



CRYSTAL FILTRATION CO.

SAFETY DATA SHEET

FILSORB XP20

**1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** FILSORB XP20

**GRADE:**

**SUPPLIER:** Crystal Filtration Co.

2146 Avon Industrial Drive

Rochester Hills, MI, 48309 Tel: 248-844-1239 Fax: 248-844-8063

**2 - HAZARDS IDENTIFICATION**

FILSORB XP20 has not been evaluated as a single product.

**Emergency Overview:** White odorless powder. Causes burn to skin and eyes. Dust irritating to respiratory tract.

React with acids and some organics

**Eye Contact:** Causes eye burn

**Skin Contact:** Causes skin burn and dries mucous membrane

**Inhalation:** Dust irritating to respiratory tract

**Chronic hazards:** No Known Chronic hazards. Not Listed by NTP, IARC or OSHA as a carcinogen

**Physical hazards:** Spill May be slippery

HMIS Rating (Scale 0-4) Synthetic amorphous silica

HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

Sodium Silicate

GHS Classification H318: Serious eye damage/irritation Category 1, H315: Skin corrosion/irritation Category 2

H335: STOT - single exposure Category 3

**3 - COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS NO.	%W/W
Synthetic amorphous silica (A)	112926-00-8	~ 48
Sodium Silicate (B)	1344-09-8	~ 47-49
Water	7732-18-5	~ 4-9
Sodium Sulfate	7757-82-6	~ 0.1-2

#### **4 - FIRST AID MEASURES**

**Eye:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If worn, remove contact lenses. Get medical attention immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Get medical attention immediately. Wash clothing before reuse.

**Inhalation:** Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. get medical attention.

**Ingestion:** If swallowed, do not induce vomiting. Get medical attention immediately. If victim is fully conscious, give a cup of water.

**General Advice:** In case of doubt or when symptoms persist, seek medical attention.

#### **5- FIRE –FIGHTING MEASURES**

**Flammable limits:** This material is noncombustible

**Extinguishing media:** FILSORB XP20 is not explosive, flammable or combustible. Select the proper media to extinguish a surrounding fire. Compatible with all standard fire fighting technique.

#### **6- ACCIDENTAL RELEASE MEASURES**

**Personal protection-** Avoid dust formation. Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. NIOSH- approved dust respirator.

**Large spills clean up:** Keep unnecessary people away; isolate the hazard area and deny entry. Do not touch or walk through the material. Carefully shovel or sweep up spilled material and place in a suitable container. Avoid generating dust. Use appropriate Personal Protective equipment (PPE).

#### **7- HANDLING AND STORAGE**

**Handling:** Avoid dust formation. Do not get in eyes, on skin, or on clothing. Avoid breathing dust keep container closed. Promptly clean up spills. Wash thoroughly after handling.

**Storage:** Store in a dry area. Keep containers closed and protected from physical damage. Separate from acids, reactive metals, and ammonium salts. Do not store in aluminum, Fiberglass, Copper, Brass, Zinc or galvanized containers. This product can absorb water from air. In case of high humidity or storage for extended period of time, use plastic bag to enclose product containers to avoid caking.

## **8-EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Controls:** Use only with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.

**Eye Protection:** Safety glasses with side shields.

**Skin and body protection:** Use suitable protective clothing, gloves, and footwear. Select with regard for use conditions and exposure potential.

**Respiratory protection:** In case of exposure to high level of airborne dust, wear a respirator in compliance with national legislation. Observe OSHA regulations for respirator use (29 C.F.R 1910.134)

**Hygiene measures:** Handle in accordance with good industrial and safety practice.

## **9- PHYSICAL CHEMICAL PROPERTIES**

	<b>Synthetic Amorphous silica (A)</b>	<b>Sodium silicate (B)</b>
<b>Appearance:</b>	White powder	White powder
<b>Odor:</b>	Odorless	Odorless
<b>PH:</b>	approximately 6 to 9	10.5 to 12.30
<b>Solubility in water:</b>	Insoluble	Soluble
<b>Flash point:</b>	Non- combustible	Non-Combustible
<b>Viscosity:</b>	N/A	N/A
<b>Boling point:</b>	N/A	N/A
<b>Vapor density:</b>	N/A	N/A
<b>Evaporation rate:</b>	N/A	N/A
<b>Ignition Temperature:</b>	N/A	N/A

## **10-STABILITY AND REACTIVITY**

**Stability:** stable under ambient temperature (21 C) and pressure (760mm hg)

**Conditions to Avoid:** None

**Materials to avoid:** Generates heat when mixed with acid. May react with ammonium salt solution resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and Zinc

**Hazardous decomposition products:** Hydrogen

## **11- TOXICOLOGICAL INFORMATION**

**Skin Irritation:** May dry skin and mucous membranes.

**Sensitization:** Does not cause sensitization.

**Chronic Toxicity:** No evidence of mutagenic, reproductive, or carcinogenic effects.

**Acute toxicity:** This product has not been tested as a whole. This product does not contain any designated by IARC, NTP, and OR OSHA as a carcinogen.

