



SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase)

Project: _____ Substitution Request Number: _____

 From: _____
 To: _____ Date: _____

 A/E Project Number: _____
 Re: _____ Contract For: _____

Specification Title: _____ Description: _____
 Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
 Manufacturer: _____ Phone: _____
 Address: _____
 Trade Name: _____ Model No.: _____
 Installer: _____ Phone: _____
 Address: _____

History: New product 1-4 years old 5-10 years old More than 10 years old

Differences between proposed substitution and specified product: _____

Point-by-point comparative data attached — REQUIRED BY A/E

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____
 Address: _____ Owner: _____
 _____ Date Installed: _____

Proposed substitution affects other parts of Work: No Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: No Yes [Add] [Deduct] _____ days.

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase — Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
 - Same warranty will be furnished for proposed substitution as for specified product.
 - Same maintenance service and source of replacement parts, as applicable, is available.
 - Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
 - Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
 - Proposed substitution does not affect dimensions and functional clearances.
 - Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
 - Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.
-

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Attachments:

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

Additional Comments: Contractor Subcontractor Supplier Manufacturer A/E
 Other:

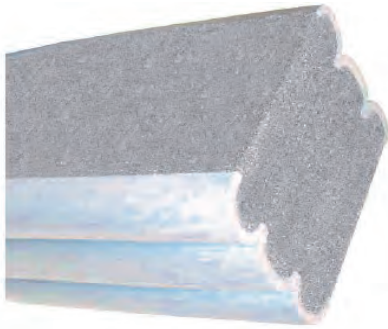
CSS(DS)-Series (Seismic Double-Sided)

Description

The Double-Sided Compression Seismic Seal (CSS-DS) is composed of an open micro-cell polyurethane foam impregnated with a hydrophobic, polymer sealing compound, which can be used in a variety of waterproofing applications. The foam that has constant internal forces built into each cell. These cells continuously push against each other and the sidewalls of an opening to keep out water, moisture, dust, sound and weather, providing a permanent, watertight seal.

The self-adhering material is used in various applications. The system was developed to waterproof most larger vertical and horizontal construction movement joints or joints anticipating seismic movement. Both the top and bottom surfaces of the profile have tough, silicone-exposed faces to match the color of adjoining structures.

The CSS(DS) is typically used in vertical applications or non-pedestrian horizontal applications, along with difficult-to-reach areas, pre-cast panels, isolation joints, window frame closures, and any other opening which requires a resilient, waterproof closure that must also be aesthetically pleasing. Once installed in the joint, the material expands to adapt to the width of the joint and the irregularities of the substrate provided such profile changes are not sudden or extreme.



Physical Properties

Properties	Result
Thermal Conductivity	0.05 W/m. °C
Temperature Range	-40° F to 185° F
Tensile Strength	ASTM 3574, meets 21 psi min.
Ultimate Elongation	ASTM 3574, 125% +/- 20%
Compression Set	ASTM 3574, Max. 2.5%
Shear Strength	Min. 8N/cm ²
Mildew Resistant	Excellent
Staining	None
Flammability	UL94VO Self Extinguishing
Flash Point	590°F (310°C)
Durometer Hardness	ASTM D2240, Shore A 15pts.

Features and Benefits

- Can accommodate rapid rates of joint movement
- Supplied in pre-compressed state for ease of installation
- Does not rely on the silicone coating or on the adhesion of a field applied bead of sealant to provide a watertight seal
- Consistent depth of product
- Excellent compression recovery
- Permanently elastic and weather-tight
- Used for joints up to 8” wide
- Allows for up to 100% (±50% movement)
- Not based on asphaltic or bitumastic impregnation
- Available in **Dow Corning® 790** and **Pecora 890**
Colors: Actual Colors may vary. See **Dow Corning® 790** and **Pecora 890** Color Chart for exact color match.
- Sizes available in 1/4” increments
- **LEED Credits** - Up to two (2) LEED credits depending on the location of the project.

PRODUCT	DEPTH OF SEAL IN (MM)	MIN. WIDTH IN (MM)	MID-RANGE** IN (MM)	MAX. WIDTH IN (MM)	TOTAL MOVEMENT IN (MM)
CSS(DS)-050	1.50” (38.1)	0.25” (6.4)	0.50” (12.7)	0.75” (19.1)	0.50” (12.7)
CSS(DS)-100	1.50” (38.1)	0.50” (12.7)	1.00” (25.4)	1.50” (38.1)	1.00” (25.4)
CSS(DS)-150	2.00” (50.8)	0.75” (19.1)	1.50” (38.1)	2.25” (57.2)	1.50” (38.1)
CSS(DS)-200	2.00” (50.8)	1.00” (25.4)	2.00” (50.8)	3.00” (76.2)	2.00” (50.8)
CSS(DS)-250	2.00” (50.8)	1.25” (31.8)	2.50” (63.5)	3.75” (95.3)	2.50” (63.5)
CSS(DS)-300	3.00” (76.2)	1.50” (38.1)	3.00” (76.2)	4.50” (114.3)	3.00” (76.2)
CSS(DS)-350	3.00” (76.2)	1.75” (44.5)	3.50” (88.9)	5.25” (133.4)	3.50” (88.9)
CSS(DS)-400	3.00” (76.2)	2.00” (50.8)	4.00” (101.6)	6.00” (152.4)	4.00” (101.6)
CSS(DS)-500	3.00” (76.2)	2.50” (63.5)	5.00” (127.0)	7.50” (190.5)	5.00” (127.0)
CSS(DS)-600	4.00” (101.6)	3.00” (76.2)	6.00” (152.4)	9.00” (228.6)	6.00” (152.4)
CSS(DS)-700	4.00” (101.6)	3.50” (88.9)	7.00” (177.8)	10.50” (266.7)	7.00” (177.8)
CSS(DS)-800	4.00” (101.6)	4.00” (101.6)	8.00” (203.2)	12.00” (304.8)	8.00” (203.2)



Dow Corning® 790 Silicone Building Sealant

Sealant Color Selection Guide

STANDARD COLORS

- Please check the availability of the different colors.
- Custom colors are available on request.
- Please refer to product literature for application and technical information.

