

	<p><b>LEONID CHEMICALS PVT. LTD., BANGALORE</b></p> <p>An ISO-9001:2008 Certified Company</p> <p>Quality Assurance Department</p>	<p>(CODE) DOCUMENT : WI</p> <p>(CODE) SECTION : WI/SM</p> <p>(DATE) : 01.04.2011</p>	 <p>Issue : 02</p> <p>Rev.: 00</p>
<p>Title: MATERIAL SAFETY DATA SHEET (MSDS): ALUMINUM OXIDE ACTIVE NEUTRAL</p>			<p>1   Page of 1</p>

## SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION MSDS

**Name:** Aluminium Oxide active neutral

**Catalog Numbers:**

A009

**Synonyms:** Alumina.

**Company Information:**

LEONID CHEMICALS Pvt Ltd,

62/A2 1<sup>st</sup> Stage,

Yeshvanthpur Industrial Suburb,

Asoka puram School Road,

Bangalore -22, Karnataka, INDIA

Ph- +91-80-23378354

Fax: +918023378354/23377126

## SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS # : 1344-28-1

Chemical Name : Aluminum oxide active neutral

% : not available

EINECS# : 215-691-6

Hazard Symbols : None Listed.

Risk Phrases : None Listed.

## SECTION 3- HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Information not available

**Potential Health Effects Eye:**

Dust may cause mechanical irritation.

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**Skin:**

Dust may cause mechanical irritation. Low hazard for usual industrial handling.

**Inhalation:**

May cause respiratory tract irritation. May cause lung damage.

**Ingestion:**

Ingestion of large amounts may cause gastrointestinal irritation. Expected to be a low ingestion hazard.

**Chronic:**

Chronic inhalation of fine dusts may cause lung damage.

#### SECTION 4- FIRST AID MEASURES

**Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:**

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:**

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:**

Information not available.

#### SECTION 5- FIRE FIGHTING MEASURES

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:**

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

 <p><b>CHEMLABS</b> Quality Our Forte</p>	<p><b>LEONID CHEMICALS PVT. LTD., BANGALORE</b></p> <p>An ISO-9001:2008 Certified Company</p> <p><b>Quality Assurance Department</b></p>	<p>(CODE) DOCUMENT : WI</p> <p>(CODE) SECTION : WI/SM</p> <p>(DATE) : 01.04.2011</p>	 <p>Issue : 02</p> <p>Rev.: 00</p>
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## SECTION 6 -Accidental Release Measures

### General Information:

Use proper personal protective equipment as indicated in Section 8.

### Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

## SECTION 7 -HANDLING AND STORAGE

### Handling:

Wash thoroughly after handling. Wash hands before eating. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Do not ingest or inhale.

### Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

### Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Personal Protective Equipment

Eyes: Not available. Skin: Wear appropriate gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure. Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## SECTION 9 -PHYSICAL AND CHEMICAL PROPERTIES

Physical State : crystalline powder

Color : White

Odor : Odorless.

pH (10 % aqueous solution) : 7.0 ± 0.5

Vapor Pressure : Negligible.

Viscosity : Not available.

Boiling Point : 2980°C

Freezing/Melting Point : 2000°C

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Auto ignition Temperature : Not applicable.  
 Flash Point : Not applicable.  
 Explosion Limits, lower : Not available.  
 Explosion Limits, upper : Not available.  
 Decomposition Temperature : Not available.  
 Solubility in water : Negligible in water.  
 Specific Gravity/Density : 4.0 (water=1)  
 Molecular Formula :  $\text{Al}_2\text{O}_3$   
 Molecular Weight : 101.9612

#### SECTION 10 - STABILITY AND REACTIVITY

**Chemical Stability:**  
Stable.

**Conditions to Avoid:**  
Incompatible materials.

**Incompatibilities with Other Materials:**  
Reacts with chlorine trifluoride or ethylene oxide. Exothermic reaction above 200C with halocarbon vapors produces toxic hydrogen chloride and phosgene.

