Elgen Manufacturing Company INC.

300 Murray Hill Road. East Rutherford, NJ 07073 (800)503-9805 ISSUE DATE: 6/10/2009 EMERGENCY PHONE NUMBER: INFOTRAC: (800) 535-5053

I.Product

PRODUCT NAME: ELGEN Galvanized Steel Product

CLASS: Steel

II.Physical Data

APPEARANCE: Metallic Color BOILING POINT: N/A SPECIFIC GRAVITY: 7.5-8.5 g/cm3 SOLUBILITY IN WATER: Not Soluble SOFTENING POINT: 2400 F MELTING POINT: 2750°F

III. Hazardous Ingredients

MATERIAL:	<u>CAS</u> 7439-89-6	<u>% WEIGHT</u> 94.00 – 99.66	OSHA PEL (mg/m3) 10 (oxide fume)	ACGIH TLV (mg/m3) 5 (oxide fume)
		1.00-4.50.		
Zinc Arsenic	7440-66-6		15 (oxide dust)	15 (oxide dust)
Aluminum	7429-90-5	004	15 (dust)	10 (dust)
Antimony	7440-36-0	<.9	0.5	0.5
Arsenic	7440-38-2	<.09	0.01	0.01
Beryllium	7440-41-7	<.09	0.002	0.002
Boron	7440-42-8	<.9	15	10
Cadmium	7440-43-9	<.09	0.005	0.01
Calcium	1305-78-8	<.9	5	2
Carbon	7440-44-0	.04-1.0	15	10
Chromium*	7440-47-3	0.01-1.5	0.5	0.06
Cobalt	7440-48-4	<.09	0.1	0.02
Manganese	7439-96-5	0.05-2.0	5 (dust)	5 (dust)
			5 (fume)	1 (fume)
Phosphorous	8049-19-2	.001020	15	10
Molybdenum	7439-98-7	0.00010	15	10
Nickel	7440-02-0	0.0130	1	1
Silicon	7440-21-3	.015220	15	10
Sulfur	7704-34-9	.001020	15	10

This product contains the following ingredient at levels subject to reporting requirements of:

SARA 313 (40CFR372): Manganese, Chromium Nickel

OSHA HAZARADOUS COMMUNICATIONS STANDARD, (29CFR1910.1200): Manganese, Chromium, Nickel, Silicon, Aluminum metallic powder

CALIFORNIA PROPOSITION 65: This product contains the following trace amounts of chemicals known to the state of California to be a cancer hazard: Nickel

IV.Health Hazard Data

ROUTE OF EXPOSURE: Inhalation of dusts or fumes.

EFFECTS OF OVEREXPOSURE:

Acute Effect: Excessive inhalation of metal fumes can produce an acute reaction known as "metal fume fever". Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms) which come on a few hours after large exposures.

Chronic Effects: Only after six to ten years of exposure to iron dust or fume does on e present any signs of pneumoconiosis (i.e. siderosis). Physical examinations of those exposed to iron dust have not indicated any disability. Excessive and repeated inhalation of chromium fume or dust may cause severe irritation, ulceration or cancer in the respiratory system. It is generally believed that the hexavalent form of chromium (Cr+6) are responsible for these effects.

It is uncertain whether metallic chromium in dust form can cause the same effects noted above. Excessive and prolonged inhalation of manganese (generally over two years exposure) can cause damage to the central nervous system. The pathology resembles Parkinson's Disease. Also, workers routinely exposed to high concentrations of manganese display an unusually high incidence of respiratory disease. Molybdenum has caused toxicity (anemia and poor growth) in farm animals, but there are no data documenting toxicity to humans due to industrial exposure.

Excessive inhalation of nickel fumes has been associated with respiratory cancer. Nickel is a potential sensitizer and may cause allergic reactions.

Chronic exposure to tungsten dust has caused respiratory disorders characterized by cough, dyspnea and wheezing. There is no correlation between the onset of symptoms, the length of exposure and the development of interstitial fibrosis.

Dermatitis, primarily on the side of the neck, flexor parts of the forearm and the back of the hand were also detected.

Vanadium dusts cause a persistent cough which can develop after five hours of exposure and may last up to ten days

Pulmonary irritation also results from vanadium, but there are no deviations in pulmonary function or other laboratory tests.

Zinc dust is a skin and respiratory tract irritant. It is relatively nontoxic. However, if oxidation occurs prior to inhalation, one must deal with toxicities associated with zinc oxide such as metal fume fever, gastrointestinal disorders and hepatic dysfunction.

