

Safety data sheet
according to 1907/2006/EC, Article 31

Printing Date: 08.02.2024

Version Number: 4.0 (replaces version 1.0)

Revision Date: 08.02.2024

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

1.1 Product identifier:

Trade name: **CHRYSO®OPTICO2-HC**

UFI: 38DH-G0E2-4008-5ESW

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

Relevant identified uses of the substance or mixture: Admixture for concrete and mortar

Identified uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet:

Manufacturer/supplier:

CHRYSO SAS.
7 rue de l'Europe. 45300.
SERMAISES DU LOIRET.
France

Tel: 02 38 34 58 00

Fax: 02 38 39 01 72

Further information obtainable from: fds.chryso@chryso.com

1.4 Emergency telephone number:

UK: NHS 111 (Members of the public)

UK NPIS 24-hour telephone number: +44 (0)344 892 0111 (Healthcare professionals only)

National Poisons Information Service : 0870 600 6266

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008

Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms



GHS05

Signal word Danger

Hazard-determining components of labelling:

Calcium nitrate

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing Date: 08.02.2024

Version Number: 4.0 (replaces version 1.0)

Revision Date: 08.02.2024

Trade name: **CHRYSO®OPTICO2-HC**

(Contd. of page 1)

Additional information:

EUH032 Contact with acids liberates very toxic gas.

Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.

2.3 Other hazards:**Results of PBT and vPvB assessment:****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:**

Mixture of substances listed below with non-hazardous additions.

For further information, please refer to the product technical data sheet.

Dangerous components:

CAS: 10124-37-5 EINECS: 233-332-1	Calcium nitrate Eye Dam. 1, H318 Acute Tox. 4, H302	30-<50%
CAS: 540-72-7 EINECS: 208-754-4 Index number: 615-004-00-3 Reg.nr.: 01-2119343700-47-XXXX	Sodium thiocyanate Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319 EUH032	1-<3%

SECTION 4: First aid measures**4.1 Description of first aid measures:****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** No special measures required.**After skin contact:** Immediately rinse with water.**After eye contact:** Rinse cautiously with water for several minutes.**After swallowing:**

Rinse mouth.

Do NOT induce vomiting.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media:****Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray.**5.2 Special hazards arising from the substance or mixture:** No further relevant information available.**5.3 Advice for firefighters:****Additional information:** Collect contaminated fire fighting water separately. It must not enter the sewage system.
 GB
 (Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing Date: 08.02.2024

Version Number: 4.0 (replaces version 1.0)

Revision Date: 08.02.2024

Trade name: **CHRYSO®OPTICO2-HC**

(Contd. of page 2)

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow product to enter drains or any other watercourse. Do not allow undiluted or large quantities of the product to enter groundwater, water courses or drains.

6.3 Methods and material for containment and cleaning up: Use neutralising agent.**6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling:** No special precautions are necessary if used correctly.**Information about fire - and explosion protection:** No special measures required.**7.2 Conditions for safe storage, including any incompatibilities:****STORAGE****Information about storage in one common storage facility:** No special measures required.**Further information about storage conditions:** Keep container tightly sealed.**7.3 Specific end use(s):** No further relevant information available.**SECTION 8: Exposure controls/personal protection****8.1 Control parameters:****Ingredients with limit values that require monitoring at the workplace:****540-72-7 Sodium thiocyanate**

WEL	Long-term value: 5 mg/m ³ as CN; Sk
-----	---------------------------------------------------

Additional information: Based on the lists valid at the date of SDS creation.**8.2 Exposure controls:****Appropriate engineering controls** No further data; see section 7.**Individual protection measures, such as personal protective equipment****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Hand protection**Material of gloves:**

Nitrile rubber.



Nitrile rubber

(Contd. on page 4)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing Date: 08.02.2024

Version Number: 4.0 (replaces version 1.0)

Revision Date: 08.02.2024

Trade name: **CHRYSO®OPTICO2-HC**

(Contd. of page 3)

Eye/face protection

Safety glasses.

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties:****GENERAL INFORMATION**

Physical state	Liquid.
Colour:	Yellow-brown
Odour:	Characteristic.
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	100 °C (7732-18-5 Water)
Flammability	Not applicable.
Flammability Limits :	
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Method:	
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
pH at 20 °C	4.5

VISCOSITY

Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
Water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density:	Not determined.
Vapour density:	Not determined.
Particle characteristics	Not applicable.

