

# MATERIAL SAFETY DATA SHEET

Document Number MSDS-TAL-005

## SECTION 1: NAME AND PRODUCT

<b>Name:</b> SELEE Corporation	<b>Contact:</b> Safety & Environmental Compliance Officer
<b>Address:</b> 700 Shepherd Street Hendersonville, NC 28792 U.S.A.	<b>Emergency Telephone Phone Number:</b> (828) 697-2411 (800) 438-7274
<b>Product Name:</b> Inoculant Filter, TE Series	<b>Telephone Number for Information:</b> (828) 697-2411 (800) 438-7274
<b>Product Type:</b> Inoculant Filter	<b>Date Prepared:</b> 11/27/06 <b>Date Superseded:</b> 1/10/03 <b>Revision:</b> 1

## SECTION II: REGULATED INGREDIENTS – Product is separated according to individuals components

Tablet

Chemical Name	CAS #	Weight Percent Range	OSHA PEL (TWA)	ACGIH TLV (TWA)	Carcinogen Y/N
Silicon *	7440-21-3	61-68	15 mg/m3	10 mg/m3	N
Aluminum *	7429-90-5	0.7-1.6	15 mg/m3	10 mg/m3	N
Calcium *	7440-70-2	0.5-2	N/E	N/E	N
Iron*	7439-89-6	19-30	10 mg/m3	5 mg/m3	N
Manganese *	7439-96-5	3.2-4.4	5 mg/m3	0.2 mg/m3	N
Zirconium *	7440-67-7	3.2-4.4	5 mg/m3	5 mg/m3	N
Barium *	7440-39-3	2.4-3.9	0.5 mg/m3	0.5 mg/m3	N
Sodium Silicate	1344-09-8	0.4-0.6	2 mg/m3	2 mg/m3	N
Sodium hydroxide	1310-73-2	0.2-0.4	2 mg/m3	2 mg/m3	N

\* Note- These materials form a complex of silicides. Percentages are based on elemental metals introduced in the formation of the product.

## Adhesive

Chemical Name	CAS #	Weight Percent Range	OSHA PEL (TWA)	ACGIH TLV (TWA)	Carcinogen Y/N
Proprietary resin compound	Proprietary	100	N/E	N/E	N

## Filter

Non-hazardous fired ceramic material

## SECTION III: PHYSICAL AND CHEMICAL DATA – Product is separated according to individuals components

Tablet

<b>Boiling Point:</b>	<b>Melting Point:</b> 1200°C	<b>Specific Gravity:</b>
<b>Vapor Pressure:</b>	<b>Percent Volatile by Vol.:</b>	<b>Vapor Density:</b>
<b>Evaporation Rate:</b>	<b>Solubility by Water:</b> the preparation reacts with water, acids, and with water in a base state	<b>Density:</b> approx. 4.5 g/cm <sup>3</sup>



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(whitewash, sodic water)

Appearance and Odor: gray solid, no odor

**Adhesive**

<u>Boiling Point:</u> N/A	<u>Melting Point:</u> 202 F	<u>Specific Gravity:</u> .99
<u>Vapor Pressure:</u> solid	<u>Percent Volatile by Vol.:</u> N/A	<u>Vapor Density:</u> N/A
<u>Evaporation Rate:</u> solid	<u>Solubility by Water:</u> Insoluble	

Appearance and Odor: Clear solid, no odor

**Filter**

<u>Boiling Point:</u> N/A	<u>Melting Point:</u> 3100 F	<u>Specific Gravity:</u> approx. 3.0
<u>Vapor Pressure:</u> N/A	<u>Percent Volatile by Vol.:</u> N/A	<u>Vapor Density:</u> N/A
<u>Evaporation Rate:</u> N/A	<u>Solubility by Water:</u> N/A	

Appearance and Odor: Gray to black, no odor

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

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

Extinguishing Media: Recommended: special powder for metal fires. Avoid extinguishers that use concentrated jets of water and wet products

Special Fire Fighting Procedures: Possibly cover the product with dry sand

Explosion Potential: Do not create dust clouds

Fire Hazard Rating:

1

Fire Hazard Rating Explanation:

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 V – HEALTH, FIRST AID AND MEDICAL TREATMENT**

Inhalation: Health Hazards (Acute and Chronic):  
Avoid inhaling dust. Treat as nuisance dust. Excessive inhalation of dust from product over long period of time can cause industrial bronchitis

