

CA037

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MATERIAL SAFETY DATA SHEET

DATE: 09/01/90

QUICK I.D.: 1102

CAS-NUMBER

CHEMICAL NAME:

Activated Alumina

TRADE NAMES/SYNONYMS:

S-501, Claus Catalyst ; A-203(Cl)

CHEMICAL FAMILY:

Aluminum Oxide

FORMULA: $Al(2)O(3).1H(2)O$

SECTION I - MANUFACTURER'S INFORMATION

LaRoche Chemicals Inc.
P. O. Box 1031
Baton Rouge
La 70821

EMERGENCY CONTACTS:
Environmental Affairs Office
504-356-8565

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	TLV (UNITS)	CAS NUMBER
ALUMINUM OXIDE (NON-FIBROUS)	85.1	10.00 MG/M3	1344-28-1
CALCIUM OXIDE	8.4	5.00 MG/M3	1305-78-8

HAZARDOUS INGREDIENTS DESCRIPTION:

OSHA LIMITS (by Wt.)

Ingredient	PEL Transitional	Final
Aluminum Oxide	15 mg/m3 total 5 mg/m3 respirable	10 mg/m3 total 5 mg/m3 respirable
Calcium Oxide	5 mg/m3	5 mg/m3

Unless otherwise noted, all values are reported as 8-hour time-weighted averages (TWA's). The TLV refers to the "Air Contaminants - Permissible Exposure Limits" (Title 29 Code of Federal Regulations Part 1910.1000) U. S. Department of Labor, Occupational Safety and Health Administration 1989, final limits.

*****Additional Information on Ingredients*****

	(average)	(typical range)
aluminum oxide (non-fibrous)	85.1%	79.8 - 86.9%
calcium oxide	8.4%	7.7 - 12.6%

SECTION III - PHYSICAL DATA

BOILING POINT: N/A F
VAPOR DENSITY: N/A
SPECIFIC GRAVITY: 0.8
EVAPORATION RATE: N/A

VAPOR PRESSURE: N/A mmHg
SOLUBILITY IN WATER: INSOLUBLE
PERCENT VOLATILE BY VOLUME: 0.0%
COMPARISON MATERIAL: WATER

APPEARANCE AND ODOR DESCRIPTION:

White, odorless grains or spheres

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A F
LOWER FLAMMABLE LIMIT: N/A
EXTINGUISHING MEDIA:

METHOD USED: N/A
UPPER FLAMMABLE LIMIT: N/A

As appropriate for combustibles in area

SPECIAL FIRE FIGHTING PROCEDURES:

None expected

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Not a fire or explosion hazard

NFPA HAZARD CLASSIFICATION

Not listed

HMIS HAZARD CLASSIFICATION

Health: 0
Flammable: 0
Reactivity: 0

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

ROUTES OF ENTRY

Eyes? YES
Skin? NO
Inhalation? YES
Ingestion? YES

HEALTH HAZARDS

Eye Contact: May cause mechanical irritation if exposed to large amounts of dust

Skin Contact: No adverse effects expected

Inhalation: May cause irritation if exposure is prolonged or excessive

Ingestion: No adverse effects expected

CARCINOGENICITY

NTP? NO
IARC? NO
OSHA? NO

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact: Flush eyes with plenty of water; if irritation develops, call a physician

Inhalation: Normally not needed; if exposed to excessive levels of dust, remove to fresh air and seek medical attention

Ingestion: Normally not needed; if large quantities are ingested, seek medical advice

SECTION VI - REACTIVITY DATA

STABILITY:

Generally considered stable

INCOMPATIBILITY:

None expected

HAZARDOUS DECOMPOSITION PRODUCTS:

None expected

HAZARDOUS POLYMERIZATION:

None expected

ADDITIONAL DESCRIPTION:

N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE OF SPILL:

Shovel or sweep into a DOT-approved shipping container for salvage value or disposal, in accordance with federal, state and local laws and regulations.

FOR ADDITIONAL ASSISTANCE IN ANY TRANSPORTATION EMERGENCY CALL
CHEMTREC @ 1-800-424-9300

WASTE DISPOSAL METHOD:

Used or unused products should be tested to determine hazard status and disposal requirements under federal, state and local laws and regulations.

