

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Alumina hydrate

PRODUCT NUMBER : A1117

SUPPLIER : 0803701

Alcan Chemicals (USA)
Division of Alcan Aluminum Corporation
3690 Orange Place Suite 400
Cleveland, Ohio (44122-4438)

Emergency tel: 1-800-919-1718
Business tel: 216-765-2550
Fax: 216-765-2570

Alcan Chemicals (CANADA)
Division of Alcan Aluminium Limited
1188 Sherbrooke West
Montreal, Quebec H3A 3G2

Emergency tel: 1-800-919-1718
Business tel: 514-848-8000
Fax: 514-848-8115/8116

SYNONYMS : Trihydrate d'alumine, Alumina Trihydrate, ATH, Hydrate d'alumine, Gibbsite, Product Hydrate, Hydroxyde d'aluminium, Aluminium Hydroxide, Alumine hydratée, Hydrated Alumina, Trioxyde d'aluminium, Aluminum Trihydroxide.

APPEARANCE AND ODOUR : White or cream powder; odourless.

USES : Refractory material. Abrasive. Flame retardant and smoke suppressant for polymers. Ceramic materials, aluminum fluoride, aluminum sulfate production.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Table with 7 columns: NAME, CAS #, LD50, LC50, EU DIRECTIVE Symbol, R phrases, CONC. Row 1: Aluminium hydroxide, 21645-51-2, Unknown, Unknown, None, None, >99 %

3. HAZARDS IDENTIFICATION

Not hazardous.

4. FIRST AID MEASURES

Inhalation : If overcome by high dust concentrations, remove to a ventilated area.
Skin contact : Wash skin thoroughly with soap and water.
Eye contact : Flush eyes thoroughly with water, taking care to rinse under eyelids.
Ingestion : Not applicable.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA : Non combustible.

HAZARDOUS COMBUSTION PRODUCTS : Not applicable.

6. ACCIDENTAL RELEASE MEASURES

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

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 :

(ACGIH=American Conference of Governmental Industrial Hygienists; TLV=Threshold Limit Value; OSHA=Occupational Safety and Health Administration [USA]; PEL=Permissible Exposure Limit; TWA=Time-Weighted Average; STEL=Short Term Exposure Limit; Ceiling=Ceiling value)

	ACGIH (TLV)		OSHA (PEL)	
	TWA	STEL	TWA	Ceiling
Aluminum oxide (total dust)	10 mg/m ³	None	15 mg/m ³	None
-Respirable dust	None	None	5 mg/m ³	None

9. PHYSICAL AND CHEMICAL PROPERTIES

pH : Not applicable.
boiling point : Not applicable.
melting point : 2030° C
vapour pressure : Not applicable.
vapour density (air=1) : Not applicable.
evaporation rate : Not applicable.
relative density (water=1) : 2.4
water solubility : Insoluble

flashpoint : Not applicable.
autoignition temperature : Not applicable.
lower flammable limit : Not applicable.
higher flammable limit : Not applicable.
explosive properties : Not applicable.
odour threshold : Not determined.
oxidizing properties : Not applicable.
partition coefficient (n-octanol/water) : Not applicable.

SUPPLEMENTARY INFORMATION : Mixing hydrated alumina with water, the result is that the slurry may be slightly acidic or basic. See below the resulting pH for each grades.

Grades	(Solution % p/v)	pH
Hydrate grade UF-15, 25, 35	(Solution 5 % p/v)	10-11
Hydrate grade UF-'E', 15, 25, 35	(Solution 5 % p/v)	5-6
Hydrate grade FRF	(Solution 20 % p/v)	9-10
Hydrate grade Superfine	(Solution 5 % p/v)	10
Alumina trihydrate "Filtercake"	(Solution 1 % p/v)	9-10
Hydrate grade Genbrite	(Solution 5 % p/v)	10

10. STABILITY AND REACTIVITY

STABLE (yes/no) : Yes.

CONDITIONS AND MATERIAL TO AVOID : Not applicable.

HAZARDOUS DECOMPOSITION PRODUCTS : Not applicable.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE : **inhalation :** Yes. **ingestion :** No
 eye contact : No **skin contact :** No **skin absorption :** No

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.

Eye contact: May cause irritation.

Ingestion: Not applicable.

CHRONIC EFFECTS :

Medical conditions aggravated by exposure to the product : Not applicable.

Carcinogenicity / Mutagenicity / Reproductive toxicity : 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])

12. ECOLOGICAL INFORMATION

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.

13. DISPOSAL CONSIDERATIONS

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 CFR 49: Not regulated IMO: Not regulated ICAO: Not regulated IATA: Not regulated
 (TDGR=Transport of Dangerous Good Regs.(Canada); CFR 49=Code of Federal Regs.(USA); IMO=International Maritime Organization; ICAO=International Civil Aviation Organization; IATA=International Air Transport Association).

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION (Canada) : Not controlled

EUROPEAN UNION CLASSIFICATION: Not classified

Warning symbol: None

Warning word: None

Risk phrases: None

Safety phrases: None

USA REGULATIONS:

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.

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).

16. OTHER INFORMATION

National Fire Protection Agency (NFPA) codes (Health, Flammability, Reactivity) : 0, 0, 0

Hazardous Material Information System (HMIS) codes (Health, Flammability, Reactivity) : 0, 0, 0

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

MANUFACTURER	GRADES	MANUFACTURER	GRADES
Alcan inc., PMG P. O. Box 1500 Jonquière, Québec Canada G7S 4L2	H-10, H-10 Filtercake, Onyx Premier series, WH & WP series	Nippon Light Metal Company Ltd 3-13-2 Mita, Minata-ku Tokyo 108 (Japan) Plant: 4025 1 Miho Shimizu Shizuoka Pref. 424 Japan	BW-53 thru BW-303, B-153E, B-103E, BHP39, BHP26, BNP26, BW-53 thru BW-303, BW-52 thru B-1403 BS 33
Alcan Chemical Europe Chalfont Park, Gerrards Cross Buckinghamshire (U.K.) SL9 0QB Plant: Burntisland, Fife KY3 OEP, UK	DH-101, FRF 5 thru FRF-90, FRF-LV1 thru FRF-LV9, AF-210 thru AF-290, SF4 thru SF11, SF-4E thru SF-11E, SF4PG thru SF-11PG, UF-7 thru UF-35, UF-7E thru UF-35E, FRF-5X thru FRF-40X, Moist hydrate FRF CV series, FRF ULV series Genbrite 400, 700, 1100	Alcan Jamaica Company Kirkvine P.O. Manchester (Jamaica) West Indies	Alumina trihydrate "Filtercake"

Abbreviations :

WHMIS= Working hazardous material information system. CAS#= Chemical Abstracts Service Registry Number.

LD₅₀= Lethal dose 50%; LC₅₀= Lethal concentration 50%; LCL₀= lowest published lethal concentration.

EU= European Union

*** Although the information in this SDS was obtained from sources which we believe to be reliable, it cannot be guaranteed. In addition, this information may be used in a manner beyond our knowledge or control. The information is therefore provided for advice purposes only, without any representation or warranty express or implied. ***

Prepared by Alcan Toxicology Service Tel: 418-699-2949
P.O. Box 1500, Jonquière (Quebec), Canada Fax: 418-699-2993
G7S 4L2

Date of the previous revision : 1999/07/14

Reason for revision: Addition of information, section 16.