

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Date of issue: 19/06/2013 Revision date: 17/04/2023 Supersedes version of: 05/04/2018 Version: 2.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

Trade name : NU3077 Cobalt (II) chloride hexahydrate AGR

 EC Index-No.
 : 027-004-00-5

 EC-No.
 : 231-589-4

 CAS-No.
 : 7791-13-1

 REACH registration No
 : 05-2115399787-19

 Product code
 : COCH-06A

 Formula
 : CoCl2 · 6 H2O

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

1.2.1. Relevant identified uses

Main use category : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

labbox labware s.l. Migjorn, 1 P.O. Box Barcelona (SPAIN) 08338 Premia de Dalt – SPAIN

FS

T +34 937 07 79 70 - F +34 937 909 532 <u>info@labbox.com</u> - <u>www.labbox.com</u>

1.4. Emergency telephone number

Emergency number

: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

H302 Acute toxicity (oral), Category 4 Serious eye damage/eye irritation, Category 1 H318 Respiratory sensitisation, Category 1 H334 Skin sensitisation, Category 1 H317 Germ cell mutagenicity, Category 2 H341 Carcinogenicity (inhalation) Category 1A H350i Reproductive toxicity, Category 1A H360F Hazardous to the aquatic environment — Acute Hazard, Category 1 H400 Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of H and EUH statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazard statements (CLP) : H302 - Harmful if swallowed.

H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage.

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 statements (CLP) : 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, forearms and face 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.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
Cobalt (II) chloride hexahydrate	CAS-No.: 7791-13-1 EC-No.: 231-589-4 EC Index-No.: 027-004-00-5 REACH-no: 05-2115399787-	≥ 98

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest.

Give oxygen or artificial respiration if necessary. Call a physician immediately.

First-aid measures after skin contact : Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. Call

a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Give nothing or a little water to drink. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Shortness of breath.

17/04/2023 (Revision date) EN (English) 2/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Making extinguishing agents environment-friendly.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible.

Hazardous decomposition products in case of fire : fume.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Do not get in eyes, on skin, or on clothing. Do not breathe dust. Ventilate spillage area.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Collect spillage. Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Store in a well-ventilated place. Keep container tightly closed.

Storage area : Store in a well-ventilated place. Store away from heat.

Special rules on packaging : Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

Laboratory chemicals.

17/04/2023 (Revision date) EN (English) 3/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

NU3077 Cobalt (II) chloride hexahydrate AGR (7791-13-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	0,02 mg/m³

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

NU3077 Cobalt (II) chloride hexahydrate AGR (7791-13-1)		
DNEL/DMEL (Workers)		
Acute - systemic effects, inhalation	88,1 µg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, inhalation	13,9 µg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	0,51 mg/m³	
PNEC aqua (marine water)	2,36 mg/m³	
PNEC (Sediment)		
PNEC sediment (freshwater)	9,5 mg/kg KW	
PNEC sediment (marine water)	9,5 mg/kg KW	
PNEC (Soil)		
PNEC soil	10,9 mg/kg KW	
PNEC (STP)		
PNEC sewage treatment plant	0,37 mg/m³	

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

Personal protective equipment symbol(s):







17/04/2023 (Revision date) EN (English) 4/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

Respiratory protection			
Device	Filter type	Condition	Standard
	Type P3		

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

dark red. brown. Colour Molecular mass 237,93 g/mol Odour : odourless. Odour threshold : Not available : 86 °C Melting point Freezing point : Not available Boiling point : Not available Flammability : Not available **Explosive limits** : Not applicable Lower explosion limit : Not applicable Upper explosion limit : Not applicable Flash point : Not applicable Auto-ignition temperature : Not applicable Decomposition temperature : Not available рΗ : 3,1-4,8

Solubility : Water: 585,9 g/100cm³ 20° C

: Not available

: Not applicable

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density : 1,9

Relative vapour density at 20 °C : Not applicable Particle size : Not available

9.2. Other information

pH solution

Viscosity, kinematic

9.2.1. Information with regard to physical hazard classes

No additional information available

17/04/2023 (Revision date) EN (English) 5/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Heavy metals.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

metals.

10.6. Hazardous decomposition products

Toxic vapours are released.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

NU3077 Cobalt (II) chloride hexahydrate AGR (7791-13-1)

LD50 oral rat > 537 mg/kg

Skin corrosion/irritation : Not classified

pH: 3,1 - 4,8

Serious eye damage/irritation : Causes serious eye damage.

pH: 3,1 – 4,8

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an

allergic skin reaction.

Germ cell mutagenicity : Suspected of causing genetic defects.

Carcinogenicity : May cause cancer by inhalation.

Reproductive toxicity : May damage fertility.

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : Very toxic to aquatic life.

(acute)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazardous to the aquatic environment, long-term : Very toxic to aquatic life with long lasting effects.

(chronic)

LC50 - Fish [1] 1,5 mg/kg

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Must follow special treatment according to local regulation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

 UN-No. (ADR)
 : UN 3077

 UN-No. (IMDG)
 : UN 3077

 UN-No. (IATA)
 : UN 3077

 UN-No. (ADN)
 : UN 3077

 UN-No. (RID)
 : UN 3077

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (IATA) : Environmentally hazardous substance, solid, n.o.s.

Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Transport document description (ADR) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cobalt (II)

chloride hexahydrate

), 9, III, (E)

Transport document description (IMDG) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III,

MARINE POLLUTANT

Transport document description (IATA) : UN 3077 Environmentally hazardous substance, solid, n.o.s., 9, III

Transport document description (ADN) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III
Transport document description (RID) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

17/04/2023 (Revision date) EN (English) 7/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.3. Transport hazard class(es)

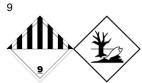
ADR

Transport hazard class(es) (ADR)
Danger labels (ADR)



IMDG

Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9



IATA

Transport hazard class(es) (IATA)

Danger labels (IATA)



ADN

Transport hazard class(es) (ADN) :
Danger labels (ADN) :



RID

Transport hazard class(es) (RID) : 9
Danger labels (RID) : 9



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M7

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Special provisions (ADR) : 274, 335, 601, 375

: 5kg Limited quantities (ADR) Excepted quantities (ADR) : E1

Packing instructions (ADR) P002, IBC08, LP02, R001

Special packing provisions (ADR) : PP12, B3 Mixed packing provisions (ADR) MP10 Portable tank and bulk container instructions (ADR) T1, BK1, BK2 TP33

Portable tank and bulk container special provisions

(ADR)

: SGAV, LGBV Tank code (ADR)

: AT Vehicle for tank carriage 3 Transport category (ADR) Special provisions for carriage - Packages (ADR) : V13 Special provisions for carriage - Bulk (ADR) : VC1, VC2 Special provisions for carriage - Loading, unloading : CV13

and handling (ADR)

Hazard identification number (Kemler No.) 90

Orange plates

90 307

Tunnel restriction code (ADR) Ε EAC code 2Z

Transport by sea

Special provisions (IMDG) : 274, 335, 966, 967, 969

Limited quantities (IMDG) : 5 kg Excepted quantities (IMDG) : E1 : P002, LP02 Packing instructions (IMDG) Special packing provisions (IMDG) PP12 IBC packing instructions (IMDG) IBC08 IBC special provisions (IMDG) ВЗ

Tank instructions (IMDG) T1, BK1, BK2, BK3

Tank special provisions (IMDG) **TP33** EmS-No. (Fire) F-A : S-F EmS-No. (Spillage) Stowage category (IMDG) Α Stowage and handling (IMDG) SW23

Air transport

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) Y956 PCA limited quantity max net quantity (IATA) 30kgG PCA packing instructions (IATA) 956 PCA max net quantity (IATA) 400kg CAO packing instructions (IATA) 956 CAO max net quantity (IATA) 400kg

Special provisions (IATA) A97, A158, A179, A197

ERG code (IATA) 91

Inland waterway transport

Classification code (ADN) M7

Special provisions (ADN) 274, 335, 375, 601

Limited quantities (ADN) 5 kg Excepted quantities (ADN) E1 Carriage permitted (ADN) T* B** Equipment required (ADN) PP, A Number of blue cones/lights (ADN) 0

Rail transport

Classification code (RID) : M7

Special provisions (RID) : 274, 335, 375, 601

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Limited quantities (RID) : 5kg Excepted quantities (RID) : E1

Packing instructions (RID) : P002, IBC08, LP02, R001

Special packing provisions (RID) : PP12, B3 Mixed packing provisions (RID) : MP10 Portable tank and bulk container instructions (RID) : T1, BK1, BK2 : TP33

Portable tank and bulk container special provisions

(RID)

Tank codes for RID tanks (RID) : SGAV, LGBV

Transport category (RID) : 3 Special provisions for carriage – Packages (RID) : W13 Special provisions for carriage – Bulk (RID) : VC1, VC2 Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

Colis express (express parcels) (RID) : CE11 Hazard identification number (RID) : 90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

REACH Annex XIV (Authorisation List)

NU3077 Cobalt (II) chloride hexahydrate AGR is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

NU3077 Cobalt (II) chloride hexahydrate AGR is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

NU3077 Cobalt (II) chloride hexahydrate AGR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

NU3077 Cobalt (II) chloride hexahydrate AGR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Cobalt (II) chloride hexahydrate is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

15.1.2. National regulations

France

Occupational diseases		
Code	Description	
RG 70	Occupational diseases caused by cobalt and its compounds	
RG 70 BIS	Respiratory disorders due to sintered or fused metal carbide dust containing cobalt	
RG 70 TER	Primary broncho-pulmonary cancer caused by inhalation of cobalt dust associated with tungsten carbide prior to sintering	

Germany

Water hazard class (WGK)

: WGK 3, Highly hazardous to water (KBwS-Beschluss; ID No. 493).

Chemicals Prohibition Ordinance (ChemVerbotsV)

: This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the

shipping route (according to § 10).

Hazardous Incident Ordinance (12. BlmSchV)

: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

: The substance is not listed

The substance is not listed
The substance is not listed

: The substance is not listed

: The substance is not listed

Denmark

Danish National Regulations

 Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1	
Carc. 1A	Carcinogenicity (inhalation) Category 1A	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H302	Harmful if swallowed.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H341	Suspected of causing genetic defects.	
H350i	May cause cancer by inhalation.	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1A	Reproductive toxicity, Category 1A
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Sens. 1	Skin sensitisation, Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.