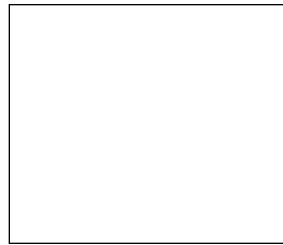
The colors shown are a close approximation of the actual sealant colors. However, for best results, submit color samples or swatches to our lab for color testing and matching.



Precast White



Limestone



White



Natural Stone



Gray



Black



Bronze



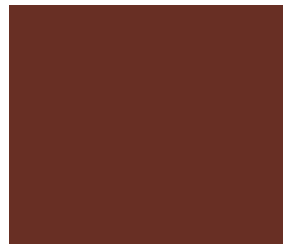
Sandstone



Adobe Tan



Dusty Rose



Rustic Brick



Blue Spruce



Charcoal



High Performance Building
Solutions



PECORA CORPORATION

Architectural Weatherproofing Products
U.S.A. • since 1862

STANDARD SILICONE COLORS

Custom colors available upon request

Non-standard colors

Minimum order quantity per color:
30 gallons for cartridges and pails
30 gallons for sausages

This guide offers a representation of color; when matching is critical, a cured or applied color sample is highly recommended.

Pecora Corporation

165 Wambold Rd
Harleysville, PA 19438
Phone: (215) 723-6051
(800) 523-6688
Fax: (215) 721-0286

www.pecora.com

An ISO-9001:2000 certified company.

ARCHITECTURAL SILICONE SEALANTS

864NST

NON-STAINING TECHNOLOGY.

Tru-White	345
Precast	113
Beige	595
Limestone	039
Aluminum Stone	515
Classic Bronze	046
Black	012
Hartford Green	196

890NST

NON-STAINING TECHNOLOGY.

Tru-White	345
Precast	113
Beige	595
Limestone	039
Anodized Aluminum	804
Aluminum Stone	515
Natural Stone	565
Sandstone	951
Charcoal Gray	950
Classic Bronze	046
Black	012
Hartford Green	196
Red Rock	955

895NST

NON-STAINING TECHNOLOGY.

Translucent	610
Tru-White	345
Anodized Aluminum	804
Aluminum Stone	515
Classic Bronze	046
Black	012

STANDARD SILICONE COLORS

Custom colors available upon request

Non-standard colors

Minimum order quantity per color:
30 gallons for cartridges and pails

This guide offers a representation of color; when matching is critical, a cured or applied color sample is highly recommended.

Pecora Corporation
165 Wambold Rd
Harleysville, PA 19438
Phone: (215) 723-6051
(800) 523-6688
Fax: (215) 721-0286

www.pecora.com

An ISO-9001:2000 certified company.

310 SL

Limestone 039

311 NS

Limestone 039

860

Translucent 610

Tru-White 345

Metallic Aluminum 027

Black 012

898NST

NON-STAINING TECHNOLOGY™

Translucent 610

Tru-White 345

Almond 792

Black 012

COVERAGE CHART (231 cu. in./gal.)

Joint Depth (in.) x Width (in.)	Linear feet per Gal.	Joint Depth (in.) x Width (in.)	Linear feet per Gal.
1/8 x 1/8	1232.0	3/8 x 7/8	58.7
1/8 x 1/4	616.0	3/8 x 1	51.3
1/8 x 3/8	410.7		
1/8 x 1/2	308.0	1/2 x 1/2	77.0
1/8 x 5/8	246.4	1/2 x 5/8	61.6
1/8 x 3/4	205.3	1/2 x 3/4	51.3
1/8 x 7/8	176.0	1/2 x 7/8	44.0
1/8 x 1	154.0	1/2 x 1	38.5
1/4 x 1/4	308.0	5/8 x 5/8	49.3
1/4 x 3/8	205.0	5/8 x 3/4	41.1
1/4 x 1/2	154.0	5/8 x 7/8	35.2
1/4 x 5/8	123.2	5/8 x 1	30.8
1/4 x 3/4	102.7		
1/4 x 7/8	88.0	3/4 x 3/4	34.2
1/4 x 1	77.0	3/4 x 7/8	29.3
		3/4 x 1	25.7
3/8 x 3/8	136.9		
3/8 x 1/2	102.7	7/8 x 7/8	25.1
3/8 x 5/8	82.1	7/8 x 1	22.0
3/8 x 3/4	68.4	1 x 1	19.3

Spectrem[®] 1

Standard Colors

Colors shown are approximate and may not reflect the shade precisely. Different lighting conditions can influence color appearance, for truer color please view in daylight. Colors are not stocked in all available package types. Minimum order quantities will apply for custom colors and alternative packaging. For more information, please contact Tremco Customer Service.

	PRECAST WHITE
	ANODIZED ALUMINUM
	IVORY
	GRAY
	OFF WHITE
	LIMESTONE
	SANDSTONE
	BUFF
	DUSTY ROSE
	ADOBE TAN
	CHAMPAGNE
	ALUMINUM STONE
	LIGHT BRONZE
	RUSTIC BRICK
	BRONZE
	DARK BRONZE
	BLACK
	WHITE

CSS & CSS(DS)-Series

INSTALLATION INSTRUCTIONS

Material Application

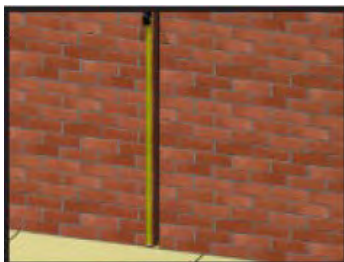
For use in **vertical joints**. Double sided silicone coating available upon request.

Recommended Tools

- Tape Measure
- Sharp Knife
- Miter Saw
- Blue Painters Tape
- Clean Cloth
- Isopropyl Alcohol
- Caulking Tool
- Wood Wedges
- Mineral Spirits

Material Sizing

1. Joints must be sized every 5-7 feet (1.524-2.137 meters) to ensure gap opening is uniform and depth is sufficient for the supplied material.



NOTE: Allow sufficient depth for the material to be recessed 1/8"–1/4" in the joint.

Material Preparation

1. Store material at a minimum of 68°F (20°C) for a minimum of 24 hours prior to installation, regardless of temperature at location of installation.

TIP: Material will expand faster when hot and slower when cold. In cold temperatures, store material in a heated area 24 hours prior to installation. In hot temperatures, store material out of direct sunlight and not in an enclosed storage container where temperatures may exceed 100°F.

2. Store materials in a dry, enclosed area. Make sure materials are off the ground and out of direct sunlight.
3. Use a miter saw to make any cuts to the seal before removing the clear shrink packing. All starting and ending pieces must be square to the termination point.

WARNING: Install the material directly after removing the shrink packaging to ensure the material does not expand past the joint opening.

4. Use a sharp knife to make any cuts after the clear shrink packaging and wooden boards have been removed.



TIP: Apply mineral spirits to the knife for a smoother cut.

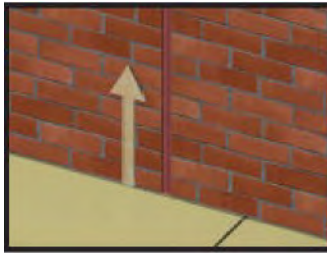
Joint Preparation

1. Verify that the joint is clean, sound, and will provide an appropriate surface for installation of the joint sealant.
 - a. Use compressed air to clean any loose debris from the joint.
 - b. Apply water or alcohol to a clean cloth and wipe the joint walls to the depth of the sealant materials plus 1”.
2. Verify that the joint is uniform and repair any spalls prior to installation.
3. Apply blue painters tape to both edges of the substrate face to prevent the silicone from contacting the substrate surface.
4. Check the material for appropriate length, width, and depth.
 - a. Supplied material should be pre-compressed to a size smaller than the intended joint opening.
 - b. Joint depth must allow for the installed material to be recessed 1/8” - 1/4” from the joint face.

Sealant Installation

1. For joints that run horizontal, begin installing the material at one side of the joint (either side) and continue to install the material working towards the opposite end (See CSS(H) installation procedure for epoxy installation). For vertical joints, begin installation at the bottom of the joint and work upward.
 - a. The installed sticks will support the subsequent sticks until the material fully expands.

TIP: To ensure an aesthetic finish, verify that the silicone adhesive matches the color on the face of the joint sealant.



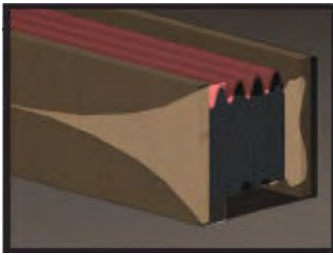
2. Run a 1/4” bead of the supplied silicone adhesive along both joint walls approx. 1/2” – 3/4” back from the surface of the joint substrate.

NOTE: When a continuous joint cannot be finished, the silicone on the substrate should stop at the last stick installed and silicone should not be applied to the end of the installed material until the next piece of material is ready to be installed.



Sealant Installation

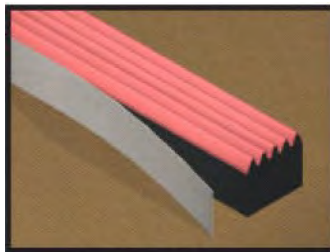
- When fully prepared to install, open the sealant material by cutting the shrink packaging along the edge of the masonite strapping.



NOTE: If stick sizes larger than the standard 5' LF is ordered (XL marking after product name), do NOT cut shrink packaging completely off. Cut open 5' LF sections at a time and install material working your way down. This will prevent the foam from expanding past the joint opening size.

WARNING: Do not cut the colored face of the material, and be prepared to install the material immediately once the packaging is removed to prevent material from expanding past the joint width.

- Verify that the material is cut square at both ends for proper seams. All pieces must be square to the termination point.
- Remove the white release liner on both sides of the seal.



WARNING: Do not twist or pull the material to avoid tearing the white release liner.

- Place the material into the joint while gently pushing the pressure sensitive adhesive (PSA) up against the side of the joint. Once the material is in place, use a margin trowel to firmly press the adhesive to the substrate and allow the material to expand to fill the joint.

TIP: If the PSA is hampering installation, use a spray bottle to wet the adhesive surface of the seal (will not affect the final sealing properties).

WARNING: Allow 72 hours for full expansion and material equalization. Expansion and equalization rates are affected by temperature.



