

Sorbent IAC-731

- Calcium / sodium hydroxide
- With color indicator, slightly alkaline
- Fine cleaning agent for air and inert gases
- Removes carbon dioxide (CO₂) from air
- Removes acid gases (SO₂, SO₃, HCl, HBr etc.)
- Residual contents <0.1ppm
- Significant color change at saturation



Description and Application

The sorbent IAC-731 is a basic chemical sorbent filter material of calcium- and sodium hydroxide. Due to its slightly alkaline character, this sorbent reacts with all acidic gas components by forming salts (neutralization).

The main application is the removal of carbon dioxide (CO₂) from humid air and other technical gases.

The very high absorption capacity (450g CO₂ per kg sorbent) guarantees with careful design long service life with low maintenance.

Technical Data

Composition:	Ca (OH) ₂ / NaOH; Calcium- and sodium hydroxide, granulated
Shape:	pieces, 1.0mm to 2.5mm Ø
Color:	Beige (unsaturated) to Violet (saturated)
Bulk volume:	approx. 850g/l
Water content:	16% to 20%
NaOH content:	2% to 3.5%
CO ₂ adsorption capacity:	34 ± 2 wt% (USP test, 100% CO ₂) 21 ± 2 wt% (5% CO ₂ in air at 60% RH)
Dwell time:	0.5 seconds to 1.8 seconds
Working temperature:	0°C to 35°C
Needed relative humidity:	20% to 95%

Ordering Information

Ordering information		Quantity	Volume	Packaging
Article-No.	Type	[g]	[l]	
700211	IAC-731wv-1L	850	1,0	PE-Wide Neck Bottle
700212	IAC-731wv-4L	3400	4,0	PE-Wide Neck Bottle
700075	IAC-731wv-5L	4250	5,0	PE-Wide Neck Bottle

Operation and Application

According to the principle of adsorptive gas purification, the gas stream to be purified is passed through the sorbent-filled adsorber.

For flow reasons, IAC-731 should be arranged standing or sloping. The flow is generally from top to bottom.

The adsorbent bed must be supported according to its mass with suitable supporting layer. Depending on the requirement for particle cleanliness, a dust filter with a corresponding degree of separation efficiency needs to be connected to the adsorber.

The sorbent IAC-731 is not suitable for

the purification of concentrated acid gases such as halogens (F₂, Cl₂, Br₂, HCl, HBr, HJ, HF), sulfuric acid (SO₂, SO₃, H₂S), nitrous gases (NO_x), phosphine, etc. because they, with intense heat development, immediately react with it.

Regeneration, Disposal

A regeneration of the sorbent IAC-731 is not possible.

Used material (recognizable by the violet color) must be disposed of according to the legal regulations.

Storage

Since basic sorbents adsorb moisture and pollutants from the ambient air and thus lose their activity, they must always be hermetically sealed (such as plastic containers) and stored in a cool and dry storage area (0°C to 35°C).

Unopened containers can be stored for up to two years

IAC-731 must be stored away from direct sunlight.

Safety Instruction



The sorbent IAC-731 is not flammable and is classified as non-corrosive.

The material causes skin irritation and severe eye irritation. Contact with the eyes is absolutely to be avoided

Wear protective gloves / protective clothing / eye protection / face protection!

If you feel unwell, seek medical advice or support.

In case of contact with eyes: Rinse cautiously with water for several minutes. Remove existing contact lenses, if possible. Continue rinsing.

If skin irritation occurs: Get medical advice.



For your attention

This information is based on our current knowledge. They do not exempt the processor from carrying out his own tests and trials.

A legally binding assurance of certain properties or the suitability for a specific application cannot be derived from our information.

Any industrial property rights as well as existing laws and regulations must be observed by the recipient of our products on his own responsibility.