



MATERIAL SAFETY DATA SHEET

CONTACT : **LEONID CHEMICALS**
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
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Bangalore-560 022, Karnataka, INDIA
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Aluminium Oxide -88309

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:
Aluminium Oxide

Catalog Numbers:
A/2280, A/2320, A/2360, A/2370, A/2372, A/2374, A/2380, A/2390

Synonyms: Aluminum Oxide; Morin Dyed; Alumina.

Company Information:
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SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS # : 1344-28-1
Chemical Name : Aluminum oxide
% : 100%
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.

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.

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	:	Solid
Color	:	White
Odor	:	Odorless.
PH	:	Not available.
Vapor Pressure	:	Negligible.
Viscosity	:	Not available.
Boiling Point	:	2980 deg C
Freezing/Melting Point	:	2000 deg C
Autoignition 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 : Al₂O₃
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.

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:
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/m³ TWA (total inhalable dust); 4 mg/m³ 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/m³

OEL-BELGIUM:TWA 10 mg/m³

OEL-DENMARK:TWA 10 mg/m³

OEL-FRANCE:TWA 10 mg/m³

OEL-GERMANY:TWA 6 mg/m³

OEL-THE NETHERLANDS:TWA 10 mg/m³

OEL-RUSSIA:STEL 4 mg/m³

OEL-SWITZERLAND:TWA 6 mg/m³

OEL-UNITED KINGDOM:TWA 10 mg/m³;STEL 20 mg/m³

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 way shall the company 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 the company has been advised of the possibility of such damages.