- Silicone coating should be flush with, not protruding above, the substrate surface.

Seams

1. Verify that the new piece of material is cut square and not at an angle to the previous installed piece.
2. Apply silicone to the butt end of the new piece of material as well as a 1/4" bead on both joint walls, inset 1/2" – 3/4" as described in the Sealant Installation section.
3. Overlap extra material (approx. 1/2" -1") at seams and splices to ensure that the seam is in compression after installation.



4. 'T' and '+' intersections
 - a. Install horizontal material first.
 - b. Butt the vertical material up to the horizontal material following steps 1 & 2.

NOTE: After installation, if there are any mitered joints with a hole or void, use the supplied flexible seal to fill and seal the joint.



5. Use the matching silicone to run a bead along each edge of the joint to fill any irregularities in the substrate.

NOTE: Seal does not require an external fillet bead to provide a watertight seal.

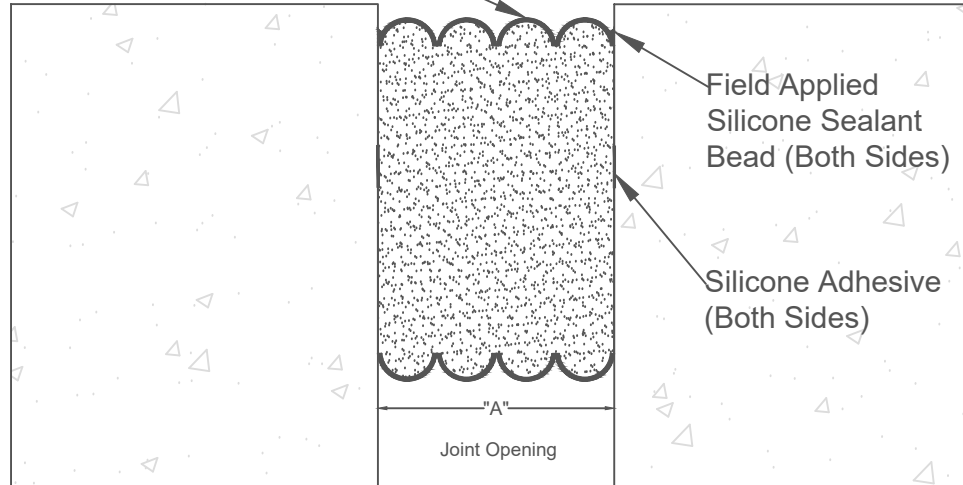
Finish

1. Tool the silicone over all seams and transitions using a small caulking tool.
2. Evenly spread the silicone on exposed seams to allow for a clean, aesthetic finish.
3. Remove any excess silicone left on the surface of the material or substrate.

WARNING: Do not allow the silicone to cure before removal.

4. Remove the blue painters tape from the substrate surface.
5. **Use the matching silicone to run a bead along each edge of the joint to fill any irregularities in the substrate.**

Factory Applied Dow 790 Or Pecora 890 Silicone



CSS(DS)-SERIES
Vertical Condition

* Note: Epoxy only used for sizes 6" and greater.
* Sizes available in 0.25" increments and up to 9".
Contact EMS for additional information.

SEAL COLOR:	
DOW 790:	_____
PECORA 890:	_____
SPECTRUM 1:	_____

WALL-WALL/CORNER APPLICATION

MOVEMENT: +/- 50% NOMINAL JOINT WIDTH
STOCK LENGTHS: 5'-0"

PRODUCT	"A" Min. Width IN (MM)	"A" Mid Range IN (MM)	"A" Max. Width IN (MM)	Total Movement IN (MM)	Seal Depth IN (MM)
CSS(DS)-050	0.25" (6.4)	0.50" (12.7)	0.75" (19.1)	0.50" (12.7)	1.50" (38.1)
CSS(DS)-100	0.50" (12.7)	1.00" (25.4)	1.50" (38.1)	1.00" (25.4)	1.50" (38.1)
CSS(DS)-150	0.75" (19.1)	1.50" (38.1)	2.25" (57.2)	1.50" (38.1)	2.00" (50.8)
CSS(DS)-200	1.00" (25.4)	2.00" (50.8)	3.00" (76.2)	2.00" (50.8)	2.00" (50.8)
CSS(DS)-250	1.25" (31.8)	2.50" (63.5)	3.75" (95.3)	2.50" (63.5)	2.00" (50.8)
CSS(DS)-300	1.50" (38.1)	3.00" (76.2)	4.50" (114.3)	3.00" (76.2)	3.00" (76.2)

NO.	Description	Date	By
<small>The information contained herein is the proprietary property of ERIE METAL SPECIALTIES, INC. No portion of it may be reproduced by any means or used in any form except for the purpose for which it was intended. All rights of design and invention are hereby reserved.</small>			



13311 Main Road * Akron * New York * 14001
Phone: (716) 542-3991 * Fax: (716) 542-3996 * E-mail: sales@eriemetal.com

PROJECT: N/A

TITLE: CSS(DS)-Series Vertical Condition

Detailed by: BAF	Date: 07/20/16
Checked by: SLP	Date: 07/22/16
Scale: NTS	EMS Job #: N/A
Sheet No.: 1 of 1	Drawing No.: CSS(DS)-1

MATERIAL SAFETY DATA SHEET**SECTION I – MATERIAL IDENTIFICATION**

MATERIAL NAME: CSS Precompressed Foam Seal, Premoulded joint filler, Polyurethane

