

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Product Name	Cobalt (II) Chloride Hexahydrate 97%
Synonyms	Cobaltous chloride hexahydrate
Chemical Formula	CoCl ₂ · 6H ₂ O
Product code	GPC6286
CAS No.	7791-13-1
EC No.	231-589-4
REACH Registration No.	Not known.

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

Identified Use(s)	PC21 Laboratory chemicals
Uses Advised Against	Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer
Company Identification
Address of Manufacturer

Select School Supplies
The Old Granary
Berghill House
Oswestry
SY11 4PD
01691 770366
sales@selectschoolsupplies.co.uk

**2. SECTION 2: HAZARDS IDENTIFICATION**

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP) Acute Tox. 4 :Harmful if swallowed.
 Aquatic Acute 1 :Very toxic to aquatic life.
 Aquatic Chronic 1 :Very toxic to aquatic life with long lasting effects.
 Carc. 1B :May cause cancer by inhalation.
 Muta. 2 :Suspected of causing genetic defects.
 Repr. 1B :May damage fertility.
 Resp. Sens. 1 :May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Skin Sens. 1 :May cause an allergic skin reaction.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name

Cobalt (II) Chloride Hexahydrate 97%

Hazard Pictogram(s)



GHS08



GHS07



GHS09

Signal Word(s)

Danger

Hazard Statement(s)

H302: Harmful if swallowed.
 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.
 H360F: May damage fertility.
 H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P201: Obtain special instructions before use.
 P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
 P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P284: [In case of inadequate ventilation] wear respiratory protection.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P308+P313: IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
cobalt dichloride	7646-79-9	231-589-4	97	Acute Tox. 4 H302 Skin Sens. 1 H317 Resp. Sens. 1 H334 Muta. 2 H341 Carc. 1B H350i Repr. 1B H360F Aquatic Acute 1 H400 Aquatic Chronic 1 H410	GHS08 GHS07 GHS09

3.2 Mixtures

Not applicable.

4. SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

Inhalation	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Skin Contact	Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Medical Advice on this label). IF exposed or concerned:
Eye Contact	IF exposed or concerned: Get medical advice/attention.
Ingestion	Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2 Most important symptoms and effects, both acute and delayed

Allergic contact dermatitis.

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment (see Medical Advice on this label). If experiencing respiratory symptoms: Call a POISON CENTER/doctor. Treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable Extinguishing media As appropriate for surrounding fire.

Unsuitable extinguishing media None.

5.2 Special hazards arising from the substance or mixture

May decompose in a fire, giving off toxic and irritant vapours.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid dust generation. Do not breathe dust. Ensure full personal protection (including respiratory protection) during removal of spillages.

6.2 Environmental precautions

Avoid release to the environment. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Collect spillage. Sweep up spilled substance and remove to safe place. Use vacuum equipment for collecting spilt materials, where practicable. Contain spillages with sand, earth or any suitable adsorbent material. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

6.4 Reference to other sections

See Also Section 8, 13.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. [In case of inadequate ventilation] wear respiratory protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

7.3 Specific end use(s)

PC21 Laboratory chemicals

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Cobalt and Cobalt compounds (as Co)	7646-79-9		0.1			(m), Sen

Region	Source
EU	EU Occupational Exposure Limits
United Kingdom	Workplace Exposure Limits (WEL)

Remark	Notes
(m)	Carc. (cobalt dichloride and sulphate)
Sen	Capable of causing occupational asthma. See EH40 paragraphs 53–56.

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection Wear eye protection with side protection (EN166).



Skin protection Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection Where engineering controls are not fitted or inadequate wear suitable respiratory protective equipment. The use of a high efficiency filter (EN143) is recommended. PF200: 200 x Protection Factor



Thermal hazards None known.

8.2.3. Environmental Exposure Controls Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Solid.
	Colour : Not known.
Odour	Not known.

Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	Not known.
Initial boiling point and boiling range	Not applicable.
Flash Point	Not applicable.
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	1.920 g/cm ³
Solubility(ies)	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.
9.2 Other information	None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Exposure to moisture

10.5 Incompatible materials

Not known. Oxidizing agents, Alkali metals

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides,
Sulphur oxides,
Hydrogen fluoride, Sodium oxides, Copper oxides
Other decomposition products - No data available

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Harmful if swallowed. LD50 Oral - Rat - 766 mg/kg Remarks: Behavioral:Tremor. Diarrhoea Nutritional and Gross Metabolic:Weight loss or decreased weight gain. LD50 Dermal - Rat - > 2,000 mg/kg
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	Not classified.
Skin sensitization data	May cause an allergic skin reaction.
Respiratory sensitization data	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	Suspected of causing genetic defects. In vitro tests showed mutagenic effects Mouse mammary gland Mutation in mammalian somatic cells.
Carcinogenicity	This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen IARC: 2B - Group 2B: Possibly carcinogenic to humans (Cobalt dichloride hexahydrate) 2B - Group 2B: Possibly carcinogenic to humans (Cobalt dichloride hexahydrate)
Reproductive toxicity	May damage fertility. Presumed human reproductive toxicant
Lactation	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

