

### Aluminium Trihydroxide

#### Section 1 Identification of the Substance and the Company:

##### 1.1 Identification of the substance

Aluminium trihydroxide.

Also called: Hydrated alumina, aluminium hydrate, and superfine alumina  
Titan 4E/Titan 7E

##### 1.2 Use of the substance:

Many industrial applications, including as a flame-retardant filler for plastics, catalyst support material, ceramics, and toothpaste.

##### 1.3 Company identification:

Industrial Chemicals (US) Limited  
50 Sugar Mill Road, Lecompte, LA 71346

(318) 767-3540                      General telephone enquiries  
[sds@icgl.co.uk](mailto:sds@icgl.co.uk)                      Safety data sheet enquiries

##### 1.4 Emergency telephone:

(318) 767-3420

#### Section 2 Hazards Identification:

Material is non-hazardous for both supply and transport, although it is classified as a nuisance dust..

Respirable dust hazard – average particle size is less than 4 microns.

Mildly irritating to eyes and skin.

Has a drying effect on skin, and may cause irritation by abrasion.

#### Section 3 Composition/Information on Ingredients:

Aluminium trihydroxide:  $\text{Al}(\text{OH})_3$

CAS:                      21645-51-2.

EINECS No:            244-492-7

#### Section 4 First Aid Measures:

Eyes:                      Wash out thoroughly with water or saline solution while holding the eye open. Seek medical attention if necessary.

Skin:                        Wash skin thoroughly with soap and water.

Inhalation:              Remove from exposure and place in fresh air.

Ingestion:                Wash out mouth with water.

#### Section 5 Fire-Fighting Measures:

Material is not combustible.

Use extinguishing media appropriate to the surrounding fire conditions.

#### Section 6 Accidental Release Measures:

Wear appropriate protective clothing.

Avoid creating dust. Sweep up or, preferably, vacuum up and collect in suitable containers for recovery or disposal. Wash affected area with large quantities of water.

MARKETED BY  
**HARWICK STANDARD  
DISTRIBUTION CORPORATION**

**Section 7 Handling and Storage:**

**7.1 Handling:**

Avoid breathing dust. Wear dust mask if appropriate.  
Handle under a local extraction system, if appropriate.  
Avoid contact with skin and eyes.

**7.2 Storage:**

Storage area should be well ventilated.

**7.3 Specific uses:**

**Section 8 Exposure Controls/Personal Protection:**

**8.1: Exposure limit values:**

OSHA PEL 5mg/m<sup>3</sup> TWA (respirable dust).

**8.2 Exposure controls:**

Personal protective measures as appropriate to quantity used.

Respiratory: Dust respirator.  
Ventilation: Extraction hood.  
Hand Protection: Rubber or plastic.  
Eye protection: Goggles or face shield.  
Other measures: Plastic apron, sleeves, boots – if handling large quantities.

**Section 9 Physical and Chemical Properties:**

**9.1 General information:**

Appearance: Fine white powder.  
Odour: Odourless.  
pH, 1% aqueous extract: 9 – 11, 5% in water.  
Tapped density: About 500 kg/ m<sup>3</sup>.  
Bulk density: About 300 kg/ m<sup>3</sup>.  
Average particle size: 1 – 4 micron (d<sub>50</sub>).  
Insoluble in water, alcohol and other organic solvents.

**9.2 Important properties:**

Molecular Formula: Al(OH)<sub>3</sub>

**Section 10 Stability and Reactivity:**

Stable and does not release any form of toxic fume.  
Soluble in strong bases, reacts vigorously with strong acids.

**Section 11 Toxicological Information:**

Toxicity Data: Essentially non-toxic.

Inhalation: High concentrations of dust may irritate nasal membranes and respiratory system.

Chronic exposure to low levels of dust may lead to lung problems.

Skin Contact: May cause slight skin irritation. Repeated and/or prolonged contact may result in dryness and cracking of skin.

Eye Contact: Mildly irritating to eyes.

Ingestion: No effect in reasonable amounts.

**Section 12 Ecological Information:**

Aluminium trihydroxide is non-hazardous to the environment.  
The material is insoluble, and will accumulate in the ground.  
No bioaccumulation potential.

**Section 13 Disposal Considerations:**

Disposal should be in accordance with local or state or national legislation. Landfill should be appropriate.

**Section 14 Transport Information:**

Aluminium trihydroxide is not classed as hazardous for transportation.

**Section 15 Regulatory Information:**

A full Chemical Safety Assessment has not yet been carried out for this substance.

CAS# 21645-51-2 is listed on the TSCA inventory.

Aluminium trihydroxide is classified as non-hazardous for supply, but packaging will carry the following safety phrase:

Do not breathe dust.

**Section 16 Other Information:**

This data sheet was prepared in accordance with EC Regulation No. 1907/2006 concerning REACH. The format was altered to comply with REACH, but no substantive changes were made to the content. Replaces Version 2, March 2006.

This version is for users in North America.

---

The information given in this data sheet is for guidance only and does not constitute a risk assessment under the COSHH Regulations. It is provided in good faith and to the best of our knowledge, but no warranty, express or implied, is made.