SECTION 1. Identification
Product identifier
Product number  DX0014
Product name  t.h.e.® Desiccant (Indicating) 8% <br/>8 Mesh

Relevant identified uses of the substance or mixture and uses advised against
Identified uses  Reagent for analysis

Details of the supplier of the safety data sheet
Company  EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821, United States of America | General Inquiries: +1-978-715-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone  800-424-9300 CHEMTREC (USA)
+1-703-527-3887 CHEMTREC (International)
24 Hours/day; 7 Days/week

SECTION 2. Hazards identification
GHS Classification
- Respiratory sensitization, Category 1, H334
- Skin sensitization, Category 1, H317
- Germ cell mutagenicity, Category 2, H341
- Carcinogenicity, Category 1B, Inhalation, H350i
- Reproductive toxicity, Category 1B, H360
For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS-Labeling
Hazard pictograms

Signal Word
Danger

Hazard Statements
H350i May cause cancer by inhalation.
H360 May damage fertility or the unborn child.
Precautionary Statements
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.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves.
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.
P308 + P313 IF EXPOSED OR CONCERNED: Get medical advice/ attention.
P313 + P333 IF SKIN IRRITATION OR RASH OCCURS: 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.

Other hazards
None known.

SECTION 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical nature</th>
<th>Mixture</th>
</tr>
</thead>
</table>

Hazardous ingredients

Chemical Name (Concentration)
CAS-No.

silica gel (>= 90% - <= 100%)
63231-67-4

Cobalt(II) chloride (>= 1% - < 5%)
7646-79-9

Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

General advice
First aider needs to protect himself.

Inhalation
After inhalation: fresh air. Call in physician.

Skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a physician.

Eye contact
After eye contact: rinse out with plenty of water. Call in ophthalmologist.
Ingestion
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
Symptoms of an acute cobalt intoxication: diarrhea, loss of appetite, drop in body temperature, drop in blood pressure. Toxic effect on kidneys (proteinuria, anuria), heart, and pancreas.
Allergic reactions

Indication of any immediate medical attention and special treatment needed
No information available.

SECTION 5. Fire-fighting measures
Extinguishing media
Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture
Not combustible.
Ambient fire may liberate hazardous vapors.

Advice for firefighters
Special protective equipment for fire-fighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information
Prevent fire extinguishing water from contaminating surface water or the ground water system.
Suppress (knock down) gases/vapors/mists with a water spray jet.

SECTION 6. Accidental release measures
Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:
Protective equipment see section 8.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Observe possible material restrictions (see sections 7 and 10).
Cover drains. Collect, bind, and pump off spills.
Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling
Observe label precautions.

Work under hood. Do not inhale substance/mixture.
Pregnant women should not be exposed to this product.

Conditions for safe storage, including any incompatibilities
Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Store at room temperature.

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Basis</th>
<th>Value</th>
<th>Threshold limits</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>silica gel 63231-67-4</td>
<td>NIOSH/GUIDE</td>
<td>Recommended exposure limit (REL):</td>
<td>6 mg/m³</td>
<td>The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Time Weighted Average (TWA):</td>
<td>20millions of particles per cubic foot of air</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Time Weighted Average (TWA):</td>
<td>0.8 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Cobalt(II) chloride 7646-79-9</td>
<td>ACGIH</td>
<td>time Weighted Average (TWA):</td>
<td>0.02 mg/m³</td>
<td>Expressed as: as Co</td>
</tr>
</tbody>
</table>

Engineering measures
Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures
Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures
Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with substance.

Eye/face protection
Safety glasses
Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Other protective equipment:
protective clothing
Respiratory protection
required when dusts are generated.
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. Physical and chemical properties
Physical state  solid
Color  white
Odor  No strong odor known.
Odor Threshold  No information available.
pH  No information available.
Melting point  No information available.
Boiling point  No information available.
Flash point  Not applicable
Evaporation rate  No information available.
Flammability (solid, gas)  The product is not flammable.
Lower explosion limit  No information available.
Upper explosion limit  No information available.
Vapor pressure  No information available.
Relative vapor density  No information available.
Density  No information available.
Relative density  No information available.
Water solubility  No information available.
Partition coefficient: n-octanol/water  No information available.
Autoignition temperature  No information available.
Decomposition temperature
No information available.