V. Fire and Explosion Hazard Data

FLAMMABILITY CLASS:

FLASH POINT: N/A

EXTINGUISHING MEDIA: As for the surrounding fire, use dry powder for metal fires.

UNUSUAL FIRE HAZARD: Contact of molten product with water can cause an explosion hazard.

FIRE FIGHTING PROCEDURES: Wear full protective clothing including helmet, self-contained positive pressuredemand breathing apparatus, protective clothing, and a face mask.

SPECIAL PROCEDURES: Firefighters should wear equipment to protect against noxious fumes.

PRODUCT OF COMBUSTION: Material will begin softening at approximately 2

400 F, will proceed to a liquid and form irritating and toxic gaseous metallic oxides at extremely high temperatures

VI. Spill or Leak Procedures

LARGE/SMALL SPILL: Avoid creating dusts when cleaning spill. Small pieces may be collected using a broom and shovel.

Particulates and dust may be collected by using a vacuum with a HEPA filter. Place collected material in a closed container.

Minimal problems with spills of this product would occur because of its solid form. However, if there is a spill of dust, clean up using methods which avoid dust generation and the use of water, such as vacuum. If airborne dust is generated during the clean up, use an appropriate NIOSH-approved respirator.

Waste Disposal Method: Dispose of in accordance with appropriate federal, state and local regulations.

VII. Special Protection

VENTILATION: Local exhaust ventilation should be provided to keep workers exposures within allowable limits. Whenever dusts, particulates, or fumes are generated, use appropriate local exhaust ventilation to keep exposures below the regulated limits.

RESPIRATORY PROTECTION: Use NIOSH/NSHA approved organic vapor respirators when vapor concentrations exceed the TLV.

EYE PROTECTION: Personal protective equipment should be worn when there is a reasonable probability of injury. Wear safety glasses with side shields.

HAND PROTECTION: Wear leather or other appropriate work gloves, if necessary for type of operation. OTHER: Protective clothing coveralls.

VIII. Emergency and First Aid Procedures

INHALATION: If acute overexposure to dust or fumes occurs, remove victim from the adverse environment and seek medical attention.

SKIN CONTACT: Wash area of contact thoroughly with soap and water. If irritation persists, seek medical attention. EYE CONTACT: Flush immediately with running water for fifteen minutes. If irritation persists, seek medical attention. INGESTION: N/A

IX. Carcinogenic Assessment

Nickel and Chromium have been identified as suspect carcinogens by NTP and IARC

X. Special Precautions

HANDLING AND STORAGE: Use good housekeeping practices to avoid excessive dust accumulation. As supplied, this product does not present a health hazard. Processing of the product for final uses can include formation of dusts, particulates, or fumes, some of which may present health hazards.

XI. Reactivity Data

STABILITY: Stable under normal conditions of handling and use. **CONDITIONS TO AVOID:** Poor ventilation. **INCOMPATIBILITY:** Strong acids (produce hydrogen gas) **HAZARDOUS DECOMPOSITION PRODUCT:** Metallic oxide. **HAZARDOUS POLYMERIZATION:** Will not occur

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ISSUE DATE: 6/10/2009

EMERGENCY PHONE NUMBER: INFOTRAC: (800) 535-5053

I.Product

PRODUCT NAME: ELGEN Aluminum Products CLASS: Metal

II.Physical Data

APPEARANCE: Silvery ductile metal SPECIFIC GRAVITY: 2.5+ MELTING POINT: 480-649°C

III. Hazardous Ingredients

Material	<u>CAS-</u> Numbe	OSHA/PEL	ACGIH/TLV
Aluminum	7429-90-5	15 mg/M3 . Total dust	10 mg/M3 . Metal Dust
		5 mg/M3 . Respirable fraction	5 mg/M3 . Welding fume
Chromium*	7440-47-3	1.0 mg/M3 (Chromium metal)	0.5 mg/MI & Cr III compounds
Cooper	7440-50-8	0.1 mg/M3 . Fume (as Cu)	0.1 mg/M3 . Fume
		1.0g/M3 . sts (Dusts & mists)	1.0g/M3 . sts (Dusts & mists)
Iron	7439-89-6	10 mg/M3 (as Fe2O3 fume)	5 mg/M3 Iron oxide dust & fume
Magnesium	7439-95-4	15mg/M3 Total Dust	10mg/M3 (fume)
Magnese	7439-96-5	5 mg/M3 . Respirable fraction	0.2 mg/M3
Silicon	7440-2-]3	15 mg/M3 Total dust	10 mg/M3
		5 mg/M3 – Respirable fraction	
Zinc*	7440-66-6	5mg/M3 (as ZnO fume)	5mg/M3 (as ZnO fume)

IV.Health Hazard Data

ROUTE OF EXPOSURE: Inhalation of fumes or dust, skin contact or ingestion.