MANUFACTURER: Erie Metal Specialties, Inc.
13311 Main Road
Akron, NY 14001

SUPPLIER: Erie Metal Specialties, Inc.
13311 Main Road
Akron, NY 14001

EMERGENCY PHONE:
CHEM-TREC: (800) 424-9300

(716) 542-3991

SECTION II – HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS: MINERAL SPIRITS LESS THAN 1%.
Other Ingredients: Trade Secret

SECTION III – PHYSICAL & CHEMICAL PROPERTIES

Boiling Point: SOLID, N/AP Specific Gravity (H₂O ; 1): 0.910
Vapor Pressure, mm Hg: N/AP Melting Point: 300° F
Vapor Density (Air = 1): N/AP
Evaporation Rate - (Butyl Acetate = 1): N/AP
Solubility In Water: NOT SOLUBLE
Appearance and Odor: BLACK OPEN CELL FOAM, ODOR NOT OBJECTIONABLE

SECTION IV – Health Hazard Data

Routes Of Entry - Inhalation?: NO Skin?: NO Ingestion?: NO
Health Hazards (Acute & Chronic): NO ADVERSE HEALTH EFFECTS
Carcinogenicity - NTP?: NO IARC Monograph?: NO OSHA Regulation?: NO
Signs & Symptoms of Exposure: NONE
Medical Conditions Generally Aggravated by Exposure: NONE
Emergency & First Aid Procedures: Ingestion, Skin Contact, Eye Contact & Inhalation - No need anticipated - If irritation occurs wash with warm water. No inhalation direct or side effects.

SECTION V - FIRE & EXPLOSION HAZARD DATA

Flash Point: 735° F Flammable Limits - LEL: N/AP LFEL: N/AP
Extinguishing Media: CO₂ DRY POWDER OR WATER
Special Fire Fighting Procedures: NIOSH APPROVED SELF-CONTAINED RESPIRATORS RECOMMENDED FOR TOXIC SMOKE
Unusual Hazards: WHEN FORCED TO BURN, THE COMBUSTION GASES WILL LIBERATE HYDROGEN CHLORIDE GAS FUMES.
FLAMMABILITY RATINGS MEET THE FOLLOWING SPECS: UL94HBF MIL-P-I5280D

MATERIAL SAFETY DATA SHEET**SECTION VI – REACTIVITY DATA:**

Stability: STABLE
Conditions to Avoid: EXCESSIVE HEAT
Incompatibility (Materials to Avoid): NONE
Hazardous Decomposition/Products: NONE
Hazardous Polymerization: WILL NOT OCCUR

SECTION VII - SPILL OR LEAK PROCEDURES

Steps to Be Taken If Material is Released Or Spilled: NONE
Waste Disposal Method: INCINERATION OR APPROVED LANDFILL
Precautions to Be Taken in Handling And Storage: STORE MATERIAL AWAY FROM DIRECT HEAT
Other Precautions: AN EFFECTIVE SOLVENT IS MINERAL SPIRITS

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection: NONE REQUIRED
Ventilation: NONE REQUIRED
Protective Gloves: NONE REQUIRED BUT RECOMMENDED DUE TO
Eye Protection: NO UNUSUAL PRECAUTIONS
Other Protective Clothing or Equipment: NONE
Work & Hygienic Practices: NO UNUSUAL PRECAUTIONS - OBSERVE GOOD WORK PRACTICES

SECTION IX - SPECIAL PRECAUTIONS

NONE REQUIRED

SECTION X - TRANSPORTATION

DOT Proper Shipping Name: Not Regulated
DOT Primary Hazard Classification: NA
UN/NA Hazard No: NE
EPA/DOT Reportable quantity: NA
DOT labels required: None required.

SECTION XI - HAZARD CODES

NFPA 704
Health Hazard 0
Fire Hazard 1
Reactivity 0
Special NONE

MATERIAL SAFETY DATA SHEET

LEGEND
HEALTH HAZARD

0 - Normal Material
1 - Slightly Hazardous
2 - Hazardous
3 - Extreme Danger
4 - Deadly

REACTIVITY

0 - Stable
1 - Unstable If Heated
2 - Violent Chemical Change
3 - Shock & Heat May Detonate
4 - May Detonate

FIRE HAZARD Flash Points:

0 - Will Not Burn
1 - Above 200° F
2 - Below 200° F
3 - Below 100° F
4 - Below 73° F
UK
AP Approximately
N/AP
N/DA

SPECIAL HAZARD

Oxidizer OXY
Acid ACID
Alkali ALK
Corrosive COR
Use No Water N/W
Unknown
Y
Not Applicable
No Data Available

SECTION XIII – U.S. REGULATORY INFORMATION:

This MSDS complies with 20 CRF 1910.1200 (THE HAZARD COMMUNICATION STANDARD). Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Erie Metal Specialties, Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Erie Metal Specialties, Inc. be responsible for damages of any nature whatsoever resulting from the use of, misuse or reliance upon information. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure its activities comply with Federal, State or Provincial, and local laws and regulations.

