 313: None above reporting de minimus
California Proposition 65: No California Proposition 65 listed chemicals are known to be present. No California Proposition 65 listed chemicals are known to be present

Canada Regulatory Information

CEPA DSL / NDSL Status: All components are listed on or exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: Not controlled

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SECTION 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections:

Prepared by: Chemical Laboratory

Issue date: June 1, 2015

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