EFFECTS OF OVEREXPOSURE:

Chromium: Chromium dust can cause irritation of the eyes, skin, and respiratory tract. Additional chromium compounds can be formed during processing and cause dermatitis, allergic reactions, and skin ulcers. Chronic overexposure can cause perforation of the nasal septum, respiratory sensitization, asthma, lung damage kidney damage, and cancer. Chromium VI compounds are listed as a Group I carcinogen by IARC and NTP.

Cooper: Acute overexposure to fumes of cooper may cause metal fume fever with flu-like symptoms. Copper dust and fume can cause irritation of the upper respiratory tract, metallic taste in the mouth, and nausea. Chronic overexposures can cause reduction in red blood cells, skin abnormalities, and hair discoloration.

Iron: The inhalation of iron oxide fumes or dust may cause an apparent benign pneumoconiosis which is called siderosis. Can cause irritation of gastrointestinal tract, bleeding, changes in the pH of body fluids, and liver damage.

Magnesium: Exposure to magnesium may cause metal fume fever with flu-like symptoms. Particles imbedded in the skin may cause severe lesions. Manganese: Excessive and prolonged inhalation of manganese (generally over two years exposure) can cause damage to the central nervous system. The pathology resembles Parkinson Disease. Also, workers routinely exposed to high concentrations of manganese display an unusually high incidence of respiratory disease.

Silicon: Chronic overexposures can cause chronic bronchitis and narrowing of the airways. Studies with experimental animals by injection have found lesions of the lungs. Zinc: Zinc is low in toxicity, but inhalation of fumes/oxides may cause metal fume fever. Onset of symptoms may be delayed 4-12 hours and include irritation of the mouth and throat, coughing stomach pain, headache, nausea, vomiting, metallic taste, chills, fever, pains in the muscles and joints, thirst, bronchitis or pneumonia and a blush tint to the skin. These symptoms go away in 24 to 48 hours and leave no effect.

Under normal handling conditions the solid alloy presents no significant health hazards. Processing of the alloy by dust or fume producing operation (grinding, buffing, heating, welding, etc.) may result in the potential for exposure to airborne metal particulates or fume.

V. Fire and Explosion Hazard Data

FLASH POINT: N/A

EXTINGUISHING MEDIA: Use class D extinguishing agents.

SPECIAL PROCEDURES: Firefighters should wear equipment to protect against noxious fumes and protective clothing.

EXPLOSION HAZARD: Fire and explosion hazard is high for aluminum when the material is in the form of dust and exposed to heat, flames, chemical reaction or in contact with powerful oxidizers.

VI. Spill or Leak Procedures

No special precautions are necessary for spills of bulk material. If large quantities of dust are spilled, remove by vacuuming or wet-sweeping to prevent elevated concentration of airborne dust. Vacuum systems must be designed for explosive dust. Avoid all ignition sources. If airborne dust is generated during the clean up, use an appropriate NIOSH-approved respirator.

Waste Disposal Method: Dispose of in accordance with appropriate federal, state and local regulations. Clean up personnel should wear respirators and protective clothing. Local ventilation is recommended to maintain dust levels below the applicable PEL's and TLV's. Ventilation systems must be designed for explosive dusts..

VII. Special Protection

VENTILATION: Local exhaust ventilation should be provided to keep worker exposures within allowable limits. Ventilation systems must be designed for explosive dusts.

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved organic vapor respirators when vapor concentrations exceed to TLV.

EYE PROTECTION: Personal protective equipment should be worn when there is a reasonable probability of injury. **PROTECTIVE GLOVES:** As needed

VIII. Emergency and First Aid Procedures

IN EYES: For contact with dust or particulates, flush eyes with large amounts of water. Eye injuries from solid particles should be treated by a physician immediately.

ON SKIN: Remove contaminated clothing. Wash area of contact thoroughly with soap and water. If irritation persists, seek medical attention

INGESTE INHALATION: If acute overexposure to dusts or fumes occurs, remove victim from the adverse environment and seek medical attention.

IX. Special Precautions

As supplied, this product does not present a health hazard. Processing of the product for final uses can include formation of dusts, particulates, or fumes, some of which may present health hazards.

