Material Safety Data Sheet

Drierite, with indicator

ACC# 97068

Section 1 - Chemical Product and Company Identification

MSDS Name: Drierite, with indicator

Catalog Numbers: AC219080000, AC219080020, AC219080050, AC219085000, AC219090000, AC219090020 AC219090020, AC219095000, AC219100000, AC219100020, AC219105000, AC350010000 AC350010000, AC350010020, AC350015000

Synonyms: None Known.
Company Identification:
 Acros Organics N.V.
 One Reagent Lane
 Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

| CAS# | Chemical Name | Percent | EINECS/ELINCS |
|-----------|--------------------|---------|---------------|
| 7778-18-9 | Drierite | 96.75 | 231-900-3 |
| 7646-79-9 | Cobaltous chloride | 3.25 | 231-589-4 |

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white granules.

Warning! Possible cancer hazard. May cause cancer based on animal data. May cause eye, skin, and respiratory tract irritation. May cause allergic respiratory and skin reaction. Hygroscopic (absorbs moisture from the air). Dangerous for the environment. The toxicological properties of this material have not been fully investigated.

Target Organs: Lungs, cardiovascular system, skin.

Potential Health Effects

Eye: Dust may cause mechanical irritation. May cause conjunctivitis.

Skin: May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May be harmful if absorbed through the skin.

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed. May interfere with blood clotting. May cause thyroid abnormalities. May cause mechanical obstruction of the digestive tract.

Inhalation: May cause allergic respiratory reaction. May cause respiratory tract irritation. May be harmful if inhaled. Exposure may result in laryngitis, pharyngitis, impaired sense of smell and taste, bleeding from nose, and reactions of trachea, and bronchial membranes. **Chronic:** Cobalt compounds may cause cancer based upon animal studies. Inhalation of dust may cause chronic rhinitis (inflammation of the mucous membrane of the nose).

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately.

Skin: Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Flash Point: Not available.

Autoignition Temperature: Not available. **Explosion Limits, Lower:**Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 1

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|--------------------|---|---|---|
| Drierite | 10 mg/m3 TWA (particulate matter containing no asbestos and < 1% crystalline sil ica) | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) |
| Cobaltous chloride | 0.02 mg/m3 TWA (as Co) (listed under Cobalt, inorganic compounds). | none listed | none listed |

OSHA Vacated PELs: Drierite: 15 mg/m3 TWA; 5 mg/m3 TWA (respirable fraction) Cobaltous chloride: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Granules Appearance: white Odor: Odorless. pH: Not available.

Vapor Pressure: Not available. Vapor Density: Not available. Evaporation Rate:Not available. Viscosity: Not available. Boiling Point: Not available.

Freezing/Melting Point:1450 deg C dec Decomposition Temperature:Not available.

Solubility: Slightly soluble. Specific Gravity/Density:2.960 Molecular Formula:CaO4S Molecular Weight:136.14

Section 10 - Stability and Reactivity

Chemical Stability: Hygroscopic: absorbs moisture or water from the air. **Conditions to Avoid:** Incompatible materials, dust generation, moisture.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, aluminum, azo, diazo, and hydrazines (e.g. dimethyl

hydrazine, hydrazine, methyl hydrazine), alkali metals. **Hazardous Decomposition Products:** Oxides of sulfur.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 7778-18-9: WS6920000 **CAS#** 7646-79-9: GF9800000

LD50/LC50: Not available.

CAS# 7646-79-9:

Oral, mouse: LD50 = 80 mg/kg; Oral, rat: LD50 = 80 mg/kg; Oral, rat: LD50 = 418 mg/kg;

Carcinogenicity:

CAS# 7778-18-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 7646-79-9:

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans (listed as 'Cobalt, inorganic compounds').

California: Not listed.

• NTP: Not listed.

• IARC: Group 2B carcinogen

Epidemiology: No data available. Teratogenicity: No data available. Reproductive Effects: No data available. Mutagenicity: No data available. Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

Section 14 - Transport Information

| | US DOT | Canada TDG |
|----------------|--|--|
| Shipping Name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOL (Cobalt chloride) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOL (Cobalt chloride) |
| Hazard Class: | 9 | 9 |
| UN Number: | UN3077 | UN3077 |
| Packing Group: | III | III |

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 7778-18-9 is listed on the TSCA inventory.

CAS# 7646-79-9 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule. Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 7646-79-9: immediate, delayed, reactive.

Section 313

This material contains Cobaltous chloride (listed as Cobalt compounds), 3.25%, (CAS# 7646-79-9) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 7646-79-9 (listed as Cobalt compounds) is listed as a hazardous a ir pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 7778-18-9 can be found on the following state right to know lists: Pennsylvania, Minnesota, Massachusetts.

CAS# 7646-79-9 can be found on the following state right to know lists: Pennsylvania, (listed as Cobalt compounds), Minnesota, (listed as Cobalt, inorganic compounds).

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols:

Risk Phrases:

R 22 Harmful if swallowed.

R 42/43 May cause sensitization by inhalation and skin contact.

R 49 May cause cancer by inhalation.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

Safety Phrases:

S 22 Do not breathe dust.

S 29 Do not empty into drains.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 53 Avoid exposure - obtain special instructions before use.

S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

WGK (Water Danger/Protection)

CAS# 7778-18-9: 0 CAS# 7646-79-9: 2

Canada - DSL/NDSL

CAS# 7778-18-9 is listed on Canada's DSL List.

CAS# 7646-79-9 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2A, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 7646-79-9 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997 Revision #5 Date: 10/17/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to 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 Fisher 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 Fisher has been advised of the possibility of such damages.