

# Lithium carbonate

fine grade 25

for fast applications

# Characterization

Lithium carbonate is a white, free floating powder and is used as accelerator in cementitious mixtures with calcium-aluminat cement.

CAS-Nr. 554-13-2

## **Chemical composition**

Li <sub>2</sub> CO <sub>3</sub>	min.	99,0 %
Cl	max.	0,02 %
Na <sub>2</sub> O	max.	0,20 %
CaO	max.	0,05%
Fe <sub>2</sub> O <sub>3</sub>	max.	0,01%
SO <sub>4</sub>	max.	0,20%

#### **Physical characteristics**

Appearance	free flowing powder
Humidity	max. 0,9%, typical 0,3%
Bulk weight	max. 900 kg/m <sup>3</sup> typical 850 kg/m <sup>3</sup>
Granulometry d <sub>50</sub>	max. 6,9 micron
Granulometry d <sub>97</sub>	max. 20,0 micron

## Function

Lithium carbonate is accelerating calcium-aluminat cement

# **Advantage**

- makes cementitious products of high quality, which can be used in a wide temperature range
- very high early strength, depending on the quantity added
- low quantity in usage
- white stains in the powdery end products are prevented because of the fineness of the powder and its consistent distribution



Application	
	Lithium carbonate can be used in different applications, i.e. in
	<ul> <li>quick setting repair-mortars with high early strength</li> <li>water-stop mortars</li> <li>tile adhesive</li> <li>flooring compounds</li> </ul>
Dosage	Typically $0,02 - 0,1$ % applied to the weight of cement, depending on the desired properties. Compounds containing Lithium carbonate are setting extremely quickly. To get practicable setting times, it is recommended to use a suitable retarder. The exact quantity added and the proportion between lithium carbonate and retarders must be found out in laboratory tests before
	practical application.
Processing	
	Lithium carbonate should be added to the dry mixture after the addition of cement and aggregates with appropriate blender-techniques to get a consistent distribution in the fin- ished product.
	It is strongly recommended not to add the product on the spot as distribution will not be guaranteed
Compatibility	
	Lithium carbonate is compatible with Portland cement and hydraulic binders, including, blast furnace slag fly ash and lime hydrate
Safety precaution	
	Hazard symbol
	Xn harmful
	Avoid eye and skin-contact. Wear safety-glasses and gloves. For more details see safety data sheet.
Storage	
	Lithium carbonate is sensitive to humidity and must be stored in a dry and cool place
Packaging	
-	25 kg Bags 900 kg per palette
	nd recommendations are based upon our experience and are offered merely for advice. consumer from making his own tests. Responsibility for damage arising from the use of our

The above information and recommendations are based upon our experience and are offered merely for advice. They do not absolve the consumer from making his own tests. Responsibility for damage arising from the use of our products cannot be derived from the recommendations given. The observance of any intellectual property rights of third parties is the responsibility of the consumer in each case

MDS 2009-05-v3e



Felsenstrasse 12, CH-8808 Pfäffikon, Switzerland – www.newchem.info