



P.O. Box 1300 TRENTON, NJ 08607

PRODUCTS COMPANY

TEL. (609) 394-0150 FAX (609)989-4847

Safety Data Sheet

Material Name: X-PANDO PIPE JOINT COMPOUND
SPECIAL NO. 2

***** Section 1 - Identification of the Substance/Preparation and the Company/Undertaking *****

Manufacturer Information

X-Pando Products Company
500 Southard Street
Trenton, NJ 08638
Phone: 609-394-0150

***** Section 2 - Composition / Information on Ingredients *****

EC #	Component	Percent	Symbols	Risks
-	Magnesium oxide fume 1309-48-4	35-45		
-	Magnesium chloride, hexahydrate 7791-18-6	20-25		
-	Quartz 14808-60-7	10-15		
-	Graphite 7782-42-5	8-12		
-	Magnesium sulfate 7487-88-9	1-5		
-	Dextrin 9004-53-9	1-5		
-	Sulfuric acid, strontium salt (1:1) 7759-02-6	1-5		

***** Section 3 - Hazards Identification *****

Human and Environmental Hazards

May cause eye, skin and respiratory tract irritation.

***** Section 4 - First Aid Measures *****

First Aid: Eyes

Irrigate eyes with large amounts of water for at least 15 minutes, while holding the eyelid(s) open. Seek medical attention if irritation persists.

First Aid: Skin

Wash the affected area with soap and water. Seek medical attention if irritation persists.

First Aid: Ingestion

Contact local poison control center or physician IMMEDIATELY.

First Aid: Inhalation

Move victim to fresh air and treat symptomatically.

***** Section 5 - Fire Fighting Measures *****

General Fire Hazards

High concentration of airborne dust may form explosive mixture with air.

Hazardous Combustion Products

Fire produces oxides of magnesium, calcium and carbon.

Extinguishing Media

Use medium suitable for surrounding material.

Fire Fighting Equipment/Instructions

Firefighters should wear full fire-fighting turn-out gear (full Bunker gear) including NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Safety Data Sheet

Material Name: X-PANDO PIPE JOINT COMPOUND SPECIAL NO. 2

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Avoid dust generation.

Clean-Up Procedures

Vacuum or scoop spilled material and place in closed containers for disposal.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Regulations vary. Consult local authorities before disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures

Avoid dust generation and wear proper personal protection equipment while handling.

Storage Procedures

Store in a closed container in dry area.

Specific Use

Sealing joints of cement lined pipes to be welded.

*** Section 8 - Exposure Controls / Personal Protection ***

Substance Exposure Limits

Magnesium oxide fume (-)

ACGIH:	10 mg/m3 TWA inhalable fraction
Austria:	20 mg/m3 STEL (respirable fraction, smoke, 4 X 15 min); 20 mg/m3 STEL (inhalable fraction, 2 X 60 min); 10 mg/m3 STEL (respirable fraction, 2 X 60 min)
	5 mg/m3 MAK (respirable fraction, smoke); 10 mg/m3 MAK (inhalable fraction, smoke)
Belgium:	10 mg/m3 TWA fume
Denmark:	6 mg/m3 TWA Mg
France:	10 mg/m3 VME fume
Germany:	1.5 mg/m3 MAK respirable fraction; 4 mg/m3 MAK inhalable fraction
Greece:	10 mg/m3 TWA inhalable fraction; 5 mg/m3 TWA respirable fraction
Ireland:	10 mg/m3 STEL] fume
	4 mg/m3 TWA] respirable dust; 5 mg/m3 TWA] fume; 10 mg/m3 TWA] total inhalable dust
Portugal:	10 mg/m3 TWA (inhalable fraction)
Spain:	10 mg/m3 VLA-ED (dust and fume)

Quartz (-)

ACGIH:	0.025 mg/m3 TWA respirable fraction
Austria:	0.15 mg/m3 MAK (respirable fraction)
Belgium:	0.1 mg/m3 TWA alveolar dust
Denmark:	0.3 mg/m3 TWA total; 0.1 mg/m3 TWA respirable
Finland:	0.05 mg/m3 TWA (respirable); 0.2 mg/m3 TWA (blasting and quarrying, respirable)
France:	0.1 mg/m3 VME alveolar fraction restrictive limit
Ireland:	0.05 ppm STEL] respirable dust
	0.1 mg/m3 TWA] respirable dust
	Under review (HSE, respirable)
Netherlands:	0.075 mg/m3 TWA respirable dust
Portugal:	0.025 mg/m3 TWA (respirable fraction)
Spain:	0.1 mg/m3 VLA-ED (respirable fraction)
Sweden:	0.1 mg/m3 LLV (respirable dust)

Safety Data Sheet

Material Name: X-PANDO PIPE JOINT COMPOUND SPECIAL NO. 2

Graphite (-)

ACGIH:	2 mg/m3 TWA respirable fraction all forms except graphite fibers
Austria:	10 mg/m3 STEL (alveolar dust with <1% quartz, respirable fraction, 2 X 60 min) 5 mg/m3 MAK (alveolar dust with <1% quartz, respirable fraction)
Belgium:	2 mg/m3 TWA alveolar fraction (except fibers)
Denmark:	2.5 mg/m3 TWA respirable
Finland:	2 mg/m3 TWA
France:	2 mg/m3 VME alveolar fraction
Germany:	1.5 mg/m3 MAK respirable fraction; 4 mg/m3 MAK inhalable fraction
Greece:	10 mg/m3 TWA inhalable fraction; 5 mg/m3 TWA respirable fraction
Portugal:	2 mg/m3 TWA (all forms except graphite fibers, respirable fraction)
Spain:	2 mg/m3 VLA-ED (dust)
Sweden:	5 mg/m3 LLV (total dust)

Engineering Controls

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Chemical splash goggles or safety glasses. Emergency eye wash stations and showers should be available within the work area.