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:  
Consult a doctor

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):  
Possible irritation

Emergency and First Aid Procedures:  
Rinse out with copious amounts of water for 15 minutes. See doctor if

irritation persists.  
Other Potential Risks: Health Hazards (Acute and Chronic):

Emergency and First Aid Procedures:

If the person is in a confined space containing a large amount of damp product, remove him or her from the area, have them breathe in fresh air, and inform a doctor

Health Hazard Rating: Health Hazard Rating Explanation:

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

## SECTION VI – REACTIVITY DATA

Stability:

Stable: X

Unstable:

Hazardous Polymerization:

Will Occur:

Will Not Occur:

Incompatibility (Materials to Avoid):

water

Decomposition Products:

Hydrogen, arsine, phosphine approx. 0.04 g of decomposition products per litre of tablet material- See Section IX

Conditions to be Avoided:

Any water present, acids, or water in a base state (whitewash, sodic water). Dust cloud. Storage or use in confined environments.

Reactivity Rating:

1

Reactivity Rating Explanation:

0 – Unstable

1 – Unstable if Heated or water added

2 – Violent Chemical Change

3 – Shock and Heat May Detonate

4 – May Detonate

## SECTION VII – STORAGE, HANDLING AND USE PROCEDURES

Normal Storage and Handling:

Pallets to be stored in a dry, well-ventilated place away from flammable and explosive materials. Do not use wet filter. Avoid dust generation.

Normal Use:

Keep dry

Steps to be Taken in Case of Leaks or Spills:

If there is a spillage in a confined, damp space, ventilate it prior to taking any further action, and avoid igniting any flames or sparks in the area. In principle the substance is not dangerous, except in damp conditions and when acids are present. Sweep up and dispose.

Waste Disposal Method:

Disposal in accordance with FEDERAL, STATE and LOCAL REGULATIONS.

## SECTION VIII – PERSONAL PROTECTION INFORMATION

Respiratory Protection: For dust and fume concentrations below the applicable exposure level, PPE is not required. If dust concentration levels are above the applicable exposure levels follow the requirements of OSHA 1910.134.

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

Protective Gloves: Recommended to prevent skin irritation.

Eye Protection: Safety Goggles

Other Protective Clothing and Equipment: Dust suppressing control technologies are effective means of minimizing airborne dust concentrations.

Other Protective Clothing and Equipment:

## **SECTION IX – SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling and Storage:

Store away from moisture and other incompatible materials.

Other Precautions:

When damp or moist, the product may react with water releasing small amounts of:

- Hydrogen (H<sub>2</sub>)
- Arsine (AsH<sub>3</sub>) : Exposure limit value = 0.80 mg/m<sup>3</sup>  
Mean exposure value = 0.20 mg/m<sup>3</sup>
- Hydrogen phosphide (PH<sub>3</sub>) : Exposure limit value = 0.40 mg/m<sup>3</sup>  
Mean exposure value = 0.13 mg/m<sup>3</sup>

Harmful effects on aquatic fauna in the event of a large quantity of the product being released into a relatively limited volume of water

Approx. 0.04 litre of decomposition products per kg of tablet material per hour when crushed and submerged over 7 hrs in ambient temperature water.

Special Rating Explanation (If Applicable).

Oxidizer	Oxy	Alkali	ALK	N/E= Not Established
Acid	ACD	Corrosive	COR	
Use No Water	NW	Radiation Hazard	R	
NAIF = No Applicable Information Found				N/A = Not Applicable

## **SECTION X – REGULATORY INFORMATION**

Toxic effects in the event of exposure to the product :

- Arsine (AsH<sub>3</sub>) :
  - Haematological effects: haemolytic action on carcinogenic red blood cells
  - Nervous system: effects on the nervous system
  - In the event of ingestion: effects on the gastro-intestinal system
  - Acute toxicity a few hours after exposure
- Phosphine (PH<sub>3</sub>) :
  - Effects on the airways: pulmonary irritation
  - Nervous system: effects on the nervous system
  - In the event of ingestion: effects on the gastro-intestinal system
- Acute, chronic toxicity

Normal product use does not create exposure.

Cutting or destroying product may produce respirable dust containing crystalline silica and/or cristobalite. Cristobalite is classed as an A2 carcinogen by IARC.

This product may contain silica but it does not release it in use. Crystalline silica may be in any of several forms depending on the conditions of use. The OSHA PEL for the respirable portion of any generated dusts is:

PEL=10 mg/M3/(% quartz + 2 (% cristobalite) + 2 (% tridymite) + 2)