EPA RCRA Waste #: None

UN #: N/A

DOT Classification: None

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: SEE ADDITIONAL DESCRIPTION
LOCAL EXHAUST VENTILATION DESCRIPTION: CONTROL TO BELOW TLV
MECHANICAL VENTILATION DESCRIPTION: LOCAL EXHAUST VENTILATION
SPECIAL VENTILATION DESCRIPTION: NONE
OTHER VENTILATION DESCRIPTION: NONE
PROTECTIVE GLOVES: NONE
EYE PROTECTION: SAFETY GLASSES WITH SIDESHIELDS
OTHER PROTECTIVE EQUIPMENT: NONE

ADDITIONAL DESCRIPTION:

Under normal manufacturing conditions, no respiratory protection is required when using this product. However should a spill occur and/or the area concentration approaches the "nuisance dust" TLV of 10 mg/m³, total, then a NIOSH/MSHA particulate respirator should be used.

CAUTION

Dust from this product is considered "nuisance dust". These dusts are not considered harmful when airborne levels are kept below the TLV.

SECTION IX - SPECIAL PRECAUTIONS

HANDLING AND STORING PRECAUTION:

Store material in dry location because of tendency to absorb moisture

OTHER PRECAUTIONS:

SARA HAZARD CATEGORIES

IMMEDIATE (Acute) Health Hazard:	YES
DELAYED (Chronic) Health Hazard:	NO
FIRE Hazard:	NO
REACTIVITY Hazard:	NO
SUDDEN RELEASE OF PRESSURE:	NO

Please note that this material is listed in the TSCA Inventory under its primary ingredients, aluminum oxide (CAS# 1344-28-1), calcium oxide (CAS# 1305-78-8) and water (CAS# 7732-18-5).

THIS PRODUCT IS NOT CONSIDERED TOXIC UNDER SARA TITLE III SECTION 313

SAL 000010042

This information is taken from sources or based upon data believed to be reliable; however, LaRoche Chemicals Inc. makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

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MATERIAL SAFETY DATA SHEET

DATE: 05/01/90

QUICK I.D.: 1101

CAS-NUMBER 1344-28-1

CHEMICAL NAME:

Activated Alumina

TRADE NAMES/SYNONYMS:

A-1, A-2, A-201, A-202HF, A-300, A-302, A-305CS, D-201, S-201, & DrySep

CHEMICAL FAMILY:

Aluminum Oxide

FORMULA: $Al(2)O(3)$

SECTION I - MANUFACTURER'S INFORMATION

LaRoche Chemicals Inc.
P. O. Box 1031
Baton Rouge
La 70821

EMERGENCY CONTACTS:
Environmental Affairs Office
504-356-8565

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	TLV (UNITS)	CAS NUMBER
ALUMINUM OXIDE (NON-FIBROUS)	93.6	10.00 MG/M3	1344-28-1

HAZARDOUS INGREDIENTS DESCRIPTION:

% Wt. OSHA PEL Transitional Limits

% Wt. OSHA Final Limits

15 mg/m3 total
5 mg/m3 respirable

10 mg/m3 total
5 mg/m3 respirable

Unless otherwise noted, all values are reported as 8-hour time-weighted averages (TWA's). The TLV refers to the "Air Contaminants - Permissible Exposure Limits" (Title 29 Code of Federal Regulations Part 1910.1000) U. S. Department of Labor, Occupational Safety and Health Administration 1989, final limit for total particulate.

*****Additional Information on Ingredients*****

	(average)	(typical range)
Aluminum Oxide (non-fibrous)	93.6%	91.3 - 94.5%
Water	6.0%	5.0 - 7.0%

SECTION III - PHYSICAL DATA

BOILING POINT: N/A F

VAPOR PRESSURE: N/A mmHg

VAPOR DENSITY: N/A
SPECIFIC GRAVITY: 0.8
EVAPORATION RATE: N/A

SOLUBILITY IN WATER: INSOLUBLE
PERCENT VOLATILE BY VOLUME: 0.0%
COMPARISON MATERIAL: N/A

APPEARANCE AND ODOR DESCRIPTION:

White, odorless grains or spheres

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A F
LOWER FLAMMABLE LIMIT: N/A
EXTINGUISHING MEDIA:

METHOD USED: N/A
UPPER FLAMMABLE LIMIT: N/A

As appropriate for combustibles in area.

