

# Sofnolime® 1025 Instrument Grade

White to violet indicating  
Size range 1.0-2.5mm granules

A high performance absorbent with a white to violet colour change when carbon dioxide is absorbed



## Applications

Sofnolime® 1025 is a high performance carbon dioxide absorbent, specifically for use in a laboratory environment when a colour change is required.

The product will also absorb H<sub>2</sub>S and SO<sub>2</sub>, which also initiates the colour change.

## Properties

Water Content	16 - 20%
Total Alkali Metal Hydroxide (as NaOH)	2.0 - 3.5% (nominal range)

## Particle size

Greater than 3.0mm	<2.0%
Between 2.5 & 3.0mm	<3.0%
Between 1.0 & 2.5mm	Balance
Between 0.6 & 1.0mm	<4.0%
Smaller than 0.6mm	<0.5%
Hardness	80.0% Min
Activity (see Notes)	19.0% Min

## Colour Indicator

Sofnolime® contains a colour indicator which changes the granules from white to violet when carbon dioxide is absorbed. This colour change is not permanent and will slowly revert back to white.

## Availability

Sofnolime® 1025 Instrument Grade is available in 2 x 4.5kg twin pack and 20 x 1kg securitainer.

## Notes

Activity is determined by passing air containing 4.76% carbon dioxide at a relative humidity of 90% at 20°C through a sample of Sofnolime® with a total residence time of two seconds and measuring the time taken for the outlet carbon dioxide level to exceed 0.02%.

## How it works

Sofnolime® removes carbon dioxide (and other acidic contaminants) from gas streams via an exothermic, water facilitated, base catalysed chemical reaction. The Sofnolime® contains a carefully controlled level of water which aids the reaction. Water is also formed as a by-product of the reaction. The reaction proceeds in 3 stages:

(i) Reaction at aqueous layer



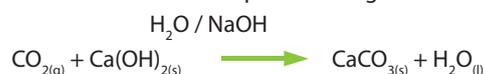
(ii) Bicarbonate formation



(iii) Decomposition/regeneration of NaOH catalyst



The overall balanced equation being :-



## Quality

Molecular Products Ltd's aim is to manufacture chemical products which satisfy completely the needs of our customers. All products are rigorously tested to ensure conformance to the specification. Our activities comply to the requirements of ISO 9001.

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