11.2 Other information

RTECS: GG0200000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Toxicity - Aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 1.1 - 1.6 mg/l - 48 h

Toxicity - Fish

LC50 - Cyprinus carpio (Carp) - 0.33 mg/l - 96.0 h

Toxicity - Algae

EC50 - Chlorella vulgaris (Fresh water algae) - 0.5 mg/l - 96 h

Toxicity - Sediment Compartment

Not classified.

Toxicity - Terrestrial Compartment

Not classified.

12.2 Persistence and Degradation

Not known.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

13. SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Dispose of contents in accordance with local, state or national legislation. Send to a licensed recycler, reclaimer or incinerator. Dispose of this material and its container to hazardous or special waste collection point.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION**14.1 UN number**

UN No. 3077

14.2 UN proper shipping name

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 9

ADR Classification Code M7

Special Provisions 274 335 375 601

Limited Quantities 5 kg

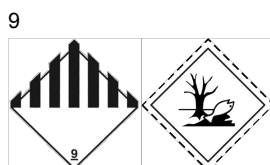
Excepted Quantities	E1
Emergency Action Code	2Z
Mixed Packing Instructions for Packages	P002 IBC08 LP02 R001
Special Packing Provisions for Packages	PP12 B3
Mixed Packing Instructions for Packages	MP10
Packing Instructions for Portable Tanks	T1 BK1 BK2 BK3
Special Provisions for Portable Tanks	TP33
Tank Code for Tanks	SGAV LGBV
Special Provisions for Tanks	
Vehicle for Tank Carriage	AT
ADR Transport Category	3
Tunnel Restriction Code	-
Special Provisions for Carriage - Packages	V13
Special Provisions for Carriage - Bulk	VC1 VC2
Special Provisions for Carriage - Loading, Unloading and Handling	CV13
Special Provisions for Carriage - Operation	
ADR HIN	90
IMDG	
IMDG Class	9
Special Provisions	274 335 375 601
Limited Quantities	5 kg
Excepted Quantities	E1
Mixed Packing Instructions for Packages	P002 IBC08 LP02 R001
Special Packing Provisions for Packages	PP12 B3
Packing Instructions for Portable Tanks	T1 BK1 BK2 BK3
Special Provisions for Portable Tanks	TP33
IMDG EMS	F-A, S-F
Stowage and Handling	Category A SW23
Segregation	
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y956
Passenger and Cargo Aircraft Limited Quantities Max net Qty	30Kg
Passenger and Cargo Aircraft Packing Instructions	956
Passenger and Cargo Aircraft Max net Qty	400Kg

Cargo Aircraft Packing Instructions 956
 Cargo Aircraft Max net Qty 400Kg
 Special Provisions A97, A158, A179, A197
 Emergency Response Guidebook (ERG) 9L

Code

Labels

Labels



14.4 Packing group

Packing group

14.5 Environmental hazards

Environmental hazards Classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available

15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Cobalt dichloride (7646-79-9)

REACH: ANNEX XIV list of substances subject to authorisation

Not listed

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles cobalt dichloride (7646-79-9)

Community Rolling Action Plan (CoRAP) Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants

Not listed

Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer

Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals

Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals

Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals

Not listed

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS08



GHS07



GHS09

Hazard classification

Acute Tox. 4 : Acute toxicity, Category 4
 Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1
 Aquatic Chronic 1 : Hazardous to the aquatic environment, Chronic, Category 1
 Carc. 1B : Carcinogenicity, Category 1B
 Muta. 2 : Germ cell mutagenicity, Category 2
 Repr. 1B : Reproductive toxicity, Category 1B
 Resp. Sens. 1 : Respiratory sensitization, Category 1
 Skin Sens. 1 : Skin sensitization, Category 1

Hazard Statement(s)

H302: Harmful if swallowed.
 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.
 H360F: May damage fertility.
 H400: Very toxic to aquatic life.
 H410: Very toxic 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/vapours/spray.
 P264: Wash hands and exposed skin thoroughly after handling.
 P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P281: Use personal protective equipment as required.

P284: [In case of inadequate ventilation] wear respiratory protection.

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P302+P352: IF ON SKIN: Wash with plenty of water.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P321: Specific treatment (see Medical Advice on this label).

P330: Rinse mouth.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of contents in accordance with local, state or national legislation.

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

IATA : International Air Transport Association

IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

Acronyms

vPvB : very Persistent and very Bioaccumulative

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