ISSUE DATE:.....04/01/11

PREPARED BY: Erie Metal Specialties, Inc.
13311 Main Road
Akron, NY 14001



MATERIAL SAFETY DATA SHEET

Print date: 06/13/2016

Version: 0

Revision date:

1. COMPANY AND PRODUCT IDENTIFICATION

Product name: FLEXIBLE SEAL ANY COLOR

Product code: AC-FSC60

Supplier: Erie Metal Specialties
13311 Main Road
Akron, NY 14001
Phone: 716-542-3991
Fax: 716-542-3996
sales@eriemetal.com
www.eriemetal.com

Emergency telephone number:
* 24 HOUR TRANSPORTATION:
**CHEMTREC: 1-800-424-9300
703-527-3887 (Call collect outside of US)

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

Components	CAS No.	Weight %	OSHA Ceiling Limits	OSHA TWA (final):	ACGIH Ceiling Limits	ACGIH Exposure Limits:	Vendor Exposure Limits:
Toluene	108-88-3	40 - 50%	300 ppm	200 ppm		20 ppm	

3. HAZARDS IDENTIFICATION

Emergency Overview

Irritating to eyes
May cause skin irritation and/or dermatitis.
Harmful by inhalation and if swallowed.

Signal word: WARNING

Principle routes of exposure: Eyes, skin and inhalation.

Eye contact: Avoid contact with eyes. Irritating to eyes.

Skin contact: Prolonged skin contact may defat the skin and produce dermatitis.

Inhalation: Avoid breathing vapors or mists. May cause irritation of respiratory tract. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion and unconsciousness.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination, and fatigue) Risk of product entering the lungs on vomiting after ingestion.

Physico-chemical properties: No hazards resulting from material as supplied.

4. FIRST AID MEASURES

General advice: Call a physician immediately.
Show this safety data sheet to the doctor in attendance.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician

Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Consult a physician if necessary.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Inhalation: Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

Note to physician: Treat symptomatically.

Medical condition aggravated by exposure: Dermatitis.

5. FIRE-FIGHTING MEASURES

Flash Point (°C): NA (Classified as a solid) **Flash point (°F):** NA (Classified as a solid) **Flash Point Method:** Not applicable

Flammable limits in air - lower (%): Not determined **Flammable limits in air - upper (%):** Not determined

Suitable extinguishing media: Use dry chemical, CO₂, water spray or `alcohol` foam.

Unusual hazards: None known

Special protective equipment for fire-fighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Specific methods: Water mist may be used to cool closed containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with the skin and the eyes Do not breathe vapour/dust.

Environmental precautions: Do not flush into surface water or sanitary sewer system.

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Handling

Technical measures/precautions: Provide sufficient air exchange and/or exhaust in work rooms.

Safe handling advice: In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe vapors or spray mist. Wear personal protective equipment. Avoid contact with skin and eyes. Keep container tightly closed. Wash thoroughly after handling.

Storage

Technical measures/storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.. Keep product and empty container away from heat and sources of ignition.

Incompatible products: strong oxidizing agents

Safe storage temperature: 40-100 ° F

Shelf life: 2 years

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	ACGIH Ceiling Limits	ACGIH Exposure Limits:	OSHA Ceiling Limits	OSHA TWA (final):	NIOSH - Pocket Guide - TWAs:	Vendor Exposure Limits:
Toluene		20 ppm	300 ppm	200 ppm	100 ppm 375 mg/m ³ 150 ppm STEL 560 mg/m ³ STEL	None

Engineering measures: Ensure adequate ventilation.

Personal Protective Equipment

General: Eye Wash and Safety Shower

Respiratory protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a NIOSH/MSHA certified respirator with organic vapor/P100 filter should be worn.

Hand protection: Neoprene gloves

Skin and body protection: Long sleeved clothing

Eye protection: Goggles.

Hygiene measures: Avoid contact with skin, eyes and clothing.



9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state:	Paste
Color:	various
Odour:	Solvent, Characteristic
Boiling point/range (°C):	110.6
Boiling point/range (°F):	231
Vapour density:	Heavier than air
Vapour pressure:	Not determined
VOC Content Product (g/L)	388 g/L
VOC Content Product (lb/gal)	3.24
VOC less water and exempt (lb/gal)	3.24
VOC less water and exempt (g/L)	388
HAP Content Product (g/L):	388 g/L
Solubility:	Insoluble
Evaporation rate:	Slower than ether
pH:	NA
Flash Point (°C):	NA (Classified as a solid)
Flash point (°F):	NA (Classified as a solid)
Decomposition temperature:	Not determined
Auto-ignition temperature (°C):	Not determined
Density @ 15.5 ° C (g/cc) :	1.0
Bulk density @ 60 ° F (lb/gal):	8.35
Solids (% by weight):	58 - 62%
Volatiles (% by volume) :	42 - 46%
Partition coefficient (n-octanol/water, log Pow):	Not determined
Explosive properties:	
- upper limit:	No data available
- lower limit:	No data available

10. STABILITY AND REACTIVITY

Stability:

Stable under recommended storage conditions.

Conditions to avoid:

Heat, flames and sparks.

Materials to avoid:

Strong oxidizing agents

Hazardous decomposition products:

Carbon oxides, Smoke

Polymerisation

Not applicable

11. TOXICOLOGICAL INFORMATION

11. TOXICOLOGICAL INFORMATION

Over exposure to toluene has been associated with permanent brain damage characterized by disturbances in gait, personality changes and loss of memory. Toluene has been found to cause cardiac sensitivity, effects on hearing, central nervous system damage, respiratory tract damage and mild reversible liver effects in laboratory animals. Toluene may be harmful to the human fetus based on positive test results with laboratory animals.

No toxicological information is available on the product. Data obtained on components are summarized below.