SPECIAL FIRE FIGHTING PROCEDURES:

None expected

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Not a fire or explosion hazard

NFPA HAZARD CLASSIFICATION

Not Listed

HMIS HAZARD CLASSIFICATION

Health: 0

Flammable: 0

Reactivity: 0

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

ROUTES OF ENTRY

Eyes? YES

Skin? NO

Inhalation? YES

Ingestion? YES

HEALTH HAZARDS

Eye Contact: May cause mechanical irritation if exposed to large amounts of dust

Skin Contact: No adverse effects expected

Inhalation: May cause irritation if exposure is prolonged or excessive

Ingestion: No adverse effects expected

CARCINOGENICITY

NTP? NO

IARC? NO

OSHA? NO

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact: Flush eyes with plenty of water; if irritation develops, call a physician

Inhalation: Normally not needed; if exposed to excessive levels of dust, remove to fresh air and seek medical attention

Ingestion: Normally not needed; if large quantities are ingested, seek medical advice

SECTION VI - REACTIVITY DATA

STABILITY:

Generally considered stable

INCOMPATIBILITY:

None expected

HAZARDOUS DECOMPOSITION PRODUCTS:

None expected

HAZARDOUS POLYMERIZATION:

None expected

ADDITIONAL DESCRIPTION:

N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE OF SPILL:

Shovel or sweep into a DOT-approved shipping container for salvage value or disposal, in accordance with federal, state and local laws and regulations.

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WASTE DISPOSAL METHOD:

Used or unused products should be tested to determine hazard status and disposal requirements under federal, state and local laws and regulations.

EPA RCRA Waste #: None

UN #: N/A

DOT Classification: None

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: SEE ADDITIONAL DESCRIPTION

LOCAL EXHAUST VENTILATION DESCRIPTION: CONTROL TO BELOW TLV

MECHANICAL VENTILATION DESCRIPTION: LOCAL EXHAUST VENTILATION

SPECIAL VENTILATION DESCRIPTION: NONE

OTHER VENTILATION DESCRIPTION: NONE

PROTECTIVE GLOVES: NONE

SAL 000010045

EYE PROTECTION: SAFETY GLASSES WITH SIDESHIELDS
OTHER PROTECTIVE EQUIPMENT: NONE

ADDITIONAL DESCRIPTION:

Under normal manufacturing conditions, no respiratory protection is required when using this product. However should a spill occur and/or the area concentration approaches the "nuisance dust" TLV of 10mg/m3, total, then a NIOSH/MSHA particulate respirator should be used.

CAUTION

Dust from this product is considered "nuisance dust". These dusts are not considered harmful when airborne levels are kept below the TLV.

SECTION IX - SPECIAL PRECAUTIONS

HANDLING AND STORING PRECAUTION:

Store material in dry location because of tendency to absorb moisture.

OTHER PRECAUTIONS:

SARA HAZARD CATEGORIES

IMMEDIATE (Acute) Health Hazard:	YES
DELAYED (Chronic) Health Hazard:	NO
FIRE Hazard:	NO
REACTIVITY Hazard:	NO
SUDDEN RELEASE OF PRESSURE:	NO

Please note that this material is listed in the TSCA Inventory under its primary ingredient, aluminum oxide (CAS# 1344-28-1).

THIS PRODUCT IS NOT CONSIDERED TOXIC UNDER SARA TITLE III SECTION 313. On February 14, 1990, the United States Environmental Protection Agency delisted non-fibrous forms of aluminum oxide from the list of toxic chemicals to be regulated under Section 313 of the Emergency Planning and Community Right-to-Know Act (SARA Title III). Products covered by this MSDS contain only non-fibrous forms of aluminum oxide.

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