

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.
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4701 Alcoa Road
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Almatis, Inc.
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1815-2, Nagano Iwakuni
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The Netherlands

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Sec III
24-Parganas South, West
Bengal
Falta, India

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**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	EINECS	CAS-No	Weight %	REACH No.
Aluminum oxide	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. 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 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

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	OSHA PEL	ACGIH TWA
Aluminum oxide 1344-28-1	= 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

10. STABILITY AND REACTIVITY

10.1. Reactivity

None under normal processing

10.2. Chemical Stability

10. STABILITY AND REACTIVITY

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.

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

16. OTHER INFORMATION

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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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet