

# Health and Safety Recommendations for Hourdex Multi Use Binder from St Astier

See also: Hourdex Data Sheet

## Product and Manufacturer Identification

- **Product:** *Hydrated Natural Hydraulic Lime 35 kg bags, grey cement and additives as per EN/BS 459.1.*  
**Commercial Name:** *Hourdex*
- **Manufacturer:**  
**Name:** *Dordognaise (C.E.S.A. Group)*  
**Adresse:** 24110 St Astier, France  
**Tel:** 05 33 54 1125  
**Fax:** 05 33 04 6791
- **In case of Urgency:**  
**France:** - ORFILA, Tel : 01 45 42 5959  
**UK:** – The Lime Line 0800 7839014  
**Ireland:**– The Traditional Lime Co. 05991 51750

## Components

LIME

CAS No : 1305-62-0

Name (ref Dir. EU) : calcium hydroxyde

Symbol : Xi

Risk phrase : R-41

EINCECS No. : 215-137-3

CEMENT

65997-15-1

Portland White

Xi

R36/37/38-43

266-043-4

## IDENTIFICATION OF DANGERS

Risk symbol	Principal risks for people and the environment
<b>X<sub>i</sub></b>	<ul style="list-style-type: none"><li>• Hydraulic lime is irritant for eyes, respiratory track and mucous membranes.</li><li>• Risk of severe eye damage in cases of splashes of powder or wet mortar in the eyes.</li><li>• Once hydrated, Hourdex increases alcalinity and therefore can irritate or dry the skin.</li><li>• In cases of significant ingestion Hourdex is caustic for the digestive tract. It can cause burning of the mouth, esophagus and stomach.</li><li>• Hourdex does not present particular risks for the environment subject to the recommendations in section XIII and the respect of national or local disposal directives.</li></ul>

## First Aid Measures

<b>Contact with eyes</b>	<ul style="list-style-type: none"><li>• Wash immediately and abundantly with clean water and consult an ophthalmologist.</li></ul>
<b>Contact with the skin</b>	<ul style="list-style-type: none"><li>• Wash the affected area abundantly with clean water. Afterwards wash again with soap or light detergent.</li><li>• Wear protective clothing</li></ul>
<b>Inhalation</b>	<ul style="list-style-type: none"><li>• Wash nose and throat with clean water. Breathe fresh air. If necessary consult a doctor.</li></ul>
<b>Ingestion</b>	<ul style="list-style-type: none"><li>• Wash mouth, drink water and consult a doctor.</li></ul>

## ANTI FIRE MEASURES

- The product is not flammable.
- All fire extinguishing agents can be used.
- Above 950°C the lime will produce CO<sub>2</sub> emission.

## ACCIDENTAL SPILLAGE MEASURES

<b>Individual precautions</b>	<ul style="list-style-type: none"><li>• Avoid all contacts with the eyes</li><li>• Avoid contact with the skin</li><li>• Handle the product with appropriate gloves</li><li>• Wear a mask if required</li></ul>
<b>Protection of the environment</b>	<ul style="list-style-type: none"><li>• Do not dispose of Hourdex in sewers, drains and on surface waters</li></ul>
<b>Cleaning and recovery methods</b>	<ul style="list-style-type: none"><li>• Avoid creating dust when collecting loose product. Once hardened the product can be collected as a normal construction debris. The hardening process is variable in accordance with weather conditions and water addition but is never below 1 hour.</li></ul>

## USAGE, STOCKING AND HANDLING PRECAUTIONS

STOCKING	HANDLING
<ul style="list-style-type: none"><li>• Keep away from children reach.</li></ul>	<ul style="list-style-type: none"><li>• Wear appropriate gloves</li><li>• Avoid inhaling the dust, wearing a mask if necessary</li><li>• To avoid contact with the eye, wear suitable safety goggles</li><li>• Manual handling : observe local health and safety directives</li></ul>

