



CALCIUM ALUMINATE CEMENTS

GÓRKAL 40, GÓRKAL 40M, GÓRKAL 50

1. SUBSTANCE IDENTIFICATION

- 1.1. Name of substance Calcium Aluminate Cements
GÓRKAL 40, GÓRKAL 40M, GÓRKAL 50
- 1.2. Purpose production of concretes and refractory mortars as well as ingredient of construction chemistry products
- 1.3. Data concerning manufacturer
- | | |
|------------------|--------------------------------|
| Manufacturer | Górka Cement Sp. z o.o. |
| Street | 22 Lipca 58 |
| Postal code/city | 32-540 Trzebinia |
| Country | Poland |
| Telephone no. | ++48 32 758 10 99 |
| Fax | ++48 32 623 34 50 |
| e-mail | sekretariat@gorka.com.pl |
| website | www.gorka.com.pl |
- 1.4. **Emergency contact number** **++48 32 758 10 99**

2. HAZARD IDENTIFICATION

- 2.1. After mixing with water an alkaline solution is formed (pH 11 –11,5). In contact with the skin and the eyes a slight temporary irritation may occur. The alkaline reserve anyway is not enough to consider the product irritant according to the criteria of Directive 67/548EEC (and further adaptations to technical progress).
- 2.2. A relevant dust concentration may occur when used in confined areas. It is regarded as nuisance dust with any known specific effects to health.
- 2.3. The reaction of hardening is exothermic. In large quantities the temperature may increase enough to cause a risk of burns.

3. COMPOSITION AND INFORMATION ABOUT INGREDIENTS

- 3.1. Chemical and mineralogical composition Inorganic hydraulic binder obtained from calcium aluminates clinker
Chemical composition of the substance: Al_2O_3 , CaO, Fe_2O_3 , SiO_2
Mineralogical composition: CA, $C_{12}A_7$, C_4AF , C_2AS
Does not contain free CaO and crystalline SiO_2
- 3.2. CAS number 65997-16-2 (calcium aluminates)
- 3.3. Hazardous components declaration and classification of components according to the EU Commission Directives 91/155/EEC, 67/548/EEC (and further adaptations to technical progress) and 1999/45/EC.
Calcium aluminates: classification - none
hazard labeling – none

4. FIRST AID

- 4.1. First aid measures
- breathing in dust** - remove the affected person from the dusty place
skin contact - wash with water
eye contact - rinse with plenty of water, medical assistance recommended
ingestion – wash out with water and give plenty of water to drink

5. FIRE FIGHTING MEASURES

Non-flammable substance



CALCIUM ALUMINATE CEMENTS

GÓRKAL 40, GÓRKAL 40M, GÓRKAL 50

6. ACCIDENTAL RELEASE INTO THE ENVIRONMENT

- 6.1. Methods of neutralization if spilt remove mechanically in dry conditions, prevent from penetration into wastewater, sewage and running water. Hardened cement may be used as construction rubble

7. SUBSTANCE HANDLING AND STORAGE

- 7.1. Storage keep in a well-ventilated, dry place in bags on pallets, protect from moisture; environment humidity may not exceed 50%; in such conditions the product may be stored for 6 months
- 7.2. Handling work with the substance should be carried out in rooms that can be ventilated

8. EXPOSURE CONTROL AND MEANS OF PERSONAL PROTECTION

- 8.1. MAC values **Total dust** 6 mg/m³
Respirable dust 2 mg/m³

The MAC value for dust in the workplace is based on the Decree of the Minister of Labour and Social Policy of 29th November 2002 with regard to the maximum admissible concentration and intensity of health-damaging factors in the workplace (Polish Official Journal of Laws no. 217 item 1833 with later changes)

- 8.2. Methods of exposure evaluation analyses of the work environment carried out by an authorized Environmental Research Laboratory
- 8.3. Means of personal protection dust-mask, protective clothing, safety gloves and safety boots are suggested

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.2 **Physical state** solid
- 9.3 **Form** brown powder
- 9.4 **Smell** odorless
- 9.5 **pH** 11 – 11,5
- 9.6 **Specific temperatures:** boiling point not applicable
melting point 1280°C
flash point not applicable
auto ignition point not applicable
- 9.7 **Flammability** **non-flammable**
- 9.8 **Explosive properties** **not explosive**
- 9.9 **Oxidation properties** **no oxidation properties**
- 9.10 **Vapour pressure** **not applicable**
- 9.11 **Solubility in water** **slightly soluble (solubility of unhydrated calcium aluminates is approximately 3,5 g/l)**
- 9.12 **Solubility in organic solvents** **insoluble in organic solvents**

10. STABILITY AND REACTIVITY

the substance is stable under normal storage and handling conditions

11. TOXICOLOGICAL INFORMATION

- 11.1. **Acute toxicity** none
- 11.2. **Local effects** may cause local temporary irritation to eye, throat or skin, but it is not classified as irritant according to EU legislation
- 11.3. **Sensitization and chronic toxicity** does not contain measurable amounts of soluble Chromium (VI) potentially causing allergic skin eczema or cancer.



CALCIUM ALUMINATE CEMENTS

GÓRKAL 40, GÓRKAL 40M, GÓRKAL 50

12.ECOLOGICAL INFORMATION

the substance has no adverse effect on the environment

13.WASTE HANDLING

packaging waste is recyclable (Product Fee Act)

14.INFORMATION REGARDING TRANSPORT

the substance does not require special precautions during transport

15.LEGAL REGULATIONS

15.1. Hazard and safety label – classification according to European Commission Directives 67/548/EEC (and further adaptations to technical progress) and 1999/45/EC – none (not classified as a dangerous product).

Symbol – none

R – phrases – none

S 22 – do not inhale the powder

S 25 – avoid contamination of the eyes

S 26 – in case the product contaminates eyes rinse them immediately with abundant quantity of water, medical help advisable

S 36/37 – wear suitable protective cloth and gloves

Legal basis for preparation of this data sheet

15.2. The commission Directive of the European Communities 91/155/EEC.

15.3. The commission Directive of the European Communities 67/548/EEC (and further adaptations to technical progress).

15.4. The commission Directive of the European Communities 1995/45/EC.

15.5. Act of 11th Jan 2001 on chemical substances and preparations (Polish Official Journal of Laws 11/2001, item 84).

15.6. Act of 27th Apr 2001, Law on Environmental Protection (Polish Official Journal of Laws 62/2001, item 627)

15.7. Act of 27th Apr 2001 on waste (Polish Official Journal 62/2001, item 628).

15.8. Decree of the Minister of Health of 2nd Oct 2003 on the criteria and ways of classification of chemical substances and preparations (Polish Official Journal of Laws No. 171 item 1666).

15.9. Decree of the Minister of Labour and Social Policy of 29th Dec 2002 on the maximum admissible concentration and intensity with adverse effects on health in the workplace (Polish Official. Journal of Laws no. 217 item 1833 with later changes).

16.OTHER INFORMATION

16.1. The product doesn't require the use the chrome (VI) reducing agent.

16.2. The information contained in this data sheet regards exclusively the substance described herein. The user is obliged to evaluate and to use the substance in a safe way, according to the applicable laws and regulations.

16.3. Form of publication of the data sheet: leaflet printed by GÓRKA CEMENT.

16.4. This data sheet replaces the previous sheets with the symbol KCh/GC/G40/3 of 1st Jan 2007, KCh/GC/G50/3 of 1st Jan 2007.

16.5. Data sheet prepared by: GÓRKA CEMENT Sp. z o. o. in Trzebinia.