Components	NTP:	IARC:	OSHA - Select Carcinogens	NIOSH - Selected LD50s and LC50s
Toluene	This product does not contain any material shown to be a carcinogen by the National Toxicology Program (NTP).	This product does not contain any material shown to be a carcinogen by the International Agency for Research on Cancer (IARC).	This product does not contain any material shown to be a carcinogen by OSHA.	12.5mg/LInhalation LC50Rat 12124mg/kgDermal LD50Rat 636mg/kgOral LD50Rat 8390mg/kgDermal LD50Rabbit 26700ppmInhalation LC50Rat

12. ECOLOGICAL INFORMATION

Persistence and degradability: No information available

Mobility: No data available

Bioaccumulation: No data available

Ecotoxicity effects: No data available

Aquatic toxicity: Not Determined

Component Information

Toluene

Ecotoxicity - Fish Species Data:
 LC50 (Pimephales promelas - 96h) = 15.22-19.05 mg/L
 LC50 (Pimephales promelas - 96h) = 12.6 mg/L
 LC50 (Oncorhynchus mykiss - 96h) = 5.89-7.81 mg/L
 LC50 (Oncorhynchus mykiss - 96h) = 14.1-17.16 mg/L
 LC50 (Oncorhynchus mykiss - 96h) = 5.8 mg/L
 LC50 (Lepomis macrochirus - 96h) = 11.0-15.0 mg/L
 LC50 (Oryzias latipes - 96h) = 54 mg/L
 LC50 (Poecilia reticulata - 96h) = 28.2 mg/L
 LC50 (Poecilia reticulata - 96h) = 50.87-70.34 mg/L
 LC50 (Pimephales promelas - 96h) = 15.22-19.05 mg/L

Ecotoxicity - Freshwater Algae Data:
 EC50 (Selenastrum capricornutum - 96h) = >433 mg/L

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

Contaminated packaging: Do not re-use empty containers

Methods for cleaning up: Take up mechanically and collect in suitable container for disposal.

Components

Toluene

108-88-3

US EPA Waste Number

D001

14. TRANSPORT INFORMATION

U. S. DEPARTMENT OF TRANSPORTATION:

Proper shipping name:

Not Regulated

TDG (CANADA):

Proper shipping name:

Not Regulated

IMDG/IMO:

Proper shipping name:

Not Regulated

IATA/ICAO:

Proper shipping name:

Not Regulated

15. REGULATORY INFORMATION

CANADIAN REGULATIONS:

Canada - WHMIS Classification Information:

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Canadian Product Classification: Class D2B

Product Classification Graphic(s):



Component Classification Data:

Toluene - 108-88-3

WHMIS hazard class:

B2, D2A, D2B

Canada - National Pollution Release Inventory:

Part 1, Group 1 Substance
Part 5 Substance
Part 1, Group 1 Substance

U.S. FEDERAL REGULATIONS:

OSHA Hazard Communication Standard:

This product is considered to be hazardous under the OSHA Hazard Communication Standard.

Toluene - 108-88-3

CERCLA/SARA - Hazardous Substances and their Reportable Quantities: 1000 lb

SARA (311, 312) hazard class: This product possesses the following SARA Hazard Categories:
Immediate Health (Acute): Yes
Delayed Health (Chronic): Yes
Flammability: Yes
Pressure: No
Reactivity: No

Toluene - 108-88-3

CERCLA/SARA 313 Emission reporting: Listed
CAA - 1990 Hazardous Air Pollutants: Listed
Clean Water Act - Hazardous Substances: Listed
Clean Water Act - Priority Pollutants: Listed

RCRA Status: Listed in Section 13

U.S. STATE REGULATIONS
(RTK):

Listed component present: toluene

Toluene - 108-88-3

California Prop 65: Present
MARTK: Present
Michigan critical materials register list: 100 lb Annual usage threshold
NJRTK: 1866
PARTK: Environmental hazard
Present

INVENTORY STATUS:

United States TSCA - Sect. 8(b) Inventory: This product complies with TSCA

Canada DSL Inventory List - This product complies with DSL

EC EINECS/ELINCS/NLP list: Compliance has not been determined

Inventory - Japan - Existing and New Chemical Substances (ENCS): Compliance has not been determined.

16. OTHER INFORMATION

Sources of key data used to compile the data sheet: Material safety data sheets of the ingredients.

Prepared by: Quaker Chemical Corporation -Safety, Health and Environmental Affairs Group - US

Reason for revision: This data sheet contains changes from the previous version in section(s) 15 and 16

HMIS classification:**Health:**

2

Flammability:

1

Reactivity:

0

Personal Protection:

H

HMIS Use Dilution**Health**

--

Flammability

--

Reactivity

--

Personal Protection

--

NFPA rating:**Health:**

2

Flammability:

1

Reactivity:

0

Special:

NA

* Indicates possible chronic health effect

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

Disclaimer

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. Quaker Chemical Corporation ("Quaker") assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of Quaker.

End of Safety Data Sheet

MATERIAL SAFETY DATA SHEET**SECTION I – MATERIAL IDENTIFICATION**

MATERIAL NAME: DOW CORNING 790 SILICONE BUILDING SEALANT MSDS # 02134292

MANUFACTURER: Erie Metal Specialties, Inc.
13311 Main Road
Akron, NY 14001SUPPLIER: Erie Metal Specialties, Inc.
13311 Main Road
Akron, NY 14001EMERGENCY PHONE:
CHEM-TREC: (800) 424-9300

(716) 542-3991

SECTION II – HAZARDOUS INGREDIENTSAcute Effects

Eye: Direct contact may cause moderate irritation.

Skin: May cause mild irritation.

Inhalation: Irritates respiratory passages very slightly.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged exposure may irritate seriously.

Inhalation: Overexposure by inhalation may injure the following organ(s): Testes. Liver. Pancreas.
Spleen.