This information is taken from sources or based upon data believed to be reliable; however, DUCTMATE INDUSTRIES, INC. makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

X. Reactivity Data

STABILITY: Stable under normal conditions of handling and use.

CONDITIONS TO AVOID: Strong acids and bases can produce flammable/explosive gas. Molten metal may react violently with water.

INCOMPATIBILITY: Acids, bases and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCT: Metal fume. Welding/cutting operations may generate ozone and oxides of nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur.

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I.Product

PRODUCT NAME: Stainless Steel, All Grades

CLASS: Steel

II.Physical Data

APPEARANCE: Metallic Solid SPECIFIC GRAVITY: 7.65 – 7.94 MELTING POINT: 2550 - 2650°F

III. Hazardous Ingredients

MATERIAL:	% WEIGHT	OSHA PEL	ACGIH TLV
Iron	45 - 90	10 mg/M3 (TWA as Fume)	5 mg/M3 (TWA as Fume)
Manganese	0 - 15	1 mg/M3 (TWA as Fume)	1 mg/M3 (TWA as Fume)
Silicon	0 - 3	10 mg/M3 (TWA)	10 mg/M3 (TWA)
Chromium*	10.5 - 30	1 mg/M3 (TWA)	0.5 mg/M3 (TWA)
Nickel*	0 - 40	1 mg/M3 (TWA)	1 mg/M3 (TWA)
Molybdenum	0 - 5	5 mg/M3 (TWA as soluble)	5 mg/M3 (TWA as soluble)
Copper	0-5	0.1 mg/M3 (TWA as fume)	0.2 mg/M3 (TWA as fume)
Aluminum	0 - 1	5 mg/M3 (TWA as fume)	5 mg/M3 (TWA as fume)
Cobalt	0 - 1	0.05 mg/M3 (TWA)	0.05 mg/M3 (TWA)

*Suspect Carcinogen by NTP and IARC

IV.Health Hazard Data

ROUTE OF EXPOSURE: Inhalation of dusts or fumes.

EFFECTS OF OVEREXPOSURE:

Stainless, as a solid, is not toxic and presents no health hazard. Overexposure to dusts or fumes which may result during heating, grinding, cutting, brazing or welding can pose significant health hazards as described below. **Iron:** Siderosis, no fibrosis

Nickel: Nickel compounds are suspect carcinogens by inhalation. The most common effect resulting from exposure to nickel compounds is "nickel itch", a form of dermatitis.

Chromium: Suspect carcinogen and tumorigen. Dermatitis may result from exposure to chromium fumes.

Manganese: Can affect central nervous system, including disturbances in gait and speech. Pulmonary system damage may result from inhalation of fume and dust.

Molybdenum: Irritation of nose and throat, weight loss and digestive disturbances in animals. No industrial poisoning have been reported.

Copper: May be responsible for one form of metal fume fever. Metal fume fever's symptoms include cough, headache, fever, nausea, chilling, pain in muscles and joints, and metal taste in mouth. This condition is usually transitory lasting one day or less.

Silicon: May produce X-ray changes in lungs without disability.

Aluminum: No known health effects.

Cobalt: an experimental carcinogen.

Medical conditions known to be aggravated by exposure to this material: Persons with lung disorders or diseases or skin disorders may be at added risk as a result of overexposure to this material.

V. Fire and Explosion Hazard Data

LASH POINT: N/A XTINGUISHING MEDIA: Use dry powder for metal fires. PECIAL PROCEDURES: Firefighters should wear equipment to protect against noxious fumes.

VI. Spill or Leak Procedures

Minimal problems with spills of this product would occur because of its solid form. However, if there is a spill of dust, clean up using methods which avoid dust generation and the use of water, such as vacuum. If airborne dust is generated during the clean up, use an appropriate NIOSH-approved respirator.

Waste Disposal Method: Dispose of in accordance with appropriate federal, state and local regulations.

VII. Special Protection

VENTILATION: Local exhaust ventilation should be provided to keep worker exposures within allowable limits. **RESPIRATORY PROTECTION:** Use NIOSH/MSHA approved organic vapor respirators when vapor concentrations exceed the TLV.

EYE PROTECTION: Personal protective equipment should be worn when there is a reasonable probability of injury. **PROTECTIVE GLOVES:** As needed.

VIII. Emergency and First Aid Procedures

INHALATION: If acute overexposure to dust or fumes occurs, remove victim from the adverse environment and seek medical attention.

