



SAFETY DATA SHEET

CHROMATE INDUSTRIAL CORPORATION®
5250-A Naiman Parkway, Solon, OH 44139 • 888-567-2206 • www.chromate.com

**FOR CHEMICAL
EMERGENCY**
Call ChemTrec day/night:
1-800-424-9300

1 IDENTIFICATION

1.1 PRODUCT IDENTIFIER: Fire Barrier Moldable Putty Pad

DATE PREPARED: April 29, 2015

PRODUCT IDENTIFICATION NUMBER: 74586

1.3 SUPPLIER'S DETAILS

1.2 RECOMMENDED USE AND RESTRICTIONS ON USE

CHROMATE INDUSTRIAL CORPORATION
5250-A Naiman Parkway, Solon, OH 44139 • (888) 567-2206
www.chromate.com

RECOMMENDED USE:

Passive fire protection in industrial applications.

1.4 EMERGENCY TELEPHONE NUMBER

ChemTrec 1-800-424-9300

2. HAZARD IDENTIFICATION

2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A.

Skin Sensitizer: Category 1.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |



Pictograms

Hazard Statements

Causes serious eye irritation.

May cause an allergic skin reaction.

Precautionary Statements

Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wear protective gloves and eye/face protection.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

2. HAZARD IDENTIFICATION CONTINUED

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Hazards not otherwise classified: None. 4% of the mixture consists of ingredients of unknown acute dermal toxicity.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
Zinc Borate 2335	138265-88-0	10 - 30 Trade Secret *
Polymer NJTS Reg. No. 04499600-7177	Trade Secret*	10 - 30 Trade Secret *
Polybutylene	9003-29-6	10 - 30 Trade Secret *
Sodium Silicate	1344-09-8	10 - 30 Trade Secret *
Methyl Esters of Hydrogenated Rosin	8050-15-5	10 - 30 Trade Secret *
Melamine Phosphate	41583-09-9	7 - 13 Trade Secret *
Glass Wool	65997-17-3	3 - 7 Trade Secret *
Butadiene-Styrene-Meta-Divinylbenzene Polymer	26471-45-4	1 - 5 Trade Secret *
Alpha-Methylstyrene-Isoamylene-Piperylene Polymer	62258-49-5	1 - 5 Trade Secret *
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	25068-38-6	1 - 5 Trade Secret *
Water	7732-18-5	1 - 5 Trade Secret *
Rayon Fiber	None	1 - 5 Trade Secret *
Amorphous Silica	112945-52-5	1 - 5 Trade Secret *
Rosin	8050-09-7	< 1 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

4 FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact: Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact: Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed: Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed: See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required: Not applicable.

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media: Non-combustible. Use a fire fighting agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture: None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters: No special protective actions for fire-fighters are anticipated.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Evacuate area. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions: Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep out of reach of children. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
SILICA, AMORPHOUS	112945-52-5	OSHA	TWA concentration:0.8mg/m3; TWA:20 millions of particles/cu. ft.	
GLASS WOOL	65997-17-3	Manufacturer determined	TWA(as dust):10 mg/m3	
ROSIN	8050-09-7	ACGIH	Limit value not established:	Cntrl all exposr-low as possib, Dermal/Respiratory Sensitizer

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment.

The following eye/face protection(s) are recommended: Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Neoprene, Nitrile Rubber, Natural Rubber

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment.

The following protective clothing material(s) are recommended: Apron - Neoprene, Apron – Nitrile

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program.

Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates.

For questions about suitability for a specific application, consult with your respirator manufacturer.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General Physical Form:	Solid
Specific Physical Form:	Putty
Odor, Color, Grade:	Red putty with pine-like odor
Odor threshold:	No Data Available
Melting point:	Not Applicable
Flash Point:	No flash point
Flammability (solid, gas):	Not Classified
Flammable Limits(LEL):	Not Applicable
Flammable Limits(UEL):	Not Applicable
Specific Gravity:	1.25 [Ref Std: WATER=1]
Solubility In Water:	No Data Available
Solubility- non-water:	No Data Available
Autoignition temperature:	Not Applicable
Decomposition temperature:	No Data Available
Volatile Organic Compounds:	< 1 % weight
VOC Less H2O & Exempt Solvents:	< 1 g/l

10. STABILITY AND REACTIVITY

10.1. Reactivity: This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability: Stable.

10.3. Possibility of hazardous reactions: Hazardous polymerization will not occur.

10.4. Conditions to avoid: None known.

10.5. Incompatible materials: None known.

10.6. Hazardous decomposition products:

Substance	Condition
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

11. TOXICOLOGICAL INFORMATION

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact: Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact: Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion: May be harmful if swallowed. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Carcinogenicity:

Ingredient	C.A.S. No.	Class Description	Regulation
Generic: GLASS FILAMENTS	65997-17-3	Anticipated human carcinogen	National Toxicology Program Carcinogens
Generic: GLASS FILAMENTS	65997-17-3	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