9.2 Other information:

Appearance:	
Form:	Liquid.
Important information on protection of health and environment, and on safety:	
Ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Change in conditions:-	
Evaporation rate:	Not determined.
Molecular weight	Not determined.

Information with regard to physical hazard classes

Explosives	Not applicable.
Flammable gases	Not classified.
Aerosols	Not classified.
Oxidising gases	Not classified.
Gases under pressure	Not classified.
Flammable liquids	Not classified.
Flammable solids	Not classified.
Self-reactive substances and mixtures	Not classified.
Pyrophoric liquids	Not classified.

(Contd. on page 5)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing Date: 08.02.2024

Version Number: 4.0 (replaces version 1.0)

Revision Date: 08.02.2024

Trade name: **CHRYSO®OPTICO2-HC**

(Contd. of page 4)

Pyrophoric solids	Not classified.
Self-heating substances and mixtures	Not classified.
Substances and mixtures, which emit flammable gases in contact with water	Not classified.
Oxidising liquids	Not classified.
Oxidising solids	Not classified.
Organic peroxides	Not classified.
Corrosive to metals	Not classified.
Desensitised explosives	Not classified.

SECTION 10: Stability and reactivity

10.1 Reactivity:

Stable under normal conditions.

No further relevant information available.

10.2 Chemical stability:

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.**10.3 Possibility of hazardous reactions** Contact with acids liberates very toxic gas.**10.4 Conditions to avoid:** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

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

ACUTE TOXICITY Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

10124-37-5 Calcium nitrate

Oral | LD50 | 1,000 mg/kg (rat)

Skin corrosion/irritation Based on available data, the classification criteria are not met.**Serious eye damage/irritation** Causes serious eye damage.**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure** Based on available data, the classification criteria are not met.**STOT-repeated exposure** Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.

Additional toxicological information:

10124-37-5 Calcium nitrate

Irritation of eyes | Serious eye damage/irritation | 1 (rabbit)

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

GB
(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing Date: 08.02.2024

Version Number: 4.0 (replaces version 1.0)

Revision Date: 08.02.2024

Trade name: **CHRYSO®OPTICO2-HC**

(Contd. of page 5)

SECTION 12: Ecological information**12.1 Toxicity:**

AQUATIC TOXICITY No further relevant information available.

12.2 Persistence and degradability: No further relevant information available.**12.3 Bioaccumulative potential:** No further relevant information available.**12.4 Mobility in soil:** No further relevant information available.**12.5 Results of PBT and vPvB assessment:**

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects:**ADDITIONAL ECOLOGICAL INFORMATION****General notes:** Must not reach sewage water or drainage ditch undiluted or unneutralised.**SECTION 13: Disposal considerations****13.1 Waste treatment methods:****Recommendation:**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

UNCLEANED PACKAGING**Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN number or ID number**
ADR, IMDG, IATA

Not Regulated

14.2 UN proper shipping name
ADR, IMDG, IATA

Not Regulated

14.3 Transport hazard class(es)ADR, ADN, IMDG, IATA
Class

Not Regulated

14.4 Packing group
ADR, IMDG, IATA

Not Regulated

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user:

Not applicable.

14.7 Maritime transport in bulk according to
IMO instruments

Not Regulated

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

See Section 2 for hazard identification.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing Date: 08.02.2024

Version Number: 4.0 (replaces version 1.0)

Revision Date: 08.02.2024

Trade name: *CHRYSO®OPTICO2-HC*

(Contd. of page 6)

Poisons Act**Regulated explosives precursors**

None of the ingredients is listed.

Regulated poisons

None of the ingredients is listed.

Reportable explosives precursors

10124-37-5 | Calcium nitrate

Listed

Reportable poisons

None of the ingredients is listed.

Directive 2012/18/EU**Named dangerous substances - ANNEX I** None of the ingredients is listed.**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

REGULATION (EU) 2019/1148**Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

10124-37-5 | Calcium nitrate

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

EUH032 Contact with acids liberates very toxic gas.

Department issuing SDS:

CHRYSO SAS.
7 rue de l'Europe. 45300.
SERMAISES DE LOIRET.
France

Tel: 02 38 34 58 00

Fax: 02 38 39 01 72

Version number of previous version: 1.0**The first date of preparation:** 08.02.2024**Number of revision times and the latest revision date:** 4.0 / 08.02.2024