SKIN CONTACT: Wash area of contact thoroughly with soap and water. If irritation persists, seek medical attention. **EYE CONTACT:** Flush immediately with running water for fifteen minutes. If irritation persists, seek medical attention. **INGESTION:** N/A

IX. Carcinogenic Assessment

Nickel and Chromium have been identified as suspect carcinogens by NTP, IARC or OSHA.

X. Special Precautions

HANDLING AND STORAGE: Use good housekeeping practices to avoid excessive dust accumulation.

XI. Reactivity Data

STABILITY: Stable under normal conditions of handling and use.

CONDITIONS TO AVOID: Poor ventilation.

INCOMPATIBILITY: Strong acids (produce hydrogen gas).

HAZARDOUS DECOMPOSITION PRODUCT: During certain operations such as welding, burning, melting or hot rolling, metal fumes may be generated. Hexavalent chromium which is suspect carcinogen may result from pickling of stainless.

HAZARDOUS POLYMERIZATION: Will not occur.

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I.Product

PRODUCT NAME: ELGEN Aluminum Products

CLASS: Metal

II.Physical Data

APPEARANCE: Silvery ductile metal SPECIFIC GRAVITY: 2.5+ MELTING POINT: 480-649°C

III. Hazardous Ingredients

Material	<u>CAS-</u> Numbe	OSHA/PEL	ACGIH/TLV
Aluminum	7429-90-5	15 mg/M3 . Total dust	10 mg/M3 . Metal Dust
		5 mg/M3 . Respirable fraction	5 mg/M3 . Welding fume
Chromium*	7440-47-3	1.0 mg/M3 (Chromium metal)	0.5 mg/MI & Cr III compounds
Cooper	7440-50-8	0.1 mg/M3 . Fume (as Cu)	0.1 mg/M3 . Fume
		1.0g/M3 . sts (Dusts & mists)	1.0g/M3 . sts (Dusts & mists)
Iron	7439-89-6	10 mg/M3 (as Fe2O3 fume)	5 mg/M3 Iron oxide dust & fume
Magnesium	7439-95-4	15mg/M3 Total Dust	10mg/M3 (fume)
Magnese	7439-96-5	5 mg/M3 . Respirable fraction	0.2 mg/M3
Silicon	7440-2-]3	15 mg/M3 Total dust	10 mg/M3
		5 mg/M3 – Respirable fraction	
Zinc*	7440-66-6	5mg/M3 (as ZnO fume)	5mg/M3 (as ZnO fume)

IV.Health Hazard Data

ROUTE OF EXPOSURE: Inhalation of fumes or dust, skin contact or ingestion.

EFFECTS OF OVEREXPOSURE:

Chromium: Chromium dust can cause irritation of the eyes, skin, and respiratory tract. Additional chromium compounds can be formed during processing and cause dermatitis, allergic reactions, and skin ulcers. Chronic overexposure can cause perforation of the nasal septum, respiratory sensitization, asthma, lung damage kidney damage, and cancer. Chromium VI compounds are listed as a Group I carcinogen by IARC and NTP.

Cooper: Acute overexposure to fumes of cooper may cause metal fume fever with flu-like symptoms. Copper dust and fume can cause irritation of the upper respiratory tract, metallic taste in the mouth, and nausea. Chronic overexposures can cause reduction in red blood cells, skin abnormalities, and hair discoloration.

Iron: The inhalation of iron oxide fumes or dust may cause an apparent benign pneumoconiosis which is called siderosis. Can cause irritation of gastrointestinal tract, bleeding, changes in the pH of body fluids, and liver damage.

Magnesium: Exposure to magnesium may cause metal fume fever with flu-like symptoms. Particles imbedded in the skin may cause severe lesions. Manganese: Excessive and prolonged inhalation of manganese (generally over two years exposure) can cause damage to the central nervous system. The pathology resembles Parkinson Disease. Also, workers routinely exposed to high concentrations of manganese display an unusually high incidence of respiratory disease.

Silicon: Chronic overexposures can cause chronic bronchitis and narrowing of the airways. Studies with experimental animals by injection have found lesions of the lungs. Zinc: Zinc is low in toxicity, but inhalation of fumes/oxides may cause metal fume fever. Onset of symptoms may be delayed 4-12 hours and include irritation of the mouth and throat, coughing stomach pain, headache, nausea, vomiting, metallic taste, chills, fever, pains in the muscles and joints, thirst, bronchitis or pneumonia and a blush tint to the skin. These symptoms go away in 24 to 48 hours and leave no effect.