**Hazardous Decomposition Products:**  
Hydrogen chloride, phosgene.

**Hazardous Polymerization:**  
Has not been reported.

#### SECTION 11 - TOXICOLOGICAL INFORMATION RTECS#:

CAS# 1344-28-1: Bd1200000

LD50/LC50:

Information Not available.

**Carcinogenicity:**  
Aluminum oxide not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. See actual entry in RTECS for complete information.

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## SECTION 12 - ECOLOGICAL INFORMATION

Information not available.

## SECTION 13 - DISPOSAL CONSIDERATION

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

## SECTION 14 - TRANSPORT INFORMATION

### IATA

Shipping Name : FLAMMABLE SOLID, ORGANIC, N.O.S.\*

Hazard Class : 4.1

UN Number : 1325

Packing Group : II

### IMO

Shipping Name : FLAMMABLE SOLID, ORGANIC, N.O.S

Hazard Class : 4.1

UN Number : 1325

Packing Group : II

### RID/ADR

Shipping Name : FLAMMABLE SOLID, ORGANIC, N.O.S

Hazard Class : 4.1

UN Number : 1325

Packing group : II

## SECTION 15 - REGULATORY INFORMATION

### European/International Regulations

European Labeling in Accordance with EC Directives

### Hazard Symbols:

Information not available.

### Risk Phrases:

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Information not available.

**Safety Phrases:**

Information not available.

**WGK (Water Danger/Protection)**

CAS# 1344-28-1: 0

**United Kingdom Occupational Exposure Limits**

CAS# 1344-28-1: OES-United Kingdom, TWA 10 mg/m<sup>3</sup> TWA (total inhalable dust); 4 mg/m<sup>3</sup> TWA (respirable dust)

**United Kingdom Maximum Exposure Limits Canada**

CAS# 1344-28-1 is listed on Canada's DSL List. CAS# 1344-28-1 is listed on Canada's Ingredient Disclosure List.

**Exposure Limits**

CAS# 1344-28-1:

OEL-AUSTRALIA: TWA 10 mg/m<sup>3</sup>

OEL-BELGIUM: TWA 10 mg/m<sup>3</sup>

OEL-DENMARK: TWA 10 mg/m<sup>3</sup>

OEL-FRANCE: TWA 10 mg/m<sup>3</sup>

OEL-GERMANY: TWA 6 mg/m<sup>3</sup>

OEL-THE NETHERLANDS: TWA 10 mg/m<sup>3</sup>

OEL-RUSSIA: STEL 4 mg/m<sup>3</sup>

OEL-SWITZERLAND: TWA 6 mg/m<sup>3</sup>

OEL-UNITED KINGDOM: TWA 10 mg/m<sup>3</sup>; STEL 20 mg/m<sup>3</sup>

OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**US FEDERAL**

TSCA

CAS# 1344-28-1 is listed on the TSCA inventory.

**SECTION 16 - ADDITIONAL INFORMATION**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.



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		Title: SPECIFICATION MANUAL - ALUMINIUM OXIDE ACTIVE NEUTRAL	

### Specification manual - Aluminium Oxide Active Neutral

$\text{Al}_2\text{O}_3$

Mol.wt.: 101.96

**Product** : Aluminium Oxide Active Neutral LR grade  
**Description** : White powder  
**Cat No** : A009  
**Cas No.** : 1344-28-1  
**Prepared Date** : 28.09.2010  
**Approved Date** : 28.09.2010

REVISION HISTORY				
Issue/Rev	Description of Change		Author	Effective Date
01/00	Initial Release		S. Paul Joshua	28.09.2010
02/00	Reviewed no changes		S. Paul Joshua	01.04.2011
Next Review Due :		02.04.2015		
To be reviewed by :		Head-QC/QA		

Sl. No.	Tests	Specification
		LR
1	pH (10% aqueous suspension)	$7.0 \pm 0.5$
2	Activity	Passes

Approved By: S.Paul Joshua, Head Quality Control and Quality Assurance

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