

Suncycle Technologies, Inc.

Safety Data Sheet

Section 1. Product and Company Identification			
Product Name:	Hydrosorb-X	SDS#	2
Product Desc.:	Desiccant packet	Origin Date:	10/01/02
Supplier:	Suncycle Technologies, Inc. PO Box 6214 Galena, IL 61036 USA	Revision Date:	07/01/16
		Responsible Name:	Ronald A. Shelk
Synonyms:	None		
Product Uses:	Removal of water from xylene		
Manufacturer:	Suncycle Technologies, Inc. PO Box 6214 Galena, IL 61036 USA 630-362-0260		

Section 2. Composition and Information on Ingredients			
Name	CAS #	% by Weight	Exposure Limits
1) Calcium Sulfate, Anhydrous	7778-18-9	97%	OSHA Final Rule (1989) TWA: 5 mg/m ³ Form: Respirable fraction TWA: 15 mg/m ³ Form: Total dust NIOSH REL (1994) TWA: 5 mg/m ³ Period: 10 hours Form: Respirable fraction TWA: 10 mg/m ³ Period: 10 hours Form: Total dust ACGIH (1994) TWA: 10 mg/m ³
2) Cobalt Dichloride	1332-82-7	3%	ACGIH TLV (2000) TWA: 2 mg/m ³ TWA: 0.02 mg/m ³

Section 3. Hazards Identification	
Physical State and Appearance	Solid blue chips. Odorless.
Emergency Overview	Warning! Causes respiratory tract, eye and skin irritation. Contains material which may cause cancer based on animal data. Contains material which causes damage to the following organs: respiratory tract, skin, eye, lens or cornea. May be harmful if swallowed. Toxic to aquatic organisms. May be harmful to the environment if released in large amounts.
Potential Acute Health Effects	
<i>Eyes</i>	Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.
<i>Skin</i>	Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or occasionally blistering.
<i>Inhalation</i>	Hazardous in case of inhalation (lung irritant).
<i>Ingestion</i>	May be harmful if swallowed.
Potential Chronic Health Effects	Carcinogenic Effects: Classified A3 (Proven for animal) by ACGIH, 2B (Possible for human.) by IARC [Cobalt Dichloride]. Classified 2 (Suspected for human) by European Union [Cobalt Dichloride]. Mutagenic Effects: Not available. Teratogenic Effects: Not available.
Medical Conditions Aggravated by Overexposure	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
Overexposure Signs/Symptoms	Skin, eyes and respiratory tract irritation.
See Toxicological Information (section 11)	

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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush with plenty of water for at least 15 minutes. Cold water may be used. Seek medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing and shoes before reuse. Seek medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical attention.
Ingestion	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Seek immediate medical attention.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Non-flammable
Auto-ignition Temperature	Not applicable
Flash Points	Not applicable
Flammable Limits	Not applicable
Products of Combustion	Not available
Fire Hazard in Presence of Various Substances	Not applicable
Explosion Hazards in Presence of Various Substances	Risk of explosion of the product in presence of mechanical impact: No. Risk of explosion of the product in presence of static discharge: No.
Fire Fighting Media And Instructions	Not applicable
Protective Clothing (Fire)	Not applicable
Special Remarks on Fire Hazards	Not available
Special Remarks on Explosion Hazards	Not available

Section 6. Accidental Release Measures

Small Spill and Leak	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill and Leak	Stop leak if without risk.. Do not touch spilled material. Use water spray to reduce dust. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local Authorities.

Section 7. Handling and Storage

Handling	Do not remove desiccant chips from plastic mesh pouch. Do not ingest. Do not breathe dust. Do not get in eyes, on skin, or on clothing.
Storage	Keep in manufacturer's vacuum-sealed plastic packaging until ready to use.

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Section 8. Exposure Controls / Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep airborne levels below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	
Eyes	Safety glasses
Body	Lab coat
Respiratory	Wear appropriate respirator when ventilation is inadequate
Hands	Gloves
Feet	Not applicable
Personal Protection in Case of a Large Spill	Splash goggles, Full suit, Dust respirator, Boots, Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Product Name	Exposure Limits
1) Calcium Sulfate, Anhydrous	OSHA Final Rule (United States, 1989) TWA: 5 mg/m ³ Form: Respirable fraction TWA: 15 mg/m ³ Form: Total dust NIOSH REL (United States, 1994) TWA: 5 mg/m ³ Period: 10 hours Form: Respirable fraction TWA: 10 mg/m ³ Period: 10 hours. Form: Total dust ACGIH (United States, 1994) TWA: 10 mg/m ³ AUVA (Austria, 1995) MAK: 6 mg/m ³ BAUA (Germany, 1997) MAK: 6 mg/m ³
2) Cobalt Dichloride	ACGIH TLV (United States, 2000) TWA: 2 mg/m ³ TWA: 0.02 mg/m ³
Consult local authorities for acceptable exposure limits.	

