



## SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

#### 1.1. Product identifier

Product name : CHRYSO®Xel 655

Product code : PF001494Q.

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

Cement additive

#### 1.3. Details of the supplier of the safety data sheet

Registered company name : CHRYSO GULF LLC.

Address : Technical Department, Light Industrial Area, Mesaieed City.Box :22849.Doha.QATAR.

Telephone : +974 4450 0840. Fax : .

fds.chryso@chryso.com

www.chryso-group.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.

Eye irritation, Category 2 (Eye Irrit. 2, H319).

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

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

Hazard pictograms :



GHS07

Signal Word :

WARNING

Additional labeling :

EUH208 Contains FORMALDEHYDE ...%. May produce an allergic reaction.

Hazard statements :

H319 Causes serious eye irritation.

Precautionary statements - Prevention :

P264 Wash the hands thoroughly after handling.

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

Precautionary statements - Response :

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

#### 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.

### >SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

##### > Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 7631-99-4 EC: 231-554-3 REACH: 01-2119488221-41  SODIUM NITRATE	GHS07, GHS03 Wng Ox. Liq. 3, H272 Eye Irrit. 2, H319		10 <= x % < 25
CAS: 50-00-0 EC: 200-001-8  FORMALDEHYDE	GHS06, GHS05, GHS08 Dgr Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Acute Tox. 3, H331 STOT SE 3, H335 Muta. 2, H341 Carc. 1B, H350	B D [1] [2]	0 <= x % < 0.1

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

##### > Information on ingredients :

- [1] Substance for which maximum workplace exposure limits are available.  
[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

### >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 eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.  
If there is any redness, pain or visual impairment, consult an ophthalmologist.

##### > 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 non first aid worker

Avoid any contact with the skin and eyes.

#### 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.

Avoid eye contact with this mixture.

#### 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 :

- France (INRS - ED984 / 2019-1487) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
50-00-0	0.5	-	1	-	C3	43

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
50-00-0	2 ppm 2.5 mg/m <sup>3</sup>	2 ppm 2.5 mg/m <sup>3</sup>			

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

FORMALDEHYDE ...% (CAS: 50-00-0)

#### >

##### Final use:

Exposure method:

Potential health effects:

##### Workers.

Dermal contact.

Long term systemic effects.

**CHRYSO®Xel 655 - PF001494Q**

DNEL : 240 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term local effects.  
DNEL : 37 µg of substance/cm2

Exposure method: Inhalation.  
Potential health effects: Short term local effects.  
DNEL : 1 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 9 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term local effects.  
DNEL : 0.5 mg of substance/m3

l> **Final use: Man exposed via the environment.**

Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 4.1 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term local effects.  
DNEL : 12 µg of substance/cm2

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 3.2 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term local effects.  
DNEL : 0.1 mg of substance/m3

**SODIUM NITRATE (CAS: 7631-99-4)**

**Final use:**

Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 20.8 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 36.7 mg of substance/m3

**Final use:**

**Man exposed via the environment.**

Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 12.5 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 12.5 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 10.9 mg of substance/m3

## 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 with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

#### - 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 EN374.

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)

Recommended properties :

- Impervious gloves in accordance with standard EN374

#### l> - 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.

## l>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

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

#### General information :

Physical state :	Fluid liquid.
Odour :	Characteristic
Colour :	Brown

#### l> Important health, safety and environmental information

pH :	10.50 . Slightly basic.
Boiling point/boiling range :	Not relevant.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	> 1
Water solubility :	Soluble.
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

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

#### 11.1.1. Substances

##### > Acute toxicity :

FORMALDEHYDE ...% (CAS: 50-00-0)

Oral route :

LD50 = 640 mg/kg

Species : Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :

LD50 = 270 mg/kg

Species : Rabbit

Inhalation route (Gas) :

LC50 = 750 ppm

Duration of exposure : 4 h

SODIUM NITRATE (CAS: 7631-99-4)

Oral route :

LD50 = 3430 mg/kg

Species : Rat

Dermal route :

LD50 > 5000 mg/kg

Species : Rat

##### > Skin corrosion/skin irritation :

FORMALDEHYDE ...% (CAS: 50-00-0)

Corrosivity :

Causes severe skin burns.

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

### Serious damage to eyes/eye irritation :

SODIUM NITRATE (CAS: 7631-99-4)

Corneal haze :

Average score = 2.5

Species : Rabbit

Duration of exposure : 72 h

Iritis :

Average score = 1

Species : Rabbit

**CHRYSO®Xel 655 - PF001494Q**

Duration of exposure : 72 h

Conjunctival redness :

Average score = 2.5  
Species : Rabbit  
Duration of exposure : 72 h

Conjunctival oedema :

Average score = 2.5  
Species : Rabbit  
Duration of exposure : 72 h

**l> Respiratory or skin sensitisation :**

FORMALDEHYDE ...% (CAS: 50-00-0)

OECD Guideline 406 (Skin Sensitisation)

Species : Guinea pig  
OECD Guideline 406 (Skin Sensitisation)

SODIUM NITRATE (CAS: 7631-99-4)

Local lymph node stimulation test :

Non-Sensitiser.

**l> 11.1.2. Mixture**

**l> Respiratory or skin sensitisation :**

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

**l> Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 50-00-0 : IARC Group 1 : The agent is carcinogenic to humans.

CAS 102-71-6 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

**l>SECTION 12 : ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**l> 12.1.1. Substances**

FORMALDEHYDE ...% (CAS: 50-00-0)

Algae toxicity :

ECr50 = 0.3 mg/l  
Species : Desmodesmus subspicatus  
Duration of exposure : 24 h

SODIUM NITRATE (CAS: 7631-99-4)

Fish toxicity :

LC50 >= 100 mg/l

Crustacean toxicity :

Species : Daphnia magna

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability**

**l> 12.2.1. Substances**

FORMALDEHYDE ...% (CAS: 50-00-0)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

SODIUM NITRATE (CAS: 7631-99-4)

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. 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

-

#### 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

-

### 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.



**CHRYSO®Xel 655 - PF001494Q**

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

H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects .
H350	May cause cancer .

**l> Abbreviations :**

DNEL : Derived No-Effect Level  
CMR: Carcinogenic, mutagenic or reprotoxic.  
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).  
GHS07 : Exclamation mark  
PBT: Persistent, bioaccumulable and toxic.  
vPvB : Very persistent, very bioaccumulable.  
SVHC : Substances of very high concern.