

# ALCAN CHEMICALS

## Product Data

## HYDRATES

### HYDRATE H-10

#### GENERAL CHARACTERISTICS

Alcan Alumina Hydrate H-10 is produced by the Bayer process in the highly reactive alpha trihydrate (gibbsite) form. It is a low-dust product because of its relatively coarse size distribution. Alumina Hydrate H-10 is a white, free-flowing powder.

Alcan Alumina Hydrate H-10 is recommended for the production of:

- low-iron aluminum sulphate
- alumina based catalysts
- sodium aluminate and other aluminum salts
- coated titanium dioxide pigments to resist chalking and discoloration
- ceramic and glass products to increase resistance to thermal shock and to chemical attack
- whitewares to increase lustre and smoothness of glaze
- fire-retardant carpet backing and underlay

Chemical Formula:  $Al_2O_3 \cdot 3H_2O$ , alternately written as  $Al(OH)_3$ , Aluminum Hydroxide.

Specific Gravity: 2.42

Bulk Density: (Loose) 1.12 g/cm<sup>3</sup> (70 lb/cu.ft.)  
(Packed) 1.36 g/cm<sup>3</sup> (85 lb/cu.ft.)

#### SHIPPING

Standard package for Alumina Hydrate H-10:

- 100 lb valve-type multi-wall paper bags, 4000 lbs per pallet.
- 2000 lb bulk bags.

Also available are 50 lb paper bags.

Bulk shipments are made in bottom discharge covered hopper cars, and in bulk trucks.

#### CHEMICAL ANALYSIS

(Maximum Values are Alcan Specifications)

Constituents	% by weight	
	maximum	typical
Soda (Na <sub>2</sub> O)	0.50	0.33
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.020	0.010
Silica (SiO <sub>2</sub> )	0.020	0.013
Free moisture	0.1	0.04
Insolubles in H <sub>2</sub> SO <sub>4</sub>	0.15	0.08
Loss on Ignition (LOI)*	--	34.6
Alumina (Al <sub>2</sub> O <sub>3</sub> ) by difference	--	65.0

\*Loss on ignition (LOI) determination, abstract Alcan Research and Development Limited Standard Method 951.65.

"A 3 g sample is ignited in a furnace in a covered, tared 20 ml platinum crucible for 2 hours at 1000°C, cooled for 45 minutes in a desiccator over fresh anhydrous magnesium perchlorate, and weighed quickly."

#### SIZE DISTRIBUTION

U.S. Standard Screen mesh size	H-10 typical value
on 100	5-10%
through 200	23-35%
through 325	3-9%

Specifications apply to lot quantities. Quality analyses are carried out on representative samples of lot quantities.

## Alcan Chemicals

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