

CHRYSO@Cure HPE - Do191A



SAFETY DATA SHEET  
(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

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

1.1. Product identifier

Product name : CHRYSO@Cure HPE  
Product code : Do191A.

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 SOUTHERN AFRICA (PTY).  
Address : 26 Malcolm Moodie Crescent, Jet Park Ext.30, 1469..Boksburg.South Africa.  
Telephone : 27 11 395 97 00. Fax : 27 11 397 66 44.  
fds.chryso@chryso.com  
www.chryso.com

1.4. Emergency telephone number : .

Association/Organisation : .

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

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 a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).  
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

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 a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).  
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 :  
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 satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

| Identification   | (EC) 1272/2008   | 67/548/EEC          | Note | %               |
|--|--|---------------------|------|-----------------|
| CAS: 107-21-1<br>EC: 203-473-3<br>REACH: 01-2119456816-28<br>ETHANE-1,2-DIOL | GHS07, GHS08<br>Wng<br>Acute Tox. 4, H302<br>STOT RE 2, H373 | Xn<br>Xn;R48/22-R22 | [1]  | 2.5 <= x % < 10 |

Information on ingredients :

[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 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 (CO<sub>2</sub>)

**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.

**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 (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

| CAS      | VME-mg/m3 : | VME-ppm : | VLE-mg/m3 : | VLE-ppm : | Notes : |
|----------|-------------|-----------|-------------|-----------|---------|
| 107-21-1 | 52          | 20        | 104         | 40        | Peau    |

- France (INRS - ED984 :2008) :

| CAS      | VME-ppm : | VME-mg/m3 : | VLE-ppm : | VLE-mg/m3 : | Notes : | TMP No : |
|----------|-----------|-------------|-----------|-------------|---------|----------|
| 107-21-1 | 20        | 52          | 40        | 104         | *       | 84 -     |

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

| CAS      | TWA :    | STEL : | Ceiling : | Definition : | Criteria : |
|----------|----------|--------|-----------|--------------|------------|
| 107-21-1 | 10 mg/m3 | -      | -         | -            | -          |

- South Africa / DOL RL (Department of Labour, Recommended limits, 1995) :

| CAS      | TWA :    | STEL : | Ceiling : | Definition : | Criteria : |
|----------|----------|--------|-----------|--------------|------------|
| 107-21-1 | 10 mg/m3 | -      | -         | -            | -          |

#### 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 :

##### Workers.

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

Exposure method:  
 Potential health effects:  
 DNEL :

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

##### Final use:

Exposure method:  
 Potential health effects:  
 DNEL :

##### Consumers.

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

Exposure method:  
 Potential health effects:  
 DNEL :

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:  
 PNEC :

Fresh water.  
 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.

**CHRYSO@Cure HPE - Do191A**

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.

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.

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

**General information :**

|                  |                |
|------------------|----------------|
| Physical state : | Fluid liquid.  |
| Odour            | Characteristic |
| Colour           | White          |

**Important health, safety and environmental information**

|   |                           |
|---|---------------------------|
| pH :                                      | 8.00 .<br>Slightly basic. |
| Boiling point/boiling range :             | Not relevant.             |
| Flash point interval :                    | Not relevant.             |
| Vapour pressure (50°C) :                  | Not relevant.             |
| Density :                                 | > 1                       |
| Water solubility :                        | Dilutable.                |
| Melting point/melting range :             | Not relevant.             |
| Self-ignition temperature :               | Not relevant.             |
| Decomposition point/decomposition range : | Not relevant.             |

**9.2. Other information**

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 (CO<sub>2</sub>)

## SECTION 11 : TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

No data available.

#### 11.1.1. Substances

##### Acute toxicity :

ETHANE-1,2-DIOL (CAS: 107-21-1)  
Dermal route : LD<sub>50</sub> > 3500 mg/kg  
Species : Mouse

Inhalation route (Vapours) : LC<sub>50</sub> 2.5

##### Specific target organ systemic toxicity - repeated exposure :

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

#### 11.1.2. Mixture

No toxicological data available for the mixture.

## SECTION 12 : ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### 12.1.1. Substances

ETHANE-1,2-DIOL (CAS: 107-21-1)  
Fish toxicity : LC<sub>50</sub> = 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<sub>50</sub> > 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.

**CHRYSO@Cure HPE - Do191A**

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. 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.

**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:

- Directive 67/548/EEC and its adaptations
- Directive 1999/45/EC and its adaptations
- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

**- 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.

**In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.**

No labelling requirements for this mixture.

Risk phrase :

Safety data sheet available for professional user on request.

**Wording of the phrases mentioned in section 3 :**

- |         |   |
|---------|---|
| H302    | Harmful if swallowed.   |
| H373    | May cause damage to organs through prolonged or repeated exposure .             |
| R 22    | Harmful if swallowed.   |
| R 48/22 | Harmful: danger of serious damage to health by prolonged exposure if swallowed. |

**Abbreviations :**

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

**CHRYSO@Cure HPE - D0191A**

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).