# CHRYSO<sup>®</sup>Plast IR 209K CHRYSO<sup>®</sup>Plast IR 209K



# Water Reducing Plasticiser

### Features

echnical Datasheet

**CHRYSO®Plast IR 209K** is a concrete admixture which has been specifically formulated to promote dispersion of particles in concrete, resulting in a major improvement in the workability.

**CHRYSO®Plast IR 209K** optimizes the dosage of cement required to obtain a given concrete compressive strength. For an equivalent plasticity and after reducing the quantity of mixing water:

- the concrete is denser;
- there is a reduced capillary action;
- depending on the dosage, there is an increase in compressive strength after 24 hours.

## Benefits

- Enhances the workability retention of concrete in hot climates.
- Water reduction ability.
- The dispersion properties of CHRYSO®Plast IR 209K allow the user to optimise the cement content when a specified mechanical strength is required.
- CHRYSO®Plast IR 209K has water repellent properties and can therefore be used to reduce the permeability of the concrete.

## Areas of Application

CHRYSO®Plast IR 209K is recommended for all concrete mixes where water content, improved cementitious material performance, high workability retention and very high strengths characteristics are desirable.

- 1. All types of cement
- 2. Ready-mix concrete with stable workability
- 3. Concrete of humid or plastic consistency
- 4. Pumped concrete
- 5. Pre-stressed concrete
- 6. Heavy prefabricated elements





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# Description:

#### **Characteristics:**

CHRYSO®Plast IR 209K is a chemically stable liquid.

1.Nature :	liquid
2.Colour :	Brown
3.Density :	$1.22 \pm 0.020$
4.pH :	6 ± 2
5.Cl ions content:	nil to EN 934 and BS 5075

CHRYSO®Plast IR 209K does not contain any purposely added calcium chloride or other chloride based components. It will not promote or contribute to corrosion of reinforcing steel in concrete.

#### Packaging:

- Bulk – IBC: 1000 L – Drums: 215 L – Pails: 20 L
  - **Standard specifications:**

Conforms to ASTM C 494 Type A, B and D and BS-EN 934-2

#### Directions for use: Dosage

between 0.3 and 2.0 kg per 100 kg of cement. The optimum dosage of **CHRYSO®Plast IR 209K** can only be established after trial tests, taking into account local conditions, materials and specification requirements.

**CHRYSO®Plast IR 209K** is completely miscible in water. It can be added to part or all of the mixing water depending on the required plasticity. The correct quantity of **CHRYSO®Plast IR 209K** should be measured using a recommended dispenser.

For ready-mix concrete, **CHRYSO®Plast IR 209K** can be added into the truck mixer just before placing the concrete, then mix again for at least 2 min before pouring.

Because local job conditions vary, please contact your local CHRYSO sales representative for further assistance if using outside recommended dosage ranges.

#### Compatibility

**CHRYSO®Plast IR 209K** is compatible with all types of Portland cement, class C and F fly ash, slag, micro silica, calcium chloride, fibers and approved air entraining admixtures.

#### **Precaution:**

• Store away from frost. Use CHRYSO®Plast IR 209K at a temperature superior to 0°C.

• Should the product freeze, its properties can be recovered after thawing and agitating thoroughly.

Shelf life: 12 months.

#### ■ Safety:

**CHRYSO®Plast IR 209K** is not considered dangerous to handle. Please refer to the material safety data sheet for additional information.

#### **About CHRYSO:**

Worldwide leader for cement and concrete additives for over 70 years, **CHRYSO** has been designing, producing, specifying and delivering its added-value solutions to the construction professionals with outstanding innovation and quality service. As a result, **CHRYSO**'s brand and products have been associated with the most prestigious and demanding construction projects over the globe.

#### Manufactured under License by,



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The information contained in this document is given to the best of our knowledge and is the result of extensive and controlled testing. However, it cannot under any circumstances be considered as a warranty involving our liability in the case of misuse. Tests should be conducted before the product is used to ensure that the methods and conditions of use of the product are satisfactory. Our specialists remain at the disposal of customers if they require help with the application of the product for their specific needs.

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# **MATERIAL SAFETY DATA SHEET**

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# **CHRYSO®Plast IR 209K**

Producer Arshia Orang Co. Zip Code 1467885484 Tehran, Iran Tel: +98 21 88370130 up to 4 Fax: +98 21 88075715

### 1. Identification of the product and the company

Identification of the product: Liquid. Company identification: See producer. Trade name: **CHRYSO®Plast IR 209K** Type of product: Concrete and mortar admixture. Use: Industrial.

#### 2. Information on ingredients

Lignosulfonate Organic Polymer - CAS No: 8061-52-7

#### 3. Hazards identification

Symptoms relating to use

- Inhalation: Overexposure to vapors may result in: Headache. Cough.
- Skin contact: Repeated or prolonged skin contact may cause irritation.
- Eye contact: Eye irritant upon direct contact.

- Ingestion: Must not come into contact with food or be consumed. Swallowing a small quantity of this material presents some health hazard. Abdominal pain, nausea

#### 4. First aid measures

- Inhalation: Assure fresh air breathing.

Obtain medical attention if breathing difficulty persists.

- Skin contact: Wash skin thoroughly with mild soap and water.

Seek medical attention if irritation develops.

- Eye contact: Rinse immediately with plenty of water.

Seek medical attention immediately.

- Ingestion: Rinse mouth. DO NOT INDUCE VOMITING. Seek medical attention immediately.

#### 5. Fire - fighting measures

- Extinguishing media: Carbon dioxide. Foam.

- Protection against fire: Wear proper protective equipment.

Do not enter fire area without proper protective equipment,

including respiratory protection.

- Special procedures: Exercise caution when fighting any chemical fire.

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# MATERIAL SAFETY DATA SHEET

# CHRYSO®Plast IR 209K

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#### 6. Accidental release measures

- Personal precautions: Equip cleanup crew with proper protection.
- Environmental precautions: Prevent entry to sewers and public waters.
  - Notify authorities if liquid enters sewers or public waters.
- After spillage and/or leakage: Clean up any spills as soon as possible,

using an absorbent material to collect it.

#### 7. Handling and storage

- Storage: Store in dry, well-ventilated area. Keep container closed when not in use.

- Handling: Ensure prompt removal from eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

#### 8. Exposure controls I personal protection

Personal protection



- Respiratory protection: Where exposure through inhalation may occur from use,

approved respiratory protection equipment is recommended.

- Hand protection: Gloves.
- Skin protection: Wear proper protective equipment.
- Eye protection: Goggles.
- Ingestion Industrial: Don't eat or drink.
- hygiene: Provide good ventilation in process area to prevent formation of vapor.

#### 9. Physical and chemical properties

- Physical state: Liquid
- Color: Brown
- Odor: Characteristic
- pH value: 4.0 to 8.0
- Density: > 1
- Solubility in water: Complete

#### 10. Stability and reactivity

Hazardous reactions: None under normal conditions.

#### 11. Toxicological information

Rat oral LDSO [mg/kg]: No data available.

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# 12. Ecological information

LCSO-96 Hour - fish [mgll] : No data available.

## 13. Disposal considerations

Disposal: Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container at hazardous or special waste collection point.

# 14. Transport information

General information: Not regulated.

# 15. Regulatory information

Symbol(s) R: None. Phrase(s) S: None. Phrase(s): None

# 16. Other information

Further information: None.

The contents and format of this MSDS are in accordance with EEC Commission Directive 2001/58/EC.

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