Oral: Overexposure by ingestion may injure the following organ(s): Pancreas. Liver. Spleen. Testes.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number	Wt %	Component Name
50791-87-2	1.0 - 5.0	Methylvinyl bis(n-methylacetamido) silane
68952-53-4	1.0 - 5.0	Dimethyl, methylethyl-N-hydroxyethamine siloxane

The above components are hazardous as defined in 29 CFR 1910.1200

SECTION IV – FIRST AID MEASURES

Eye: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 - 20 minutes while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately obtain medical attention.

MATERIAL SAFETY DATA SHEET

- Skin:** As quickly as possible remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Immediately flush with lukewarm gently flowing water for 15 minutes. Completely decontaminate clothing, shoes and leather goods before reuse or discard. Obtain medical attention.
- Inhalation:** Remove from the source of contamination or move to fresh air. If irritation persists, obtain medical advice.
- Oral:** If irritation or discomfort occur, obtain medical advice.

Notes to Physician: Treat according to person's condition and specifics of exposure.

SECTION V - FIRE & EXPLOSION HAZARD DATA

Flash Point: Not applicable.

Autoignition Temperature: Not determined.

Flammability Limits in Air: Not determined.

Extinguishing Media: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Unusual Fire Hazards: None.

SECTION VI – ACCIDENTAL RELEASE MEASURES:

Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See Section 8 for Personal Protective Equipment for Spills. Call (716) 542-3991, if additional information is required.

SECTION VII – HANDLING AND STORAGE

Use with adequate ventilation. Product evolves N-methyl acetamide when exposed to water or humid air. Provide ventilation during use to control N-methyl acetamide within exposure guidelines or use respiratory protection. Avoid eye contact. Avoid skin contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally.

Keep container closed and store away from water or moisture.

MATERIAL SAFETY DATA SHEET

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Exposure Limits

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
50791-87-2	Methylvinyl bis(n-methylacetamido) silane	See N-methyl acetamide comments.

N-methyl acetamide is formed on contact with water or humid air. Provide adequate ventilation to control exposures to within Dow Corning recommended exposure guidelines of 1 ppm (TWA) and 5 ppm (Excursion Limit).

Engineering Controls

Local Ventilation: Recommended.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes:	Use proper protection - safety glasses as a minimum.
Skin:	Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.
Suitable Gloves:	Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.
Inhalation:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.
Suitable Respirator:	General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Personal Protective Equipment for Spills

Eyes:	Use full face respirator.
Skin:	Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.
Inhalation/Suitable Respirator:	Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Precautionary Measures:	Avoid eye contact. Avoid skin contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally. Use reasonable care.
Comments:	Product evolves N-methyl acetamide when exposed to water or humid air. Provide ventilation during use to control N-methyl acetamide within exposure guidelines or use respiratory protection.

MATERIAL SAFETY DATA SHEET

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Paste
Color:	Brown
Odor:	Some odor
Specific Gravity @ 25°C:	1.462
Viscosity:	Not determined.
Freezing/Melting Point:	Not determined.
Boiling Point:	Not determined.
Vapor Pressure @ 25°C:	Not determined.
Vapor Density:	Not determined.
Solubility in Water:	Not determined.
pH:	Not determined.
Volatile Content:	Not determined.
Flash Point:	Not applicable.
Autoignition Temperature:	Not determined.
Flammability Limits in Air:	Not determined.

Note: The above information is not intended for use in preparing product specifications. Contact EMS before writing specifications.

SECTION X – STABILITY AND REACTIVITY

Chemical Stability:	Stable.
Hazardous Polymerization:	Hazardous polymerization will not occur.
Conditions to Avoid:	None.
Materials to Avoid:	Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Metal oxides. Formaldehyde. Silicon dioxide. Nitrogen oxides. Quartz

SECTION XI – TOXICOLOGICAL INFORMATION

Contains Bis(N-methyl acetamido)silane which liberates N-methylacetamide (NMA) during cure. NMA has been shown to cause birth defects in laboratory animals

MATERIAL SAFETY DATA SHEETSpecial Hazard Information on Components

No known applicable information

SECTION XII – ECOLOGICAL INFORMATIONEnvironmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Hazard Parameters (LC50 or EC50)	Ecotoxicity Classification Criteria		
	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

SECTION XIII – DISPOSAL CONSIDERATIONS:RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No
State or local laws may impose additional regulatory requirements regarding disposal. Call (716) 542-3991, if additional information is required.

SECTION XIV – TRANSPORT INFORMATION:

DOT Road Shipment Information (49 CFR 172.101): Not subject to DOT.

Ocean Shipment (IMDG): Not subject to IMDG code

Air Shipment (IATA): Not subject to IATA regulations

Call (716) 542-3991, if additional information is required.

MATERIAL SAFETY DATA SHEET**SECTION XV – REGULATORY INFORMATION:**

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355): None

Section 304 CERCLA Hazardous Substances (40 CFR 302):

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
68-12-2	0.69	Dimethylformamide
1330-20-7	0.14	Xylene

Section 311/312 Hazard Class (40 CFR 370):

Acute:	Yes
Chronic:	Yes
Fire:	No
Pressure:	No
Reactive:	No

Section 313 Toxic Chemicals (40 CFR 372):

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
68-12-2	0.69	Dimethylformamide

Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold

SECTION XVI – Other Information:

Prepared by: Erie Metal Specialties, Inc.

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

ISSUE DATE:.....04/01/11

PREPARED BY: Erie Metal Specialties, Inc.
13311 Main Road
Akron, NY 14001