Under normal handling conditions the solid alloy presents no significant health hazards. Processing of the alloy by dust or fume producing operation (grinding, buffing, heating, welding, etc.) may result in the potential for exposure to airborne metal particulates or fume

V. Fire and Explosion Hazard Data

FLASH POINT: N/A

EXTINGUISHING MEDIA: Use class D extinguishing agents.

SPECIAL PROCEDURES: Firefighters should wear equipment to protect against noxious fumes and protective clothing.

EXPLOSION HAZARD: Fire and explosion hazard is high for aluminum when the material is in the form of dust and exposed to heat, flames, chemical reaction or in contact with powerful oxidizers.

VI. Spill or Leak Procedures

No special precautions are necessary for spills of bulk material. If large quantities of dust are spilled, remove by vacuuming or wet-sweeping to prevent elevated concentration of airborne dust. Vacuum systems must be designed for explosive dust. Avoid all ignition sources. If airborne dust is generated during the clean up, use an appropriate NIOSH-approved respirator.

Waste Disposal Method: Dispose of in accordance with appropriate federal, state and local regulations. Clean up personnel should wear respirators and protective clothing. Local ventilation is recommended to maintain dust levels below the applicable PEL's and TLV's. Ventilation systems must be designed for explosive dusts..

VII. Special Protection

VENTILATION: Local exhaust ventilation should be provided to keep worker exposures within allowable limits. Ventilation systems must be designed for explosive dusts.

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved organic vapor respirators when vapor concentrations exceed to TLV.

EYE PROTECTION: Personal protective equipment should be worn when there is a reasonable probability of injury. **PROTECTIVE GLOVES:** As needed

SKIN CONTACT: Wash area of contact thoroughly with soap and water. If irritation persists, seek medical attention.

VIII. Emergency and First Aid Procedures

INHALATION: If acute overexposure to dust or fumes occurs, remove victim from the adverse environmental and seek medical attention.

SKIN CONTACT: Wash area of contact thoroughly with soap and water. If irritation persists, seek medical attention. **EYE CONTACT:** Flush immediately with running water for fifteen minutes. If irritation persists, seek medical attention.

INGESTION: Seek medical attention if large quantities of materials have been ingested.

IX. Carcinogenic Assessment

Aluminum has NOT been identified as a suspect carcinogen by NTP, IARC, or OSHA.Nickel and Chromium have been identified as suspect carcinogens by NTP and IARC

X. Special Precautions

HANDLING AND STORAGE: Use good housekeeping practices to avoid excessive dust accumulation.

XI. Reactivity Data

STABILITY: Stable under normal conditions of handling and use.

CONDITIONS TO AVOID: Strong acids and bases can produce flammable/explosive gas. Molten metal may react violently with water.

INCOMPATIBILITY: Acids, bases and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCT: Metal fume. Welding/cutting operations may generate ozone and oxides of nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur.

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I.Product

PRODUCT NAME: Elgen Neoprene Gasket CLASS: RUBBER

II.Physical Data

APPEARANCE: Black Strip SOLUBILITY IN WATER: Negligible SPECIFIC GRAVITY: 0.11-0.32

III. Hazardous Ingredients

MATERIAL:	% WEIGHT	OSHA PEL	ACGIH TLV
Neopreme	100	N/A	N/A

IV.Health Hazard Data

ROUTE OF EXPOSURE: The product is physically handled, but under normal use, presents no serious hazard. EFFECTS OF OVEREXPOSURE: Acute Effect: No acute effects have been associated with the neoprene rubber. Chronic Effects: No chronic effects have been associated with the neoprene rubber.

V. Fire and Explosion Hazard Data

FLASH POINT: N/A The neoprene is fire-resistant relative to hydrocarbon rubbers. **EXTINGUISHING MEDIA**: Use foam to extinguish the fire.

VI. Spill or Leak Procedures

Any scrap should be placed into a closed container for disposal. Waste Disposal Method: Dispose of in accordance with appropriate federal, state and local regulations...

VII. Special Protection

VENTILATION: General exhaust ventilation should be provided to keep worker exposures at a minimum. **RESPIRATORY PROTECTION**: Equipment is not normally required. However, abnormal conditions may require one to wear NIOSH respirator equipment.

EYE PROTECTION: Personal protective equipment should be worn when there is a reasonable probability of injury. **PROTECT IVE GLOVES**: As needed.