Data from laboratory studies conducted by CP Kelco and / or from scientific literature on component are summarized below.

Synthetic amorphous Silica

LD50 Oral > 3300 mg/kg (rat)

LD50 Dermal > 5000 mg/kg (rat)

LC 50 Inhalation > 2.0 mg/l (rat)

Sodium Sulfate

LD50 Oral > 10000mg/kg (rat)

## Toxicological Information: Sodium silicate

Information on toxicological effects
Acute toxicity
Ingestion: All symptoms of acute toxicity are due to high alkalinity. Material will cause irritation. Oral LD50 (rat) 3400 mg/kg bw
Inhalation: Dust is irritant to the respiratory tract. All symptoms of acute toxicity are due to high alkalinity. Inhalation LC50 (rat) >2.06 g/m3
Skin Contact: Material will cause irritation. Dermal LD50 (rat) >5000 mg/kg bw
Eye Contact: Material will cause severe irritation. Risk of serious damage to eyes.
Skin corrosion/irritation: Irritating to skin.
Serious eye damage/irritation Irritating to eyes.
Sensitization: Not sensitizing.
Mutagenicity: No evidence of genotoxicity. In vitro/in vivo negative.
Carcinogenicity: No structural alerts.
Reproductive toxicity: No evidence of reproductive toxicity or developmental toxicity.
STOT - single exposure Irritating to respiratory system.
STOT - repeated exposure Not classified. NOAEL oral (rat) >159 mg/kg bw/d
Aspiration hazard Not classified

### **12-ECOLOGICAL INFORMATION**

**Ecotoxicity:** This product not tested as a whole. This product is not expected to be toxic to aquatic life. no biocide added.

**Mobility:** Inert material

**Bioaccumulative potential:** Inert material

**Other adverse effects:** None known

## Synthetic amorphous silica

96-Hours LC50	Brachydanio rerio: 5000mg/L (Static)
72-Hour EC50	Pseudokirchneriella Subcapitata: 44- mg/L
48-Hour EC50	Ceriodaphnia dubia: 7600 mg/L
<b>Sodium sulfate</b>	
96-Hours LC50	Daphnia magna: 630mg/L
	Primephales promelas: 13500-14500 mg/L

## Sodium Silicate

Toxicity: Fish (Brachydanio rerio) LC50 (96 hour) 1108 mg/l  
Aquatic invertebrates: (Daphnia magna) EC50 (48 hour) 1700  
mg/l

Persistence and Degradability: Inorganic. Soluble silicates, upon dilution, rapidly depolymerise degradability into molecular species indistinguishable from natural dissolved silica.

Bioaccumulative potential Inorganic. The substance has no potential for bioaccumulation.

Mobility in soil: Not applicable.

Results of PBT and vPvB : Not classified as PBT or vPvB. assessment

Other adverse effects: The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

### **13-Disposal Considerations**

**Disposal Methods:** Dispose in accordance with local, State, and national regulations.

The component of FILSORB XP20 is not regulated under RCRA landfill requirements. However, it is responsibility of user of the product to determine, at the time of disposal, whether the product fall under RCRA as a regulatory waste.

## **14-Transport Information**

DOT: Not regulated

## **15- REGULATORY INFORMATION**

**Classification:** This product has been classified in accordance with hazard criteria of the controlled products regulations (CPR) and the MSDS Contains all information required by the CPR.

### **NATIONAL CHEMICAL INVENTORY LISTING**

USA (TSCA): Silicon Dioxide 7631-86-9, Sodium Sulfate 7757-82-6

CANADA (DSL/NDSL): Synthetic amorphous silica 112926-00-8, Sodium Sulfate 7757-82-6

**Disclaimer:** The information contained in this safety data sheet is the best information available to Crystal filtration. However, no representation, warranty, or guarantee is implied or expressed regarding the accuracy, reliability, or completeness of this information or use of the product.

Users and handlers of this product should make their own investigations to determine the suitability of the information provided herein for their own purposes.