1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers
Product name : Drierite, Indicating

Product Stock Numbers : 21001, 21005, 22001, 22005, 23001, 23005, 24001, 24005, 24025, 24035, 26800, 26840, 26930, 27068, 27069, 27070, 40207, 40451, 50068

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses : Desiccant or drying agent

1.3 Details of the manufacturer of the safety data sheet
Company : W A Hammond Drierite Co., LTD.
P.O. Box 460
Xenia, OH 45385
U.S.A.
Telephone : 937-376-2927
Web Site : www.drierite.com

1.4 Emergency telephone number
Emergency Phone # : 937-376-2927

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Eye irritation (Category 2A), H319
Respiratory sensitization (Category 1), H334
Skin sensitization (Category 1), H317
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 2), H351
Reproductive toxicity (Category 1B), H360
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram ![Danger, Eye, Fertilizer]

Signal word : Danger

Hazard statement(s)
H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.
H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341 : Suspected of causing genetic defects.
H351 : Suspected of causing cancer.
H360 : May damage fertility or the unborn child.
H401 : Toxic to aquatic life.
H412 : Harmful to aquatic life with long lasting effects.
Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P285 In case of inadequate ventilation wear respiratory protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P337 + P313 IF eye irritation persists: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Synonyms : Drierite

Formula : CaSO4 + CoCl2

Hazardous components

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium sulfate</td>
<td></td>
<td>≥95% ≤ 100 %</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>7778-18-9</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>231-900-3</td>
<td></td>
</tr>
</tbody>
</table>

Cobalt dichloride Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.</td>
<td>7646-79-9</td>
<td>≤ 2%</td>
</tr>
<tr>
<td>EC-No.</td>
<td>231-589-4</td>
<td></td>
</tr>
<tr>
<td>Index-No.</td>
<td>027-004-00-5</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resp. Sens. 1;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Sens. 1;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muta. 2;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carc. 1B;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repr. 1B;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute 1;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 1;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H302, H317, H318, H334, H341, H350, H360, H410</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

5. FIREFIGHTING MEASURES
5.1 Extinguishing media  Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Sulfur oxides, Hydrogen chloride gas, Cobalt/cobalt oxides, Calcium oxide

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE
7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium sulfate</td>
<td>7778-18-9</td>
<td>TWA</td>
<td>15.000000 mg/m3</td>
<td>USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5.000000 mg/m3</td>
<td>USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>10.000000 mg/m3</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td>Cobalt dichloride</td>
<td>7646-79-9</td>
<td>TWA</td>
<td>0.020000 mg/m3</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
</tbody>
</table>

Remarks: Nasal symptoms

Gypsum is the dihydrate form & Plaster of Paris is the hemihydrate form.

TWA 5.000000 mg/m3 USA. NIOSH Recommended Exposure Limits

TWA 10.000000 mg/m3 USA. NIOSH Recommended Exposure Limits

TWA 10.000000 mg/m3 USA. ACGIH Threshold Limit Values (TLV)

Nasal symptoms

Pulmonary function Asthma
Myocardial effects
Substances for which there is a Biological Exposure Index or Indices (see BEI® section)
Confirmed animal carcinogen with unknown relevance to humans varies

8.2 Exposure controls

Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate Government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance
   Form: blue/pink solid

b) Odor
   No data available

c) Odor Threshold
   No data available

d) pH
   No data available

e) Melting point/freezing point
   No data available

f) Initial boiling point and boiling range

 g) Flash point
    Not applicable

h) Evaporation rate
   No data available

i) Flammability (solid, gas)
   No data available

j) Upper/lower flammability or explosive limits
   No data available

k) Vapor pressure
   No data available

l) Vapor density
   No data available

m) Relative density
   No data available

n) Water solubility
   No data available

o) Partition coefficient: n-octanol/water
   No data available

p) Auto-ignition temperature

q) Decomposition temperature

r) Viscosity
   No data available

s) Explosive properties
   No data available

t) Oxidizing properties
   No data available

9.2 Other safety information
No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Oxidizing agents, Alkali metals, Strong oxidizing agents
10.6 **Hazardous decomposition products**  
Other decomposition products - No data available  
In the event of fire: see section 5

11. **TOXICOLOGICAL INFORMATION**

11.1 **Information on toxicological effects**  
**Acute toxicity**

No data available

**Inhalation:** No data available  
**Dermal:** No data available  
**No data available**

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC:  
2B - Group 2B: Possibly carcinogenic to humans (Cobalt dichloride)  
2B - Group 2B: Possibly carcinogenic to humans (Cobalt dichloride)

NTP:  
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:  
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available  
**No data available**

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: Not available

Blood disorders, Nausea, Vomiting, Diarrhea  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence  
Stomach - Irregularities - Based on Human Evidence (Cobalt dichloride)

12. **ECOLOGICAL INFORMATION**

12.1 **Toxicity**

No data available
12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
Toxic to aquatic life with long lasting effects.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Product
These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state, and federal regulations or contract with a licensed chemical disposal agency.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods

IMDG
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cobalt dichloride) Marine pollutant: yes Product falls under Special Provision A197 which allows product to be shipped “not restricted”. **See further information.**

IATA
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cobalt dichloride) Product falls under Special Provision A197 which allows product to be shipped “not restricted”. **See further information.**

Further information
**Special Provision A197—is a new special provision assigned to environmentally substances, UN 3077 and UN 3082 that allows these substances to be shipped as “not restricted” provided that the net quantity in any receptacle does not exceed 5 kg or 5 L and the packaging used meets defined standards.

15. REGULATORY INFORMATION

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

- Cobalt dichloride
  New Jersey Right to Know Components CAS-No. 7646-79-9

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

Massachusetts Right to Know Components
California Right to Know Components

- Calcium sulfate
  Massachusetts Right to Know Components CAS-No. 7778-18-9
  California Right to Know Components CAS-No. 7778-18-9

Pennsylvania Right to Know Components
Calcium sulfate
16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.  Acute toxicity  Aquatic Acute  Acute aquatic toxicity
Aquatic Chronic  Chronic aquatic toxicity  Carc. Carcinogenicity
Eye Dam.  Serious eye damage
H302  Harmful if swallowed.
H317  May cause an allergic skin reaction.
H318  Causes serious eye damage.
H319  Causes serious eye irritation.
H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341  Suspected of causing genetic defects.
H350  May cause cancer.
H351  Suspected of causing cancer.
H360  May damage fertility or the unborn child.
H401  Toxic to aquatic life.
H410  Very toxic to aquatic life with long lasting effects.
H412  Harmful to aquatic life with long lasting effects.
Muta.  Germ cell mutagenicity

HMIS Rating
Health hazard:  2
Chronic Health Hazard:  *
Flammability:  0
Physical Hazard  0

NFPA Rating
Health hazard:  2
Fire Hazard:  0
Reactivity Hazard:  0

Further information
Copyright 2015 W A Hammond Drierite Co., Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. W A Hammond Drierite Co., Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.drierite.com.

Preparation Information
W A Hammond Drierite Co., Ltd
PO Box 460
Xenia, OH 45385
1-937-376-2927
Revised: 01-01-2015