Viscosity, dynamic
No information available.

Explosive properties
Not classified as explosive.

Oxidizing properties
none

SECTION 10. Stability and reactivity
Reactivity
See below

Chemical stability
The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions
Dangerous reactions are not expected handling the product according to its intended use.

Conditions to avoid
No information available

Incompatible materials
No information available

Hazardous decomposition products
In the event of fire: See section 5.

SECTION 11. Toxicological information
Information on toxicological effects
Likely route of exposure
Eye contact, Skin contact, Ingestion

Sensitization
Mixture may cause an allergic skin reaction.

Mixture may cause allergy or asthma symptoms or breathing difficulties if inhaled.

CMR effects
Carcinogenicity:
Possible carcinogen by inhalation.

Mutagenicity:
Evidence of genetic defects.

Reproductive toxicity:
May damage fertility or the unborn child.

Specific target organ systemic toxicity - single exposure
The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC
Group 2B: Possibly carcinogenic to humans
Cobalt(II) chloride 7646-79-9

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

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

ACGIH
Confirmed animal carcinogen with unknown relevance to humans.
Cobalt(II) chloride 7646-79-9

Further information
Symptoms of an acute cobalt intoxication: diarrhea, loss of appetite, drop in body temperature, drop in blood pressure. Toxic effect on kidneys (proteinuria, anuria), heart, and pancreas. Other dangerous properties can not be excluded.
Handle in accordance with good industrial hygiene and safety practice.

Ingredients

silica gel
No information available.

Cobalt(II) chloride
Acute oral toxicity
LD50 Rat: 418 mg/kg (RTECS)

Acute dermal toxicity
LDLO Rat: 2,000 mg/kg (RTECS)

SECTION 12. Ecological information

Ecotoxicity
No information available.

Persistence and degradability
No information available.

Bioaccumulative potential
No information available.

Mobility in soil
No information available.

Additional ecological information
Discharge into the environment must be avoided.
Ingredients

silica gel
No information available.

Cobalt(II) chloride

M-Factor
10

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

UN number UN 3077
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT DICHLORIDE)
Class 9
Packing group III
Environmentally hazardous --

Air transport (IATA)

UN number UN 3077
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT DICHLORIDE)
Class 9
Packing group III
Environmentally hazardous --
Special precautions for user no

Sea transport (IMDG)

UN number UN 3077
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT DICHLORIDE)
Class 9
Packing group III
Environmentally hazardous --
Special precautions for user yes
SECTION 15. Regulatory information
United States of America

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

Ingredients
Cobalt(II) chloride 7646-79-9 1%

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

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

DEA List I
Not listed

DEA List II
Not listed

US State Regulations
Massachusetts Right To Know
Ingredients
silica gel

Pennsylvania Right To Know
Ingredients
silica gel

New Jersey Right To Know
Ingredients
Cobalt(II) chloride

California Prop 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
SAFETY DATA SHEET
according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number  DX0014
Product name  t.h.e.® Desiccant (Indicating) 8% 8 Mesh

Notification status
TSCA:  All components of the product are listed in the TSCA-inventory.
DSL:  All components of this product are on the Canadian DSL.
KOREA:  Not in compliance with the inventory

SECTION 16. Other information

Training advice
Provide adequate information, instruction and training for operators.

Full text of H-Statements referred to under sections 2 and 3.
H317  May cause an allergic skin reaction.
H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341  Suspected of causing genetic defects.
H350i  May cause cancer by inhalation.
H360  May damage fertility or the unborn child.

Key or legend to abbreviations and acronyms used in the safety data sheet
Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Revision Date  02/10/2015

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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