
1. Product and company identification

Product name : Ground calcined alumina.

SDS number : 000221

Synonym (s) : Alundum, Alumina gamma, Lundum, Alumina beta, Corundum, Calcined alumina.

Use (s) : Refractory material. Aluminium production. Ceramic materials.

Appearance and odour : White odourless powder.

Supplier : Alcan Specialty Aluminas
Division of Alcan Inc.
1188, Sherbrooke west
Montréal, Québec
Canada
H3A 3G2

Emergency phone: **1-800-567-7455***
Phone : 514-848-8000
Fax : 514-848-8115/8116

* Please call collect for outside calls of North America.

****See section 16 for producer(s) identification****

Prepared by : Alcan Toxicology Service
P.O. Box 1500, Jonquière (Québec)
Canada, G7S 4L2

Phone: 418-699-2949
Fax : 418-699-2993
E-mail : servicetoxico@alcan.com

2. Hazards identification

Not hazardous.

3. Composition / Information on ingredients

Components :

| CAS | EC number | Designation | Content | Warning symbol (s) | R Phrase(s) |
|-----------|-----------|----------------|---------|--------------------|-------------|
| 1344-28-1 | 215-691-6 | Aluminum oxide | 100 % | - | - |

Identification number of the European Commission relative to EINECS (European Inventory of Existing Commercial chemical Substances) or ELINCS (European List of Notified Chemical Substances.).

4. First Aid

Inhalation : If overcome by high dust concentrations, remove to a ventilated area.

Skin contact : Wash skin thoroughly with soap and water.

Eyes contact : Flush eyes thoroughly with water, taking care to rinse under eyelids. If irritation persists, continue flushing for 15 minutes, rinsing from time to time under eyelids. If discomfort continues, consult a physician.

Ingestion : Not applicable

5. Fire fighting measure (s)

Extinguishing media : Non combustible.

Hazardous combustion product(s) :

Not applicable

6. Accidental release measures

Environmental protection / cleaning method(s):

Collect solids. Recycle if possible.

7. Handling and storage

Handling precautions : Avoid generating dust during handling.

Storage conditions : Not applicable

8. Exposure controls / Personal protection

Exposure controls / personal protection :

Provide general and local ventilation to maintain concentrations of air contaminants below recommended standards. Wear eye and respiratory protection (goggles and mask), or a full-face respirator if necessary.

Exposure limits:

| CAS number | Designation | Exposure limits | | | | |
|------------|-----------------|-----------------|-------|----------------------|-----------|------|
| 1344-28-1 | Aluminum oxide | ACGIH (TLV®) | TWA: | 10 mg/m ³ | STEL : | none |
| | | OSHA (PEL) | TWA: | 15 mg/m ³ | CEILING : | none |
| | | OELs | AEL : | 10 mg/m ³ | SEL : | none |
| | Respirable dust | OSHA (PEL) | TWA: | 5 mg/m ³ | CEILING : | none |

(ACGIH = American Conference of Governmental Industrial Hygienists; OSHA = Occupational Safety and Health Administration; TLV ®= Threshold Limit Value [USA]; PEL = Permissible Exposure Limit; TWA = Time-Weighted Average; STEL = Short Term Exposure Limit; C = Ceiling value; OELs= Occupational Exposure Limit values; AEL= Average Exposure Limit values; SEL= Short-term Exposure Limit values; CAS = Number of Chemical Abstracts Service.)

9. Physical and chemical properties

| | | | |
|-------------------------------------|----------------|--|----------------|
| pH : | Not applicable | Flash point : | Not applicable |
| Boiling point : | > 2900 °C | Autoignition temperature : | Not applicable |
| Melting point : | 2030 °C | Lower flammable limit : | Not applicable |
| Vapour pressure : | Not applicable | Higher flammable limit : | Not applicable |
| Vapour density (air=1) : | Not applicable | Explosive properties : | Not applicable |
| Évaporation rate : | Not applicable | NFPA fire code : | 0 |
| Relative density (water=1) : | 4.0 | Oxidizing properties : | Not applicable |
| Water solubility : | Insoluble. | Partition coefficient (n-octanol/water) : | Not applicable |
| Odour threshold : | Not determined | | |

