

S CANISTER

FILLED WITH SOFNOLIME, THE S CANISTER IS A CO₂ SCRUBBER FOR USE IN PRE-EXISTING MAINFOLD SYSTEMS ON SUBMARINES TO MAINTAIN A BREATHABLE ATMOSPHERE.



APPLICATIONS

- Submarine primary system
- Commercial submarines

DIMENSIONS (WITHOUT LIDS)

Length x width (mm)	199.5 x 135
Height (mm)	221

PROPERTIES

- Highly volumetrically efficient (136 litres of CO₂ absorption per kg soda lime)
- Reliable operation
- Easy to use
- No maintenance
- Watertight seals

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



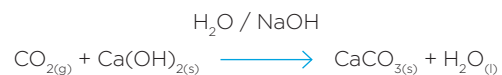
(ii) Bicarbonate formation



(iii) Decomposition/regeneration of NaOH catalyst



The overall balanced equation being



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SPECIFICATIONS

Sofnolime Grade	2050 (2.0 - 5.0 mm) NI L Grade
Carbon dioxide removal capacity of unit	> 503 litre/unit @ 266 litre/min @ 1% carbon dioxide
Minimum Sofnolime fill	3.7 kg
Shelf life	5 years
Storage volume per unit	6.2 litre

DIMENSIONS

Sofnolime Grade	2050 (2.0 - 5.0 mm)
Unit weight	4 kg
Pressure drop	≤ 45 mm H ₂ O 90 litre/min (flow rate)
Unit Dimensions / mm (w x l x h)	135 x 199.5 x 230mm (with lids)

ADDITIONAL INFORMATION

Packaging, Transportation & Disposal

Canisters are packed in boxes. Each box contains 4 canisters. Each pallet will have 24 boxes (3 layers of 8 boxes), 96 units per pallet. Pallet 100 x 120 cm. Box 429 (L) x 289 (W) x 244 (H)mm. Total pallet gross weight is 550 kg.

Sofnolime

Sofnolime is a soda lime absorbent for removal of carbon dioxide and other acidic contaminants from gas streams. Sofnolime is an active compound formed by mixing calcium and sodium hydroxide. It is supplied as hard, porous, irregularly shaped granules which have been processed to maximise carbon dioxide absorption and minimise dust formation.

Disposal

The units should be disposed of in accordance with local legislation.

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.

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