VIII. Emergency and First Aid Procedures

INHALATION: N/A

SKIN CONTACT: Wash area of contact with soap and water if irritated.

EYE CONTACT: Flush immediately with running water for fifteen minutes. If irritation persists, seek medical attention. **INDIGESTION**: N/A

IX. Carcinogenic Assessment

The neoprene has NOT been identified as a suspect carcinogen by NTP, IARC, or OSHA..

X. Special Precautions

HANDLING AND STORAGE: Keep containers closed and store away from extreme heat and cold. DO NOT FREEZE. Keep away from chemicals that react with water. Store away from acids and incompatible materials.

XI. Reactivity Data

STABILITY: Stable under normal conditions of handling and use. **CONDITIONS** TO AVOID: Extreme heat source. **INCOMPATIBILITY:** N/A **HAZARDOUS DECOMPOSITION PRODUCT:** N/A **HAZARDOUS POLYMERIZATION:** Will not occur.

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I.Product

PRODUCT NAME: Fiber Glass Insulation/Insulation Board

CHEMICAL FAMILY: Fiber Glass Wool Product **FORMULA:** Not available

II.Physical Data

Appearance Pink, yellow, tan Odor Faint resin (organic) Physical State Solid, fibrous pH Does not apply Flash point Not available Autoignition temperature Does not apply Boiling Point Does not apply Melting point/range Not available Flammability Limits in Air Iower / upper / Explosive properties Does not apply Oxidizing properties Does not apply Vapor Pressure Does not apply Specific Gravity Does not apply Water solubility Insoluble VOC content Not available

III. Hazardous Ingredients

CAS #	Component	Percent by Wt.
65997-17-3	Glass Fiber, Wool	85-100
25104-55-6	Urea, polymer with formaldehyde and phenol	0-15

Non-Hazardous Statement The remaining components of this product are non-hazardous or are in small enough quantities as to not meet regulatory thresholds for disclosure. These components contain no substances or impurities which would influence the classification of this product.

IV.Health Hazard Data

Emergency Overview

Exposure to dust may be irritating to eyes, nose and throat. Hydrogen chloride may be released from vinyl faced products during fire.

Potential Health Effects Principle Routes of Exposure Eye

Skin Contact Inhalation

Acute Effects

- Eyes May cause slight irritation
- Skin May cause slight skin irritation
- Inhalation May cause irritation of respiratory tract
- Ingestion Ingestion of material is unlikely

Chronic Effects There is no known chronic health effect connected with long-term use or contact with these products

Aggravated Medical Conditions

Chronic respiratory or skin conditions may temporarily worsen from exposure to this product **Carcinogenic Status**

This product contains a component which is listed by IARC, OSHA or NTP. See Section 11 **OSHA Regulatory Status** This material is considered hazardous by the OSHA Hazard communication Standard (29 CFR 1910.1200)

Potential Environmental Effects There is no known ecological information for this product.

V. Fire and Explosion Hazard Data

Flammability/Combustibility Properties Non-flammable

Suitable extinguishing media dry chemical foam carbon dioxide (CO2) water fog Unsuitable Extinguishing Media None Hazardous Combustion Products Carbon Monoxide, Carbon Dioxide (CO2), Ammonia. Other undetermined compounds could be released in small quantities Explosion Data Sensitivity to Mechanical Impact Not available Sensitivity to Static Discharge Not available Special Hazards Arising from the Chemical Vinyl faced products will release hydrogen chloride

Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear

NFPA Health 2 Flammability 2* Reactivity 0 Special Instructions: none

* Some facing and packaging materials are flammable.

VI. Spill or Leak Procedures

Personal precautions Avoid contact with the skin and the eyes. **Methods for Containment •** Material will settle out of air

• Prevent from spreading by covering or other means

Methods for Clean-up • Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination

- Avoid dry sweeping
- After cleaning, flush away traces with water
- Pick up and transfer to properly labeled containers.

VII. Special Protection

Engineering Controls • Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits.

- Dust collection system must be used in transferring operations, cutting or machining or other dust generating process.
- Vacuum or wet clean-up methods should be used

Personal protective equipment

tory protection • When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators such as 3M model 8210 (3M model 8271 in high

humidity environments)

Eye/face Protection Safety glasses with side-shields

Skin Protection • Protective gloves

• Long sleeved shirt and long pants

General Hygiene Considerations • Wash hands before breaks and immediately after handling the product

- Avoid contact with skin, eyes and clothing
- Avoid getting dust into boots and gloves through wrist bands and pant tucks
- Remove and wash contaminated clothing before re-use.