Personal Protective Equipment: Skin

Wear chemical resistant, impervious gloves for routine industrial use. Use body protection appropriate for task. An apron or other impermeable body protection is suggested. Full-body chemical protective clothing is recommended for emergency response procedures.

Personal Protective Equipment: Respiratory

None required where adequate ventilation conditions exist. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

Eye wash fountain is recommended.

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Gray to Black Powder	Odor:	None
Physical State:	solid	pH:	NA
Vapor Pressure:	ND	Vapor Density:	NA
Boiling Point:	NA	Melting Point:	ND
Solubility (H2O):	Appreciable	Specific Gravity:	2.56
Evaporation Rate:	ND	VOC:	ND
Octanol/H2O Coeff.:	ND	Flash Point:	NA
Flash Point Method:	NA	Upper Flammability Limit	NA
		(UFL):	
Lower Flammability Limit	NA	Burning Rate:	NA
(LFL):			
Auto Ignition:	NA		

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Avoid contact with strong acids and strong bases.

Incompatibility

None

Hazardous Decomposition

Hazardous decomposition products such as hydrogen chloride, chlorine and magnesium oxide fumes may develop with exposure to high temperatures.

Safety Data Sheet

Material Name: X-PANDO PIPE JOINT COMPOUND SPECIAL NO. 2

Hazardous Polymerisation

Will not occur.

*** Section 11 - Toxicological Information ***

Potential Health Effects

A: General Product Information

Acute Eye:

May cause mechanical irritation if exposed to large amounts of the dust.

Acute Skin:

This product may cause skin irritation.

Acute Inhalation:

May cause irritation to respiratory tract and lung damage if exposure is repeated or prolonged. Although unlikely, inhalation of fumes from heated material may cause metal fume fever, a flu-like illness characterized by delayed symptoms of cough, muscle pains chills and nausea.

Acute Ingestion:

This product may cause gastrointestinal harm and nausea if it is swallowed.

B: Substance Analysis - LD50/LC50

Magnesium chloride, hexahydrate (-)

Oral LD50 Rat 8100 mg/kg

Quartz (-)

Oral LD50 Rat 500 mg/kg

Carcinogenicity

No information for product

Substance Carcinogenicity

Quartz (-)

IARC: Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources) (Group 1 (carcinogenic to humans))

Germany: Category 1 (causes cancer in man, alveola fraction)

Netherlands: Present (respirable dust, crystalline)

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Substance Analysis - Ecotoxicity - Aquatic Toxicity

Magnesium sulfate (-)

Test & Species

Test & Species	Conditions
24 Hr LC50 Lepomis macrochirus	19000 mg/L [static]
96 Hr LC50 Pimephales promelas	2700 mg/L
24 Hr EC50 Daphnia magna	1700 mg/L
72 Hr EC50 Desmodesmus subspicatus	266.4 - 417.3 mg/L [Static]
48 Hr EC50 Daphnia magna	

Mobility

No information available for the product.

Safety Data Sheet

Material Name: X-PANDO PIPE JOINT COMPOUND SPECIAL NO. 2

Persistence & Degradation

No information available for the product.

Bioaccumulation

No information available for the product.

Other Adverse Effects

No information available for the product.

*** Section 13 - Disposal Considerations ***

Waste Disposal Instructions

Avoid disposal, attempt to utilize preparation completely. Prior to disposal of unused preparation, consult an approved waste disposal operative to ensure regulatory compliance. Refer to local statutory requirements and the Toxic Industrial Waste Regulations (TIWR) for proper disposal instructions.

*** Section 14 - Transportation Information ***

IATA Information

Shipping Name: Not Regulated

ICAO Information

Shipping Name: Not Regulated

IMDG Information

Shipping Name: Not Regulated

*** Section 15 - Regulatory Information ***

EU MARKING AND LABELLING:

Symbol(s):

None

Risk Phrases:

None

Safety Phrases:

A: General Product Information

None

Safety Data Sheet

Material Name: X-PANDO PIPE JOINT COMPOUND SPECIAL NO. 2

B: Substance Analysis - Inventory

Component/CAS	EC #	EEC	CAN	TSCA
Magnesium oxide fume 1309-48-4	-	EINECS	DSL	Yes
Magnesium chloride, hexahydrate 7791-18-6	-	No	No	No
Quartz 14808-60-7	-	EINECS	DSL	Yes
Graphite 7782-42-5	-	EINECS	DSL	Yes
Magnesium sulfate 7487-88-9	-	EINECS	DSL	Yes
Sulfuric acid, strontium salt (1:1) 7759-02-6	-	EINECS	DSL	Yes
Dextrin 9004-53-9	-	EINECS	DSL	Yes

*** Section 16 - Other Information ***

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

End of Sheet