

# MATERIAL SAFETY DATA SHEET

Document Number MSDS-MF-008

## SECTION 1: NAME AND PRODUCT

**Name:**

SELEE Corporation

**Address:**

700 Shepherd Street  
Hendersonville, NC 28792 U.S.A.

**Product Name:**

S446 Metal Micromass®

**Product Type:**

Metal foam

**Contact:**

Safety & Environmental Compliance Officer

**Emergency Telephone Phone Number:**

(828) 697-2411

(800) 438-7274

**Telephone Number for Information:**

(828) 697-2411

(800) 438-7274

**Date Prepared:**

Jan 14, 2010

**Date Superseded:**

N/A

**Revision:**

New

## SECTION II: COMPOSITION INGREDIENTS

Chemical Name	CAS #	Weight Percent Range	OSHA PEL (TWA)	ACGIH TLV (TWA)	Notes
Iron	7439-89-6	Bal	10.0 mg/m <sup>3</sup>	5.0 mg/m <sup>3</sup>	As Iron Oxide, fume
Chromium*	7440-47-3	22-28	1.0 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	As metal*
Manganese	7439-96-5	1-2	5 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	Elemental
Phosphorus		< 1	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	Elemental
Silicon	7440-21-3	0.5-1.5	5.0 mg/m <sup>3</sup>	10.0 mg/m <sup>3</sup>	Respirable Fraction
Carbon	7440-44-0	< 1	3.5 mg/m <sup>3</sup>	3.5 mg/m <sup>3</sup>	Respirable dust
Nitrogen	7727-37-9	<1	30 mg/m <sup>3</sup>	31 mg/m <sup>3</sup>	As nitric oxide
Nickel	744-01-0	<1	1 mg/m <sup>3</sup>	1.5 mg/m <sup>3</sup>	Elemental
Sulfur	7704-34-9	<1	5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	Elemental

\* Note that material subjected to welding, torch-cutting, brazing and possibly grinding operations may generate airborne hexavalent chromium (Cr<sup>+6</sup>), a confirmed human carcinogen. Hexavalent Chromium OSHA PEL 2.5 µg/m<sup>3</sup>, ACGIH TLV 0.01 mg/m<sup>3</sup>.

## SECTION III: HAZARD IDENTIFICATION

**Inhalation:**

In its solid form, this material would be considered non-hazardous. However, some of the elements contained in material have been determined to be toxic and subject to regulatory controls. These elements can be emitted as airborne contaminants by certain processing conditions, including cutting, sawing, machining, welding, torch brazing, and grinding.

**Eyes/Skin:**

Abrasion hazard.

**Ingestion:**

Unlikely



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**SECTION IV – HEALTH, FIRST AID AND MEDICAL TREATMENT**

**Inhalation:** Health Hazards (Acute and Chronic):  
Avoid inhalation of metal fragments and dusts. Use approved dust and fume respirator when machining, cutting, grinding, welding, melting, torch cutting, or brazing the material.

Emergency and First Aid Procedures:  
Treat as nuisance dust. Remove to fresh air.

**Ingestion:** Health Hazards (Acute and Chronic):  
N/A

Emergency and First Aid Procedures:  
N/A

**Skin:** Health Hazards (Acute and Chronic):  
Abrasive, recommend wearing protective equipment

Emergency and First Aid Procedures:  
Wash with soap and water

**Eye:** Health Hazards (Acute and Chronic):  
Particle may enter eye

Emergency and First Aid Procedures:  
Flush eye with water. See physician if irritation proceeds

**Other Potential Risks:** Health Hazards (Acute and Chronic):  
Note warnings regarding production of airborne contaminants resulting from welding, torch cutting, brazing and grinding operations.

Emergency and First Aid Procedures:  
N/A

**Health Hazard Rating:** **Health Hazard Rating Explanation:**  
0                      0 – Normal Material                      3 – Extreme Danger  
1 – Slightly Hazardous                      4 – Deadly  
2 – Hazardous

**SECTION V – FIRE AND EXPLOSION HAZARD DATA**

Flash Point: N/A                      (Method Used): N/A                      Flammable Limits:  
LEL: N/A                      UEL:

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A

Explosion Potential: N/A

Fire Hazard Rating: **Fire Hazard Rating Explanation:**  
0                      0 – Will Not Burn                      3 – Below 100°F (38°C)  
1 – Above 200°F (93°C)                      4 – Below 73°F (23°C)  
2 – Below 200°F (93°C)

## SECTION VI – ACCIDENTAL RELEASE

### Steps to be Taken in Case of Leaks or Spills:

Sweep up and dispose of in accordance with FEDERAL, STATE and LOCAL REGULATIONS.

## SECTION VII – STORAGE, HANDLING AND USE PROCEDURES

### Normal Storage and Handling:

When storing keep dry. Do not use wet. Do not store near acids or reactive substances.

### Normal Use:

Keep dry

## SECTION VIII – PERSONAL PROTECTION INFORMATION

Respiratory Protection: If ventilation alone cannot so control exposure, use NIOSH-approved respirators selected according to OSHA 29 CFR 1910.134.

### Ventilation:

General and local exhaust ventilation, engineering controls, and good housekeeping practices are recommended to keep dust concentrations below the permissible exposure limits.

Protective Gloves: Recommended

Eye Protection: Safety Goggles

## SECTION IX: PHYSICAL AND CHEMICAL DATA

Boiling Point: N/A

Melting Point: N/A

Density: 0.3 lb/in<sup>3</sup>

Vapor Pressure: N/A

Percent Volatile by Vol.: N/A

Vapor Density: N/A

Evaporation Rate: N/A

Solubility by Water: None

Appearance and Odor: Grey porous material, no odor

## SECTION X – STABILITY AND REACTIVITY DATA

### Stability:

Stable: X

Unstable:

### Hazardous Polymerization:

Will Occur:

Will Not Occur: X

### Incompatibility (Materials to Avoid):

Moisture, Acids, Oxidizers, Bases

### Decomposition Products:

NA

### Conditions to be Avoided:

Contact with moisture and incompatible materials.

### Reactivity Rating:

0

### Reactivity Rating Explanation:

0 – Stable

1 – Unstable if Heated

2 – Violent Chemical Change

3 – Shock and Heat May Detonate

4 – May Detonate

## SECTION XI – TOXICOLOGICAL CONSIDERATIONS

### Toxicity:

N/A solid

**SECTION XII – ECOLOGICAL CONSIDERATIONS**

Mobility:

N/A solid

Persistence and degradability

N/A solid

Bioaccumulation:

N/A solid

**SECTION XIII – DISPOSAL CONSIDERATIONS**

Waste Disposal Method:

Disposal in accordance with FEDERAL, STATE and LOCAL REGULATIONS.

**SECTION XIV – TRANSPORTATION CONSIDERATIONS**

No components hindering transport.

**SECTION XV – REGULATORY CONSIDERATIONS**

R 36/38: Irritating to eyes or skin

S 36/37: Wear suitable protective clothing and gloves

**SECTION XVI – ADDITIONAL INFORMATION**

California Safe Drinking Water and Toxic Enforcement Act of 1986:

WARNING: THIS PRODUCT CONTAINS CHROMIUM, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

Oxidizer	Oxy	Alkali	ALK
Acid	ACD	Corrosive	COR
Use No Water	NW	Radiation Hazard	R

NAIF = No Applicable Information Found

N/A = Not Applicable