Section 9. Physical and Chemical Properties

Physical State and Appearance	Solid
Odor	Odorless
Taste	Not available
Color	Blue (Anhydrous) or Pink (Hydrated)
Molecular Weight	Not applicable
Molecular Formula	CaSO ₄ .Cl ₂ Co
PH (1% Soln/Water)	Not available
Boiling/Condensation Point	Not available
Melting/Freezing Point	1559.9°C (2839.8°F) based on data for Calcium Sulfate, Anhydrous. Weighted average: 1534.82°C (2794.7°F)
Critical Temperature	Not available
Specific Gravity	Weighted average: 2.91 (Water=1)
Vapor Pressure	Not available
Vapor Density	Not available
Volatility	Not available
Odor Threshold	Not available
Evaporation Rate	Not available
VOC	Not available
Viscosity	Not available
LogK _{avg}	Not available
Ionicity (in Water)	Not available
Dispersion Properties	See solubility in water.
Solubility	Partially soluble in water.
Physical Chemical Comments	Not available

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Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available
Incompatibility with Various Substances	Not available
Hazardous Decomposition Products	Sulfur Oxides (SO ₂ , SO ₃ ,...)
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

RTECS Number	Calcium Sulfate, Anhydrous Cobalt Dichloride	WS6920000 GF9800000
Toxicity to Animals	Acute oral toxicity (LD50): 55 mg/kg [Guinea pig]. (Cobalt Dichloride)	
Chronic Effects on Humans	CARSINOGENIC EFFECTS: Classified A3 (Proven for animal) by ACGIH, 2B (Possible for human.) IARC [Cobalt Chloride]. Classified 2 (Suspected for human.) by European Union [Cobalt Dichloride].	
Other Toxic Effects on Humans	Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or occasionally blistering. Hazardous in case of inhalation (lung irritant). May be harmful if swallowed.	
Synergetic Products (Toxicologically)	Not available	
Irritancy	Draize Test: Not available	
Sensitization	Hazardous in case of skin contact (sensitizer), of inhalation (lung sensitizer).	
Carcinogenic Effects	Classified A3 (Proven for animal) by ACGIH, 2B (Possible for human.) IARC [Cobalt Dichloride]. Classified 2 (Suspected for human.) by European Union [Cobalt Dichloride].	
Toxicity to Reproductive System	Not available	
Teratogenic Effects	Not available	
Mutagenic Effects	Not available	
Special Remarks on Other Toxic Effects on Humans	Not available	

Section 12. Ecological Information

Ecotoxicity	Not available
BOD5 and COD	Not available
Biodegradable/OECD	Not available
Mobility	Not available
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	Not available

Section 13. Disposal Considerations

EPA Waste Number	Not available
Treatment	The material does not have an EPA Waste Number and therefore is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. Always contact a permitted waste disposal site (TSD) to assure compliance with all current local, state, and Federal Regulations.

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Section 14. Transportation Information

DOT Classification	Proper Shipping Name: CHEMICALS, N.O.S. Reportable Quantity: Not applicable
TDG Classification	Not available
IMO/IMDG Classification	Proper Shipping Name: CHEMICALS, N.O.S. Reportable Quantity: Not applicable
ICAO/IATA Classification	Proper Shipping Name: CHEMICALS, N.O.S. Reportable Quantity: Not applicable

Section 15. Regulatory Information

U.S. Federal Regulations	TSCA 8(b) inventory: Calcium Sulfate, Anhydrous; Cobalt Dichloride SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: Cobalt Dichloride SARA 311/312 MSDS distribution – chemical inventory – hazard identification: Cobalt Dichloride: Immediate (acute) Health Hazard, Delayed (Chronic) Health Hazard SARA 313 toxic chemical notification and release reporting: Cobalt Dichloride: 3%; Clean water act (CWA) 307: No products were found. Clean water act (CWA) 311: No products were found. Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.
WHMIS (Canada)	CLASS D-2B: Material causing other toxic effects (TOXIC). CEPA DSL: Calcium Sulfate, Anhydrous; Cobalt Dichloride This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.
International Regulations	
EINECS	Calcium Sulfate, Anhydrous 231-900-3 Cobalt Dichloride 231-589-4
DSCL (EEC)	R36/37/38- Irritating to eyes, respiratory system and skin. R42/43- May cause sensitization by inhalation and skin contact. R49- May cause cancer by inhalation R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
International Lists	Austria (NICNAS): Calcium Sulfate, Anhydrous; Cobalt Dichloride Germany water class: Cobalt Dichloride Japan (MITI): Calcium Sulfate, Anhydrous; Cobalt Dichloride Korea (TCCL): Calcium Sulfate, Anhydrous; Cobalt Dichloride Philippines (RA6969): Calcium Sulfate, Anhydrous; Cobalt Dichloride China: No products were found.
State Regulations	Pennsylvania RTK: Calcium Sulfate, Anhydrous: (generic environmental hazard); Cobalt Dichloride: (environmental hazard, generic environmental hazard) Massachusetts RTK: Calcium Sulfate, Anhydrous New Jersey: Cobalt Dichloride California prop 65: No products were found.

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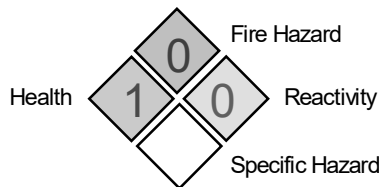
Section 16. Other Information

Label Requirements

Hazardous Material Information System (U.S.A.)

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	a

National Fire Protection Association (U.S.A.)



References Not available

Other Special Considerations Not Available

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, the above named supplier and manufacturer does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final.