## CONTROL PROCEDURES FOR WORKERS' EXPOSURE AND TYPE OF EQUIPMENT FOR INDIVIDUALS' PROTECTION

### Exposure control:

Total Dust Limit:	10 mg/m <sup>3</sup>
Air borne dust limit:	5 mg/m <sup>3</sup>

### Individuals' protection:

Inhalation protection	Wear appropriate mask
Hand protection	Wear appropriate gloves
Eyes protection:	Wear goggles to avoid risk of splashes in the eyes
Skin protection:	Wear suitable protective work clothing

## PHYSICAL AND CHEMICAL PROPERTIES

Aspect	Grey Powder
Odour	None
Fusion temperature	> 1000°C
Ignition Temperature	Not Flamable
Danger of Explosion	Not Explosive
Solubility in water	> 1.5 g/l at 20°C
PH	Between 12 and 13 (in saturated solution)
Apparent volumetric mass	0.65 g/cm <sup>3</sup> (20°C)
Absolutre volumetric mass	2.6 g/cm <sup>3</sup> (20°C)
Granulometry	20% to 30% fines < 0.05mm

## STABILITY AND REACTIVITY

Stability:	The product is stable at all temperatures
Conditions to avoid:	Storage in damp areas to avoid an hydraulic set
Materials to avoid:	Reacts strongly with acids, generating CO <sub>2</sub>

## TOXICOLOGICAL INFORMATION

<b>Inhalation:</b>	Inhalation can cause irritation of the respiratory ways and of the nasal mucose. In extreme cases the mucose can be eroded
<b>Ingestion:</b>	Large ingestion can cause burining of the mouth, exophagus and stomach
<b>Skin contact:</b>	Can irritate the skin due to its high alcalinity
<b>Contact with the eyes</b>	Can cause irritation of the eye and the pupil Proplongued rinsing is necessary
<b>Cronic skin pathology</b>	Prolongued exposure without adequate protection (eg. gloves) can cause dermatological irritation

## ECOLOGICAL INFORMATION

<b>Mobility:</b>	None
<b>Potential bio-accumulation:</b>	None
<b>Ecotoxicity:</b>	<ul style="list-style-type: none"><li>• Hourdex is an alcaline material that brings the water pH to 12.4 in saturated solution</li><li>• The carbonation process, with time, re-constitutes Calcium Carbonate (CaCO<sub>3</sub>) which is a neutral material in ecological terms.</li></ul>

## DISPOSAL INFORMATION

- The product in its hardened state can be disposed of as a normal construction debris
- Dispose of used bags in authorised refuse areas in accordance with local directives.

## TRANSPORT INFORMATION

Hourdex is not subject to ADR, RID, IMDG and IATA regulations.  
In general, avoid spillages of powder during transport.

### NOTE:

- ADR : European agreement on road transport of dangerous substances.
- RID : International rail transport regulation for dangerous substances.
- IMDG : International maritime dangerous goods code.
- IATA : International Air Transport Association.

## COMPULSORY INFORMATION

Risk Symbol	X <sub>i</sub> irritant
Principal Constituent	Calcium hydroxide
Phrases R:	<ul style="list-style-type: none"><li>• R36/37/38- irritant for the eyes, respiratory ways and the skin</li><li>• R41 - risk of severe lesion to the eyes</li><li>• R43 – can damage the skin</li></ul>
Phrases S:	<ul style="list-style-type: none"><li>• R36/37/38- irritant for the eyes</li><li>• S24/25 – avoid contact with the skin and the eyes</li><li>• S26 in case of contact with the eyes, wash immediately and abundantly with clean water and consult a specialist</li><li>• S37 – wear appropriate gloves</li><li>• S39 - wear protective eye goggles.</li></ul>

**OTHER INFORMATION: None**

*The recommendations in this document are based on our knowledge as it stands today related to Natural Hydraulic Limes, sands and additives. They are given in good faith.*

**Under no circumstance the information can be considered as a quality guarantee.**

**The User attention is drawn to the eventual risks caused by the utilisation of a product for different purposes from the ones for which the product has been envisaged. It is the responsibility of the User to adopt the appropriate safety measures and to apply all regulations current at the time of use. The prescriptions contained in this document are given to help the User to fulfill its obligations. The precautions listed cannot be considered as exhaustive.**

See also: [HOURDEX Data Sheet](#)

**For further Guidance, contact your St Astier Distributor.**  
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