

# Sofnolime® 1025

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 absorbent and is suitable for use where 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

Retained on 2.80mm screen	1.0% Max
Retained on 2.00mm screen	30.0% Max
Retained on 1.40mm screen	Balance
Retained on 0.60mm screen	20.0% Max
Passing 0.60mm screen	1.0% Max
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 white to violet is available in 2 x 4.5kg packs and 20 kg kegs

## 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



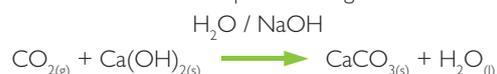
(ii) Bicarbonate formation



(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 ISO9001:2008.

## Molecular Products Limited

Parkway, Harlow Business Park,  
Harlow, Essex, CM19 5FR, UK

**T** +44 (0)1279 445111  
**F** +44 (0)1279 401231

**E** sales@molprod.com  
**W** www.molecularproducts.com