

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code	154
Product Name	TABULAR ALUMINA
Contains	Aluminum oxide, CAS 1344-28-1
Synonyms	T60/64 CD and all sizes, T160, T162 all sizes, Filter Bed Alumina (FBA), Premix, Tabalox

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Aluminum filter, Heat exchanger, Inert bed support, Refractory

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Almatis GmbH Lyoner Str. 9 60528 Frankfurt Germany Phone: +49 69 9573410	Almatis GmbH Giulinistrasse 2 67065 Ludwigshafen Germany Phone: +49 621 57070	Almatis B.V. Theemsweg 30 NL-3197 KM Botlek Rt The Netherlands Phone: +31 181270129	Almatis, Inc. 501 West Park Road Leetsdale, PA 15056 USA Phone: +1 412 630-2800
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For further information, please contact

E-mail address info@almatis.com

1.4. Emergency telephone number

Emergency Telephone Number 3E Global Incident Response Hotline (Almatis access code: 334735)

GB: +44 20 35147487
UK: 0 800 680 0425
US: +01 760 476 3961
US: +01 760 476 3959

2. HAZARDS IDENTIFICATION

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No data available

2.2. Label Elements**Symbol(s)**

None

Signal word

None

Hazard statements

None

2.3. Other information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical name	CAS No.	Weight-%	REACH Reg. No
Aluminum oxide	1344-28-1	>99	01-2119529248-35-0024 01-2119529248-35-0125 01-2119529248-35-0086 01-2119529248-35-0238

4. FIRST AID MEASURES

4.1. Description of first aid measures**Eye Contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Skin Contact

Wash skin with soap and water.

Ingestion

Rinse mouth

Inhalation

Remove to fresh air

General Advice

If symptoms persist, call a physician
Show this safety data sheet to the doctor in attendance

4.2. Most important symptoms and effects, both acute and delayed

No information available

4.3. Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media**Suitable Extinguishing Media**

The product itself does not burn

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Extinguishing media which must not be used for safety reasons

No information available

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
None in particular.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment
Avoid dust formation

6.2. Environmental precautions

No special environmental precautions required

6.3. Methods and material for containment and cleaning up

Recover product. Place into appropriate container for disposal.

Methods for Cleaning Up

Sweep up and shovel into suitable containers for disposal

6.4. Reference to other sections

See Section 12 for additional information.

7. HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Handling

Provide appropriate exhaust ventilation at places where dust is formed

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice

Exposure scenario

No information available

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry place

7.3. Specific end use(s)

No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

Chemical name	EU	United Kingdom	France	Spain	Germany OEL (TWA)
Aluminum oxide 1344-28-1			VME: 10 mg/m ³	VLA-ED: 10 mg/m ³	1.25 mg/m ³ 6.0 mg/m ³ (a)

(a) GOEL - Germany - TRGS 900 - Occupational Exposure Limits - TWAs, (a) exempt facilities listed in 2.4(8) and (9)

Component	Italy	Portugal	Netherlands	Finland	Denmark
Aluminum oxide 1344-28-1 (>99)		TWA: 10 mg/m ³			TWA: 10 mg/m ³

Component	OSHA PEL	ACGIH TWA
Aluminum oxide 1344-28-1 (>99)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	1 mg/m ³ TWA (respirable fraction)

Derived No Effect Level (DNEL) 3 mg/m³, respirable, 8 hour TWA

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles)

Skin Protection No special protective equipment required.

Hand Protection No special protective equipment required.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Environmental exposure controls Avoid dust formation

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Balls, Powder, Granules

Color White

Odor None

pH

Flash point (°C) DEGREES Not applicable

Autoignition temp (°C) DEGREES Does not ignite

Melting Point/Range

Melting point (°C) DEGREES 2053 °C

Solubility Insoluble

Density 3.5-3.7 g/cm³

Bulk Density 800-2800 kg/m³

Explosives Not applicable

10. STABILITY AND REACTIVITY

10.1. Reactivity

None under normal processing

10.2. Chemical Stability

Stable under normal conditions

10.3. Possibility of Hazardous Reactions

None under normal processing

10.4. Conditions to Avoid

None under normal processing

10.5. Incompatible materials

None under normal processing

10.6. Hazardous Decomposition Products

None under normal processing

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects**Acute Toxicity**

Acute toxicity - Oral	Conclusive but not sufficient for classification
Acute toxicity - Dermal	Conclusive but not sufficient for classification
Acute toxicity - Inhalation (Dusts/Mists)	Conclusive but not sufficient for classification
Oral LD50	> 5000 mg/kg (rat)
Dermal LD50	No effect
Inhalation LC50	> 5 mg/m ³ (rat)

Chronic Toxicity

Irritation	Conclusive but not sufficient for classification
Corrosivity	Conclusive but not sufficient for classification
Sensitization	Conclusive but not sufficient for classification
Mutagenic Effects	Conclusive but not sufficient for classification
Carcinogenic effects	Conclusive but not sufficient for classification
Reproductive Effects	Conclusive but not sufficient for classification
Developmental Effects	Conclusive but not sufficient for classification
Aspiration Hazard	Conclusive but not sufficient for classification

12. ECOLOGICAL INFORMATION**12.1. Toxicity****Ecotoxicity effects**

Not water endangering

(WGK: 1346)

Aquatic toxicity is unlikely due to low solubility

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential.

No information available

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

None

13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods****Waste from Residues/Unused Products**

Disposal should be in accordance with applicable regional, national and local laws and regulations

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal

14. TRANSPORT INFORMATION

Note: Not classified as dangerous in the meaning of transport regulations

IMDG/IMO Not regulated.

RID Not regulated.

ADR Not regulated

ICAO Not regulated

IATA Not regulated

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Listed on DSL
PICCS	Complies
ENCS	Complies
IECSC	Complies
AICS	Complies
KECL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. A Chemical Safety Assessment has been carried out

A Chemical Safety Assessment has been carried out

16. OTHER INFORMATION

Key literature references and sources for data

www.ChemADVISOR.com/

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Issuing Date 24-Mar-2011
Revision Date 07-Mar-2018

Revision Note
Reason for revision Revision 16, March 2018
Updated Almatis Inc. address
Updated Prepared By

Updates The most current version of this Safety Data Sheet is available at this URL:
<http://almatiswv.thewerco.com/private/search.aspx?language=EN>

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End of Safety Data Sheet