VIII. Emergency and First Aid Procedures

Eye contact • Rinse immediately with plenty of water, also under the eyelids, for at least 15 Minutes

- Do not rub or scratch eyes
- If eye irritation persists, consult a specialist
- Skin contact Wash off immediately with soap and cold water.

• DO NOT use warm water because this will open up the pores of the skin, which

will cause further penetration of the fibers.

- DO NOT rub or scratch affected areas.
- Use a wash cloth to help remove fibers or apply and remove an adhesive tape

so that the fibers adhere to the tape and are pulled out of the skin.

- Remove contaminated clothing.
- If skin irritation persists, call a physician
- Never use compressed air to remove fibers from skin

Ingestion • Accidental ingestion of this material is unlikely

- If this does occur, watch person for several days to make sure intestinal
- blockage does not occur
- Rinse mouth with water to remove fibers from the throat
- If symptoms persist, call a physician
- Inhalation Move to fresh air
- If symptoms persist, call a physician

IX. Carcinogenic Assessment

Acute Toxicity

A: General Product Information

Dust from this product is a mechanical irritant, which means that it may cause temporary irritation or scratchiness of the throat, and/or itching of the eyes and skin.

B: Component Analysis - LD50/LC50

Urea extended phenol-formaldehyde binder (cured) (25104-55-6)

Oral LD50 Rat: 7 g/kg; Oral LD50 Mouse: 7 g/kg

Carbon black (encapsulated) (1333-86-4)

Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit: >3 g/kg

Carcinogenicity

Component Carcinogenicity

Fiber Glass Wool (65997-17-3)

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans (related to Glass wool fibers)NTP: Reasonably Anticipated To Be A Carcinogen (respirable size) (related to Glasswool) (Possible

Select Carcinogen)IARC: Group 3 - Not Classifiable (IARC Monograph 43, 1988; Monograph 81, 2002 related to Insulation glasswool)

Carbon black (encapsulated) (1333-86-4)

ACGIH: A4 - Not Classifiable as a Human Carcinogen IARC: Group 2B - Possibly Carcinogenic to Humans (IARC Monograph 65, 1996)

Chronic Toxicity

Fiber Glass Wool: In October 2001, IARC classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans." The 2001 decision was based on current human and animal research that shows no association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease. This is a reversal of the IARC finding in 1987 of a Group 2B designation (possibly carcinogenic to humans) based on earlier studies in which animals were injected with large quantities of fiber glass. NTP and ACGIH have not yet reviewed the IARC reclassification or the most current fiber glass health research; at this time, both agencies continue to classify glass wool based on the earlier animal injection studies. A detailed listing of references on fiber glass health effects can be found in the publication HSE-64C, "Heath and Safety Aspects of Fiber Glass," which can be downloaded from Johns Manville's Internet homepage, www.jm.com (select "Health Safety and Environment").

X. Special Precautions

Handling • Avoid dust formation

- Do not breathe dust
- Wear personal protective equipment

XI. Reactivity Data

Chemical Stability Stable Conditions to avoid None expected

Incompatible Materials None expected

Hazardous decomposition products See Section 5 for hazardous decomposition products during a fire **Possibility of Hazardous Reactions** Hazardous polymerisation does not occur.

XII. Ecological Information

Ecotoxicity: This material is not expected to cause harm to animals, plants or fish Chemical Fate Persistance/Degradability Not available Bioaccumulation/Accumulation Not available Mobility in Environmental Media Not available

XIII. Disposal Consideration

Waste Disposal Method Dispose of in accordance with Local, State, Federal and Provincial regulations. **Contaminated packaging** Empty containers should be taken for local recycling, recovery or waste disposal.

US EPA Waste Number No EPA Waste Numbers are applicable for this product's components. **RCRA** This material is not expected to be a characteristic hazardous waste under RCRA.

XIV. Transportation Information

Shipping Name: This product is not classified as a hazardous material for transport.

XV. Regulatory Information

International Inventories

All components of this product are either listed on the following inventories or are exempt.

Glass Fiber – Wool	TSCA	DSL	NDSL	EINECS 266-046-	ELINCS	ENCS	China	KECL KE-	PICCS GEN-	AICS
65997-17-3 Urea, polymer with formaldehyde and phenol 25104-55-6	XU	Present	-	0	-	-	Present	17630	0994	Present
	XU	Present	-	-	-	7-907	Present	KE- 35185	-	Present

USA

Federal Regulations

SARA 313 Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)

This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372