MATERIAL SAFETY DATA SHEET







Section 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: DelSORB®

Supplier: Delta Adsorbents

Chemical Name: Blue Indicating Silica Gel 24 Congress Circle

Synonyms: Amorphous Silica, Desiccant Roselle, IL 60172

USA

Telephone: 630-980-5205 Fax: 630-980-5286

Section 2: COMPOSITION & INFORMATION ON INGREDIENTS

Molecular Formula: $SiO_2 \cdot nH_2O + CoCl_2$

CAS NumberIngredientWeight in Percent (%)Hazardous1343g98g2Silica Gel> 99.7No7646g79g9Cobalt Chloride< 0.3</td>Yes

Section 3: HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation: May cause dryness and irritation to mucous membranes, nose and throat. Symptoms may include

coughing, sore throat, and wheezing. **Ingestion:** No adverse effects expected.

Skin Contact: May cause irritation with dryness and abrasion.

Eye Contact: May cause irritation, redness and pain.

Chronic Exposure: Repeated exposure may cause symptoms similar to those listed for acute effects. Synthetic amorphous silica does not produce silicosis. Prolonged exposure to cobalt has been shown to cause cancer in laboratory animals.

Section 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Ingestion: Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, get medical attention.

Section 5: FIRE & EXPLOSION DATA

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Fighting Media and Instructions: Use any means suitable for extinguishing surrounding fire. **Special Remarks:** Use protective clothing and breathing equipment appropriate for surrounding fire.

Section 6: ACCIDENTAL RELEASE MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Use respiratory protection and eye protection.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Vacuuming or wet sweeping may be used to avoid dust dispersal. Use respiratory protection and eye protection.

Section 7: HANDLING & STORAGE

Storage: Keep container tightly closed. It's suitable for any general chemical storage area. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

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Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Airborne Exposure Limits:

OSHA Permissible Limit (PEL) g 80 / (%Sio₂) mg/m (TWA) Silica (synthetic, amorphous):

ACGIH Threshold Limit Value (TLV) g 10 mg/m3 (TWA)

ACGIH Threshold Limit Value (TLV) g 0.02 mg/m³ (TWA) as Co, A3: **Inorganic Cobalt Compounds:**

Animal Carcinogen.

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Respirator (NIOSH Approved). Gloves.

Section 5. I This icae & Chemicae I Not Entres		
Solid crystals	Roling Point	

Physical state: Not applicable. Color: **Melting Point:** Not applicable. Blue Not applicable. Odor: Vapor Pressure: Odorless Solubility: Insoluble, Chloride may leach out. Vapor Density: Not applicable. **Specific Gravity:** 2.1 (Water=1) Evaporation Rate: Not available. % Volatiles by volume @ 21C (70F): 0 pH: 5.5 g 9.0 (in 5% slurry)

Section 10: STABILITY & REACTIVITY

Stability: The product is stable.

Hazardous Decomposition Products: Oxides of carbon and silicon may be formed when heated.

Hazardous Polymerization: Will not occur.

Incompatibility with powerful oxiders: Reacts with hydrogen fluoride, fluorine, oxygen difluoride, chlorine trifluoride,

strong acids, strong bases, and oxidizers.

Conditions to Avoid: Moisture, extreme heat, and incompatibles.

Section 11: TOXICOLOGICAL INFORMATION

Toxicity to Animals:

LD50: Not available. LC50: Not available.

Carcinogenicity: Cobalt and its compounds have been shown to cause cancer in laboratory animals.

Section 12: ECOLOGICAL INFORMATION

Eco toxicity: This material is not expected to be toxic to aquatic life.

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: TRANSPORT INFORMATION

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

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Section 15: OTHER REGULATORY INFORMATION					
HMIS (U.S.A.):		National Fire Protection Association (U.S.A.):			
Health Hazard:	1	Health: 1			
Fire Hazard:	0	Flammability: 0			
Reactivity:	0	Reactivity: 0			
Personal Protection:	Е				
CAS Number	Ingredient	SARA 302	SARA 313		
1343g98g2	Silica Gel	No	No		
7646g79g9	Cobalt (II) Chloride	No	No		
CAS Number	Ingredient	CERCLA	261.33	8(d)	
1343g98g2	Silica Gel	No	No	No	
7646g79g9	Cobalt (II) Chloride	1	No	No	

Section 16: OTHER INFORMATION

References: Not available. **Other Special Considerations:** Not available.

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The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The information above is believed to be accurate and represents the bet information currently available to us. However, we make no warrant of merchantability or any other warranty, express or implied, with respect of such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Delta Adsorbents be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Delta Enterprises has been advised of the possibility of such damages.