11. TOXICOLOGICAL INFORMATION CONTINUED

Toxicological Data: If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
Zinc Borate 2335	Dermal	Rabbit	LD50 > 10,000 mg/kg
Zinc Borate 2335	Ingestion	Rat	LD50 > 10,000 mg/kg
Sodium Silicate	Dermal	Rabbit	LD50 > 4,640 mg/kg
Sodium Silicate	Ingestion	Rat	LD50 500 mg/kg
Polybutylene	Dermal	Rat	LD50 > 10,250 mg/kg
Polybutylene	Ingestion	Rat	LD50 > 34,600 mg/kg
Polymer NJTS Reg. No. 04499600-7177	Dermal	Rabbit	LD50 > 2,000 mg/kg
Polymer NJTS Reg. No. 04499600-7177	Ingestion	Rat	LD50 > 5,000 mg/kg
Melamine Phosphate	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Melamine Phosphate	Ingestion	Rat	LD50 > 4,000 mg/kg
Glass Wool	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass Wool	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Butadiene-Styrene-Meta-Divinylbenzene Polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Amorphous Silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Amorphous Silica	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Amorphous Silica	Ingestion	Rat	LD50 > 5,110 mg/kg
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Dermal	Rat	LD50 > 1,600 mg/kg
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Ingestion	Rat	LD50 > 1,000 mg/kg
Alpha-Methylstyrene-Isoamylene-Piperylene Polymer	Ingestion	Rat	LD50 > 40,000 mg/kg
Rosin	Dermal	Rabbit	LD50 > 2,500 mg/kg
Rosin	Ingestion	Rat	LD50 7,600 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Sodium Silicate	Rabbit	Corrosive
Polybutylene	Rabbit	Minimal irritation
Polymer NJTS Reg. No. 04499600-7177		No significant irritation
Glass Wool		No significant irritation
Butadiene-Styrene-Meta-Divinylbenzene Polymer		Minimal irritation
Amorphous Silica	Rabbit	No significant irritation
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Rabbit	Mild irritant
Rosin	Rabbit	No significant irritation

11. TOXICOLOGICAL INFORMATION CONTINUED

Serious Eye Damage/Irritation

Name	Species	Value
Sodium Silicate	Rabbit	Corrosive
Polybutylene	Rabbit	Mild irritant
Glass Wool		No significant irritation
Amorphous Silica	Rabbit	No significant irritation
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Rabbit	Moderate irritant
Rosin	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Sodium Silicate	Mouse	Not sensitizing
Amorphous Silica	Human and animal	Not sensitizing
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Human and animal	Sensitizing
Rosin	Guinea pig	Sensitizing

Respiratory Sensitization

Name	Species	Value
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Human	Some positive data exist, but the data are not sufficient for classification
Rosin	Human	Some positive data exist, but the data are not sufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Sodium Silicate	In Vitro	Not mutagenic
Sodium Silicate	In vivo	Not mutagenic
Glass Wool	In Vitro	Some positive data exist, but the data are not sufficient for classification
Amorphous Silica	In Vitro	Not mutagenic
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	In vivo	Not mutagenic
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Glass Wool	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Amorphous Silica	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

11. TOXICOLOGICAL INFORMATION CONTINUED

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Sodium Silicate	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 200 mg/kg/day	during gestation
Amorphous Silica	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Amorphous Silica	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Amorphous Silica	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Ingestion	Not toxic to female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Ingestion	Not toxic to male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Dermal	Not toxic to development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Ingestion	Not toxic to development	Rat	NOAEL 750 mg/kg/day	2 generation

11. TOXICOLOGICAL INFORMATION CONTINUED

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Sodium Silicate	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Sodium Silicate	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 2,400 mg/kg/day	4 weeks
Sodium Silicate	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 804 mg/kg/day	3 months
Sodium Silicate	Ingestion	blood	All data are negative	Rat	NOAEL 804 mg/kg/day	3 months
Sodium Silicate	Ingestion	heart liver	All data are negative	Rat	NOAEL 1,259 mg/kg/day	8 weeks
Polybutylene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.07 mg/l	2 weeks
Polybutylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.7 mg/l	2 weeks
Glass Wool	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL not available	occupational exposure
Amorphous Silica	Inhalation	respiratory system silicosis	All data are negative	Human	NOAEL not available	occupational exposure
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	2 years
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Dermal	nervous system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	13 weeks
4,4'-Isopropylidenediphenol-Epichlorohydrin Polymer	Ingestion	auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days

Aspiration Hazard

Name	Value
------	-------

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

12. ECOLOGICAL INFORMATION

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

13. DISPOSAL CONSIDERATIONS

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): Not regulated

14. TRANSPORT INFORMATION

For Transport Information, please visit <http://www.chromate.com> or call (888)-567-2206

15. REGULATORY INFORMATION

15.1. US Federal Regulations

Contact Chromate Industrial Corp. for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
Zinc Borate 2335 (ZINC COMPOUNDS)	138265-88-0	10 - 30

15.2. State Regulations

Contact Chromate Industrial Corp. for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this product are in compliance with the chemical notification requirements of TSCA.

15.4. International Regulations

Contact Chromate Industrial Corp. for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

16. OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. Chromate Industrial Corp. MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the Chromate Industrial Corp. product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a Chromate Industrial Corp. product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the Chromate Industrial Corp. product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

Chromate Industrial Corp. provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, Chromate Industrial Corp. makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from Chromate Industrial Corp.

Chromate Industrial Corp. USA SDSs are available at www.chromate.com