



SAFETY DATA SHEET

Creation Date 24-Nov-2010

Revision Date 21-May-2012

Revision Number 3

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: Drierite®, with indicator
Cat No. 219090000; 219090020; 219095000

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1B
Reproductive Toxicity	Category 1B
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s) T - Toxic
N - Dangerous for the environment

R-phrases(s) R49 - May cause cancer by inhalation
R60 - May impair fertility
R68 - Possible risk of irreversible effects

Risk Combination Phrases R42/43 - May cause sensitization by inhalation and skin contact
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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SECTION 2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H341 - Suspected of causing genetic defects
 H410 - Very toxic to aquatic life with long lasting effects
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H317 - May cause an allergic skin reaction
 H360F - May damage fertility
 H350i - May cause cancer by inhalation

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
 P273 - Avoid release to the environment
 P202 - Do not handle until all safety precautions have been read and understood
 P281 - Use personal protective equipment as required

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Calcium sulfate 7778-18-9	EEC No. 231-900-3	<95	7778-18-9	-	-	-

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Cobaltous chloride 7646-79-9	EEC No. 231-589-4	2.5-4	7646-79-9	Xn; R22 R42/43 Carc.Cat.2; R49 N; R50-53 Repr.Cat.2; R60 Muta.Cat.3; R68	Acute Tox. 4 (H302) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Muta. 2 (H341) Carc. 1B (H350i) Repr. 1B (H360F) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-
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For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Ingestion

Do not induce vomiting. Obtain medical attention.

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire..

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Use only under a chemical fume hood. Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Component

Calcium sulfate

Cobaltous chloride

	European Union	The United Kingdom	France	Belgium	Spain
Calcium sulfate			VME: 10 mg/m ³ 8 heures.	TWA: 10 mg/m ³ 8 uren	VLA-ED: 10 mg/m ³ 8 horas
Cobaltous chloride		Capable of causing cancer and/or heritable genetic damage TWA: 0.1 mg/m ³ (As Co) STEL: 0.3 mg/m ³ (As Co)			VLA-ED: 0.02 mg/m ³ (as Co)

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Component	Italy	Germany	Portugal	The Netherlands	Finland
Calcium sulfate		MAK: 1.5 mg/m ³ 8 Stunden. respirable fraction MAK: 4 mg/m ³ 8 Stunden. inhalable fraction TWA: 6 mg/m ³ 8 Stunden. respirable fraction	TWA: 10 mg/m ³ 8 horas		
Cobaltous chloride		Skin	TWA: 0.02 mg/m ³ 8 horas		TWA: 0.05 mg/m ³ 8 tunteina

Component	Austria	Denmark	Switzerland	Poland	Norway
Calcium sulfate	STEL: 10 mg/m ³ 15 Minuten TWA: 5 mg/m ³ 8 Stunden		MAK: 3 mg/m ³ 8 Stunden		
Cobaltous chloride			Skin MAK: 0.1 mg/m ³ 8 Stunden		TWA: 0.02 mg/m ³ 8 timer

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Calcium sulfate	TWA: 10.0 mg/m ³		TWA: 10 mg/m ³ 8 hr.		
Cobaltous chloride		TWA: 0.1 mg/m ³ 8 satima. Co			

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Calcium sulfate				TWA: 6 mg/m ³ 8 órában. respirable dust	

Component	Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
Calcium sulfate		TWA: 6 mg/m ³	TWA: 6 mg/m ³ 8 urah respirable fraction		
Cobaltous chloride				LLV: 0.05 mg/m ³ 8 timmar. total dust	

Biological limit values

Component	European Union	United Kingdom	France	Spain	Germany
Cobaltous chloride			Cobalt: 0.001 mg/L blood end of shift at end of workweek Cobalt: 0.015 mg/L urine end of shift at end of workweek		

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

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Exposure controls**Engineering Measures**

Use only under a chemical fume hood Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment**Eye Protection**

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

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

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Physical State**

Solid

Appearance

Blue

Boiling Point/Range

No information available.

Melting Point/Range

1450°C / 2642°F

Flash Point

No information available.

Autoignition Temperature

No information available.

Water Solubility

slightly soluble

Molecular Formula

Ca O4 S

Molecular Weight

136.13

SECTION 10. STABILITY AND REACTIVITY**Reactivity****Chemical Stability**

Hygroscopic.

Possibility of Hazardous Reactions**Hazardous Polymerization**

Hazardous polymerization does not occur.

Hazardous Reactions .

No information available.

Conditions to Avoid

Incompatible products, Exposure to moist air or water.

Incompatible Materials

Strong oxidizing agents, Metals.

Hazardous Decomposition Products

Sulfur oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Component Information

Component

Calcium sulfate
Cobaltous chloride

LD50 Oral	LD50 Dermal	LC50 Inhalation (Dust)
3000 mg/kg (Rat)		
80 mg/kg (Rat)		

Chronic Toxicity

Carcinogenicity

Component

Cobaltous chloride

The table below indicates whether each agency has listed any ingredient as a carcinogen

IARC	UK
Group 2B	

Sensitization

Mutagenic Effects

Reproductive Effects

Developmental Effects

Target Organs

Other Adverse Effects

Endocrine Disruptor Information

May cause sensitization by inhalation and skin contact
 Contains a known or suspected mutagen
 Product is or contains a chemical which is a known or suspected reproductive hazard.
 No information available.
 Respiratory system Skin
 The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information
 None known

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Calcium sulfate		Lepomis macrochirus: LC50: 2.98 mg/L/96H		EC50: 3200 mg/L/120H
Cobaltous chloride		Cyprinus carpio: LC50=0.33 mg/L 96h		1.1-1.6 mg/L 48h

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Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Component	log Pow
Calcium sulfate	-0.2
Cobaltous chloride	0.85

Mobility in soil

No information available.

Results of PBT and vPvB assessment**Other adverse effects**

No information available

SECTION 13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION**IMDG/IMO**

UN-No	UN3077
Hazard Class	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.

ADR

UN-No	UN3077
Hazard Class	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

IATA

UN-No	UN3077
Hazard Class	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.

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SECTION 15. REGULATORY INFORMATION
Safety, health and environmental regulations/legislation specific for the substance or mixture
International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Calcium sulfate	231-900-3	-		X	X	-	X	X	X	X	X
Cobaltous chloride	231-589-4	-		X	X	-	X	X	X	X	X

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment
SECTION 16. OTHER INFORMATION
Full text of R-phrases referred to under sections 2 and 3

R22 - Harmful if swallowed

R49 - May cause cancer by inhalation

R60 - May impair fertility

R68 - Possible risk of irreversible effects

R42/43 - May cause sensitization by inhalation and skin contact

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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Revision Summary
Reason for revision (M)SDS sections updated, 2.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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SECTION 16. OTHER INFORMATION**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet