



SAFETY DATA SHEET
(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : CHRYSO@Cure HPE

Product code : D0191.

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

Concrete and mortar admixture.

1.3. Details of the supplier of the safety data sheet

Registered company name : CHRYSO SAS.

Address : 7 rue de l'Europe.45300.SERMAISES DU LOIRET .France.

Telephone : 02 38 34 58 00. Fax : 02 38 39 01 72.

fds.chryso@chryso.com

www.chryso.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

> In compliance with EC regulation No. 1272/2008 and its amendments.

May produce an allergic reaction (EUH208).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Mixture for spray application.

> In compliance with EC regulation No. 1272/2008 and its amendments.

Additional labeling :

EUH208

Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.

EUH210

Safety data sheet available on request.

> 2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

> Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 107-21-1 EC: 203-473-3 REACH: 01-2119456816-28 ETHANE-1,2-DIOL	GHS07, GHS08 Wng Acute Tox. 4, H302 STOT RE 2, H373	[1]	2.5 \leq x % < 10
INDEX: 613-088-00-6 CAS: 2634-33-5 EC: 220-120-9 1,2-BENZISOTHIAZOL-3(2H)-ONE	GHS05, GHS07, GHS09 Dgr Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 M Acute = 1		0 \leq x % < 0.05

> Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 107-21-1 EC: 203-473-3 REACH: 01-2119456816-28 ETHANE-1,2-DIOL		oral: ATE = 2000 mg/kg BW
INDEX: 613-088-00-6 CAS: 2634-33-5 EC: 220-120-9 1,2-BENZISOTHIAZOL-3(2H)-ONE	Skin Sens. 1: H317 C>= 0.05%	

Information on ingredients :

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

>SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

> In the event of exposure by inhalation :

In the event of an allergic reaction, seek medical attention.

> In the event of splashes or contact with skin :

In the event of an allergic reaction, seek medical attention.

In the event of swallowing :

Seek medical attention, showing the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

No data available.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

>SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m ³	VME-ppm	VLE-mg/m ³	VLE-ppm	Notes
107-21-1	52	20	104	40	Peau

- France (INRS - ED984 / 2020-1546) :

CAS	VME-ppm	VME-mg/m ³	VLE-ppm	VLE-mg/m ³	Notes	TMP No
107-21-1	20	52	40	104	*	84

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
107-21-1	20 ppm 52 mg/m ³	40 ppm 104 mg/m ³		Sk	

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

ETHANE-1,2-DIOL (CAS: 107-21-1)

Final use:

Exposure method:
Potential health effects:
DNEL :

Exposure method:
Potential health effects:
DNEL :

Final use:

Exposure method:
Potential health effects:
DNEL :

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
106 mg/kg body weight/day

Inhalation.
Long term systemic effects.
35 mg of substance/m³

Consumers.

Dermal contact.
Long term systemic effects.
53 mg/kg body weight/day

Inhalation.
Long term systemic effects.
7 mg of substance/m³

Predicted no effect concentration (PNEC):

ETHANE-1,2-DIOL (CAS: 107-21-1)

Environmental compartment:

Fresh water.

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PNEC :	10 mg/l
Environmental compartment: PNEC :	Sea water. 1 mg/l
Environmental compartment: PNEC :	Intermittent waste water. 10 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 20.9 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 199.5 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

> - Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

> - Respiratory protection

Type of FFP mask :

Wear a disposable half-mask aerosol filter in accordance with standard EN149/A1.

Category :

- FFP2

>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state : Fluid liquid.

Colour

Colour : White

> Odour

Odour threshold : Not stated.

Odour : Characteristic

> Melting point

Melting point/melting range : Not relevant.

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> Freezing point

Freezing point / Freezing range : Not stated.

> Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not relevant.

> Flammability

Flammability (solid, gas) : Not stated.

> Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) : Not stated.

Explosive properties, upper explosivity limit (%) : Not stated.

> Flash point

Flash point interval : Not relevant.

Auto-ignition temperature

Self-ignition temperature : Not relevant.

Decomposition temperature

Decomposition point/decomposition range : Not relevant.

> pH

pH (aqueous solution) : Not stated.

pH : 8.00 .
Slightly basic.

> Kinematic viscosity

Viscosity : Not stated.

> Solubility

Water solubility : Dilutable.

Fat solubility : Not stated.

> Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

Vapour pressure

Vapour pressure (50°C) : Not relevant.

Density and/or relative density

Density : > 1

> Relative vapour density

Vapour density : Not stated.

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid :

- frost

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO₂)

>SECTION 11 : TOXICOLOGICAL INFORMATION

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

No data available.

11.1.1. Substances

Acute toxicity :

ETHANE-1,2-DIOL (CAS: 107-21-1)	
Oral route :	LD ₅₀ = 2000 mg/kg
Dermal route :	LD ₅₀ > 3500 mg/kg Species : Mouse
Inhalation route (Gas) :	LC ₅₀ 2.5

Specific target organ systemic toxicity - repeated exposure :

ETHANE-1,2-DIOL (CAS: 107-21-1)	
Oral route :	C = 200 mg/kg bodyweight/day Species : Rat Duration of exposure : 28 days OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
Dermal route :	C = 2200 mg/kg bodyweight/day Species : Dog Duration of exposure : 28 days OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

> 11.1.2. Mixture

> Respiratory or skin sensitisation :

Contains at least one sensitising substance. May cause an allergic reaction.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

ETHANE-1,2-DIOL (CAS: 107-21-1)	
Fish toxicity :	LC ₅₀ = 72860 mg/l Species : Pimephales promelas Duration of exposure : 96 h NOEC = 15380 mg/l Species : Pimephales promelas Duration of exposure : 35 days
Crustacean toxicity :	EC ₅₀ > 100 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) NOEC = 8590 mg/l Species : Ceriodaphnia dubia

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

ETHANE-1,2-DIOL (CAS: 107-21-1)	
Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

>SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

> 14.1. UN number or ID number

-

> 14.2. UN proper shipping name

-

> 14.3. Transport hazard class(es)

-

> 14.4. Packing group

-

> 14.5. Environmental hazards

-

> 14.6. Special precautions for user

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>SECTION 15: Regulatory information

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

> - Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2020/217 (ATP 14)

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

>SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

|> Wording of the phrases mentioned in section 3 :

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure .
H400	Very toxic to aquatic life.

|> Abbreviations :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
NOEC : The concentration with no observed effect.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
ATE : Acute Toxicity Estimate
BW : Body Weight
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefährdungsklasse (Water Hazard Class).
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.
|> Modification compared to the previous version