



ALMATIS
PREMIUM ALUMINA

SAFETY DATA SHEET

Preparation Date 24-Mar-2011

Revision Date 24-Mar-2011

Revision Number 10

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 All mm and mesh sizes of all Tabular grades (T60, T64), Tabular grades (T60, T64), T60, T64, Tabular Alumina Balls (T160, T162), T160, T162, Filter Bed Alumina (FBA), Premix, Tabalox, Tabular Alumina, Tabular Alumina Fines (TAF)

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	Almatis, Inc. P.O. Box 300 4701 Alcoa Road Bauxite, AR 72022 USA	Almatis GmbH Giulinistrasse 2 67065 Ludwigshafen Germany	Qingdao Almatis Co., Ltd. Box 150, Sunshine Tower 61 Hongkong Middle Road Qingdao 266071 P.R. China
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Almatis, Inc. 501 West Park Road Leetsdale, PA 15056 USA	Almatis Limited Tsuzuki Iwakuni 740 Japan	Almatis B.V. Theemsweg 30 NL-3197 KM Botlek R The Netherlands	Almatis Alumina Pvt. Ltd. Falta Industrial Growth Centre, Sec III 24-Parganas South, West Bengal Falta, India
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For further information, please contact

info@almatis.com
www.almatis.com

1.4. Emergency telephone number

Almatis: +1 501-776-4677

CHEMTREC:

+1-703-527-3887 (INTERNATIONAL)
+1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Not classified

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2.2. Label Elements

Symbol(s)
None

Signal Word
None

Hazard Statements
None

Precautionary Statements

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P280 - Wear eye protection/ face protection
P285 - In case of inadequate ventilation wear respiratory protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

2.3. Other information
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical Name	EC No.	CAS-No	Weight %	REACH No.
Aluminum oxide	EEC No. 215-691-6	1344-28-1	>99	01-2119529248-35-0024 01-2119529248-35-0125 01-2119529248-35-0086 01-2119529248-35-0087

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 Move 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 immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

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5. FIRE-FIGHTING MEASURES

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 materials for containment and cleaning up

Recover product. Place into appropriate container for disposal.

Methods for Cleaning up

Shovel or sweep up

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

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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	3.0 mg/m ³ 6.0 mg/m ³ (a)

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

Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Aluminum oxide 1344-28-1		TWA: 10 mg/m ³			TWA: 10 mg/m ³

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Aluminum oxide 1344-28-1	MAK: 6 mg/m ³ STEL: 30 mg/m ³	MAK: 3 mg/m ³ STEL: 24 mg/m ³	NDS: 2 mg/m ³ NDSch: 16 mg/m ³	OEL: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 4 mg/m ³

Chemical Name	Japan	OSHA PEL	ACGIH TWA
Aluminum oxide 1344-28-1	TWA: 0.5 mg/m ³ TWA: 2 mg/m ³	= 15 mg/m ³ TWA total dust = 5 mg/m ³ TWA respirable fraction	10mg/m ³ TWA particulate matter containing no asbestos and < 1% crystalline silica

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

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Eye Protection Safety glasses with side-shields
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 (dust) 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	Powder, Granules, Balls
Color	White
Odor	None
pH	9.00 - 10.50
Flash Point	Not applicable
Autoignition temp (°F) DEGREES	Does not ignite
Boiling Point/Range	Not determined
Melting Point/Range	2053°C
Solubility	Insoluble
Density	3.5-3.7 g/cm ³
Bulk Density	800-2800 kg/m ³
Risk of explosion	None

10. STABILITY AND REACTIVITY

10.1. Reactivity

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10. STABILITY AND 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 oral toxicity	Conclusive but not sufficient for classification
Acute dermal toxicity	Conclusive but not sufficient for classification
Acute inhalation toxicity	Conclusive but not sufficient for classification

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
Aquatic toxicity is unlikely due to low solubility

12.2. Persistence and degradability

No information available

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.

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12.6. Other adverse effects

None known

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste 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	Complies
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 Commercial Chemical Substances/EU 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

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16. OTHER INFORMATION

Key literature references and sources for data
www.ChemADVISOR.com/

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Preparation Date	24-Mar-2011
Revision Date	24-Mar-2011
Revision Summary	Revision 8, April 2008 Section 16, added email address and revision history Revision 9, December 2009 Section 3, revised weight % Revision 10, March 2011 Update to format

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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End of Safety Data Sheet