10. Stability and reactivity

Stable (yes/no) : Yes
Conditions and material to avoid :
Not applicable
Hazardous decomposition product(s) :
Not applicable

11. Toxicological information

Acute effects :

Inhalation : Inhalation of high concentrations of these inert nuisance particulates can result in mild irritation of the respiratory tract.
Skin contact : May cause irritation.
Eyes contact : May cause irritation through mechanical abrasion.
Ingestion : Not applicable

Chronic effects :

Medical conditions aggravated by exposure to the product :
Not applicable

Carcinogenicity : None of the ingredients present at concentrations equal to or greater than 0.1% are listed as a carcinogen or potential carcinogen by IARC, NTP or OSHA.
[IARC = International Agency for Research on Cancer; NTP = National Toxicology Program (USA); OSHA = Occupational Safety and Health Administration (USA)]

Mutagenicity : No data available.

Reproductive toxicity :
No data available.

12. Ecological information

Ecotoxicity : Aluminum oxide and its various chemical forms, such as alpha, beta, gamma, alumina hydrate and aluminum hydroxyde do not present any hazard for the environment.

Mobility : No data available.

Persistence/ biodegradability :
No data available.

Bioaccumulation : No data available.

13. Disposal considerations

Methods of disposal :

Recycle if possible. This substance is inert and does not require special disposal methods. Dispose of waste in accordance with federal, state, or local regulations.

14. Transport information

TDGR: not regulated ; ADR : not regulated ; CFR 49: not regulated ; IMO: not regulated ; ICAO: not regulated ; IATA: not regulated .

(TDGR = Transport of Dangerous Good Regs.(Canada). ADR : European agreement relative to international transport of dangerous goods by road. CFR 49 = Code of Federal Regs.(USA). IMO = International Maritime Organization. ICAO = International Civil Aviation Organization. IATA = International Air Transport Association.)

15. Regulatory information

Canadian regulation :**WHMIS classification :**

Not controlled

WHMIS: Working Hazardous Material Information System.

NPRI [Canada]

This product is not subject to the mandatory reporting requirements of the National Pollutant Release Inventory (NPRI) pursuant to the Canadian Environmental Protection Act (CEPA).

European union classification :

Not classified

Warning symbol(s) :

None

Risk phrase(s) :

None

Safety phrase(s) :

None

USA regulation(s) :**Section 313 Supplier Notification**

This product does not contain any chemicals in concentrations subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (Title III of SARA) and of 40 CFR 372.

TSCA - DSL [USA - Canada]

This substance or all the ingredients of this product are on the Domestic Substances List (DSL - Canadian Environmental Protection Act [Canada]) as well as on the Chemical Substances Inventory of the Toxic Substances Control Act (TSCA Inventory [USA]). The presence on these lists does not require any legal reporting.

16. Other information

National Fire Protection Agency (NFPA) codes - (Health, flammability, reactivity) : 0, 0, 0

Hazardous Material Information System (HMIS) - (Health, flammability, reactivity) : 0, 0, 0

Product grades available by manufacturer (this list may be incomplete) :

| MANUFACTURER | GRADES | MANUFACTURER | GRADES |
|---|--|--|---|
| Alcan Primary Metal Group Jonquière Works P.O Box 1500 Jonquière, Québec Canada G7S 4L2 | C1, C17, C-713, CAR, CF Séries CF40, C60, C70, C80, C90, AM, MA, A50TF, XA, AMP, RAR40, RAR50, RAC40, RAC50, RAC30, RAC60 | Alcan Bauxite and Alumina Alcan Specialty Aluminas Gardanne Works 13541 Gardanne France Phone: (33) 04 42 65 22 22 Fax : (33) 04 42 51 41 79 | AC34B34 / AC34B5 / AC34B6 / AC44B4 / AC44B5 / AC44B6 / AR12B5 / AR12B25 / P122B / P662B / P152SB / P172SB / PFR / PFR15 / PFR20 / PBR / PMR. |

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This safety data sheet is in accordance with WHMIS, directives 2001/58/CE and AINSI Z400.1-2003.

Version 1 : 2005-03-30

New material safety data sheet.