



Material safety data sheet

CHRYSO® STX

Early strength activator for PFA
 and slag cement blends

1. Identification of substance/preparation and company

Substance/preparation

Trade name: CHRYSO® STX

Normal use: Cement additive

Company

CHRYSO Southern Africa (Pty) LTD

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Website: www.chryso.com | Sharecall facility: 0861 CHRYSO



2. Composition/information on ingredients

Substances present at a concentration below the minimum danger threshold:

Substance name	Concentration
Sodium Chloride	<25%
STX	<20%

Hazardous substances that are present independently from one another: no known substances within this category.

Other substances representing a hazard: no known substances within this category.

Other substances with occupational limits: no known substances within this category.

3. Identification of hazards

CHRYSO® STX is not classed as hazardous to health by 88/379/EEC directive and is not flammable.

Inhalation

CHRYSO® STX is not expected to present a significant hazard under the anticipated conditions for normal use however inhalation of CHRYSO® STX vapour may cause respiratory irritation.



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Ingestion

The product must not come into contact with food or be consumed because swallowing **CHRYSO® STX** represents a health hazard and may create symptoms like abdominal pain and nausea.

Eyes

CHRYSO® STX will act as an irritant when it comes into contact with one's eyes and may cause redness, pain and blurred vision.

Skin

Repeated or prolonged contact with the skin will cause irritation

4. First aid

As a general rule, always call a doctor in case of doubt or if symptoms persist. Never induce swallowing in an unconscious person.

Inhalation

In the event of exposure by inhalation, move the patient into fresh air and keep him/her warm and still. If coughing persists, call a doctor. If breathing is irregular or has stopped, give mouth-to-mouth resuscitation and call a doctor. Do not give the patient anything orally.

Ingestion

With ingestion, wash out mouth thoroughly with fresh water, but do not induce vomiting. Seek medical advice and show this material safety data sheet.

Eyes

If **CHRYSO® STX** is splashed in or has any contact with a person's eyes – hold the eyelids open and wash thoroughly with water. Regardless of the initial state, refer the patient to an ophthalmologist and supply this material safety data sheet.

Skin

Should **CHRYSO® STX** have any contact with the skin, wash the affected area with soap and water. Obtain medical attention if irritation persists.



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5. Fire fighting measures

This is not relevant as **CHRYSO® STX** is not flammable. However, toxic gas may be emitted on thermal decomposition and fire fighting personnel should be equipped with autonomous insulating breathing apparatus. Foam and carbon dioxide should be used as extinguishing media. Water is an unsuitable extinguishing media.

6. Measures to be taken in the event of accidental spillage

Safety precautions

Consult safety measures under section 7 and section 8 of this material safety data sheet (handling and storage, exposure control/personal safety).

Environmental safety precautions

Prevent any material from entering drains or waterways. Use drums to dispose of waste recovered in accordance with section 13 of this data sheet (disposal considerations). If **CHRYSO® STX** contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures.

Cleaning methods

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, and diatom earth in drums for waste disposal. Clean up spills as soon as possible and use disposable containers. Clean preferably with a detergent, do not use solvents.

7. Handling and storage

The regulations that apply to the storage premises of **CHRYSO® STX** must apply to workshops where the product is handled.

CHRYSO® STX must be handled in accordance with good industrial hygiene and safety procedures. Observe precautions stated on the label as well as industrial safety regulations.

Keep the product away from a person's or an animal's food or drink. All smoking, eating and drinking must be prohibited in premises where the preparation is used. Wash hands and other exposed areas with mild soap before one eats, drinks or smokes and before leaving work. Avoid any contact with the eyes.

CHRYSO® STX must be stored in a tightly closed container in a dry, well ventilated area. Prevent access of any unauthorised personnel onto the premises.



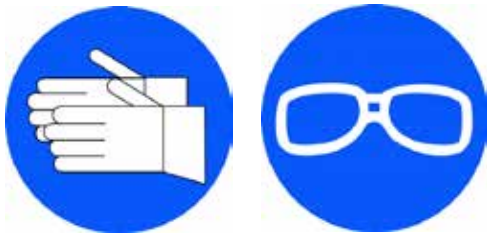
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8. Exposure control/personal safety

Exposure limits per INRS ND 1945-153-93 / (1996) and ND 2022-163-96: substances within this category are unknown.



Respiratory protection

Where exposure through inhalation may occur from use, approved respiratory protection is recommended of class FFP2. Provide adequate ventilation in order to minimise vapour concentrations.

Skin protection

Personnel must wear regularly laundered overalls and physical protective equipment including gloves. The gloves should be resistant to chemical penetration. Protective creams may be used for exposed skin, but they should not be applied after contact with the product.

Eye protection

Avoid contact with eyes and use safety goggles. Supply eye washes in workshops where CHRYSO®STX is constantly handled.

For further information, see section 11 of this safety data sheet (toxicological information).

9. Physical and chemical properties

- | | |
|----------------------------|----------------------------------------------------|
| • Colour: | clear to amber |
| • Active ingredients: | aqueous solution of mineral and organic components |
| • Chloride content: | 14% |
| • Alkali content: | ≤10% Na ₂ O equivalent |
| • Specific gravity (25°C): | 1.157 (±0.0b) |



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- pH (25°C): 5 to 8
- Freezing point: <-20°C
- Flash point: >100°C (not flammable)
- Dry matter (solids content): 22%
- Solubility of preparation in water: diluatable
- Vapour tension at 50°C of volatile constituents: below 110 kPa

10. Stability and reactivity

This material is stable at the handling and storage conditions recommended in section 7 (handling and storage) of this material safety data sheet.

On exposure to high temperatures, **CHRYSO® STX** may decompose, releasing toxic gases like carbon monoxide and carbon dioxide.

11. Toxicological information

CHRYSO® STX contains no substance classed as hazardous per directive 67/548/EEC. No data is available regarding the preparation itself. However, it is generally agreed that **CHRYSO® STX** can cause the lesions on the eye and significant irritation to the skin about 24 hours after exposure. This will only occur if section 7 (handling and storage) as well as section 10 (stability and reactivity) is not adhered to.

12. Ecological information

CHRYSO® STX is harmful to aquatic organisms' and may cause long term adverse effects within the aquatic environment.



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13. Disposal considerations

Do not pour into drains and walkways. Dispose this product and its container at a hazardous or special waste collection point in a safe manner and in accordance with national/municipal regulations; avoid its release into the environment.

14. Transport information

Exempt from transport classification and labelling, transportation of **CHRYSO® STX** must be in compliance with the provisions of ADR for road, RID for rail, IDMG for sea and the ICAO/IATA for air transport.

15. Regulatory information

This preparation is classified in compliance with the directive known as All preparations 88/379/EEC and its adaptations. In addition, directive 91/63/EC with the 22° adaptation of directive 67/548/EC Hazardous Substances has been taken into account

16. Other information

The contents and format of this material safety data sheet are in accordance with EEC Commission Directive 2001/58/EC.

Print date:14/01/2014

Disclaimer: The user's working conditions are not known by **CHRYSO**, the information supplied on this safety data sheet is based on **CHRYSO's** current level of knowledge and on national and community regulations. **CHRYSO®STX** must not be used for any purposes other than those specified under section 1 (identification of the substance/preparation and the company) without first obtaining written 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 given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties. The contents and format of this material safety data sheet are in accordance with EEC Commission Directive 2001/58/EC.

