

MATERIAL SAFETY DATA SHEET • MSDS



SECTION I • PRODUCT IDENTIFICATION

TRADE NAME	ALUMINUM OXIDE POWDER
ANAMET PRODUCT NUMBER	57XX-X

CHEMICAL NAME

MANUFACTURER / SUPPLIER'S NAME ANAMET
ADDRESS P.O. Box 538
 BOUCHERVILLE, QUÉBEC, J4B 6Y2
TELEPHONE NO. (450) 646-1290
EMERGENCY TELEPHONE NO. CANUTEC: (613) 996-6666

SECTION II • COMPOSITION / INFORMATION ON COMPONENTS

Chemical characterization Description	CAS number	%	OSHA PEL	ACGIH TLV
Aluminum Oxide. (Non-Fibrous), Al ₂ O ₃	1344-28-1	98	10 mg/m ³	10 mg/m ³
Silicon Dioxide. (SiO ₂)	7631-86-9	1	Not established.	6 mg/m ³
Titanium Oxide.	13463-67-7	2-3	10 mg/m ³	10 mg/m ³
Iron Oxide.	1309-37-1	0.1-0.2	10 mg/m ³	10 mg/m ³

NOTE: Ingredients are listed on the TSCA Inventory of Chemical Substances. Those not identified are non-hazardous.

SECTION III • PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling point in °C	Not available.	Vapor pressure (mm Hg)	Not applicable.
Melting point in °C	2038 °C (3700°F)	Vapor density (Air = 1)	Not applicable.
Specific Gravity (Water = 1)	3.97	Evaporation rate (Butyl acetate = 1)	Not applicable.
Solubility in water	Insoluble.		
Appearance and odor	Black or brown powder, odorless.		

MATERIAL SAFETY DATA SHEET • MSDS



SECTION IV • FIRE / EXPLOSION HAZARD

Flash point	Not flammable.			
Flammable limits	LEL	None.	UEL	None.
Extinguishing medium	Not available			
Special fire fighting procedures	Does not burn.			
Unusual fire and explosion hazards	None known.			

SECTION V • REACTIVITY

Stability	Stable.
Incompatibility	None.
Hazardous decomposition products	Not established.
Hazardous Polymerization	Will not occur.

SECTION VI • TOXICOLOGICAL PROPERTIES OF PRODUCT

A - SUGGESTED FIRST AID

Eyes	Wash with large amounts of water and obtain medical assistance.
Skin	Wash with soap and water. If irritation persists, obtain medical assistance.
Inhalation	Remove to fresh air and obtain medical assistance.
Ingestion	Obtain medical attention. <u>Do not induce vomiting.</u>

B – TOXICOLOGICAL INFORMATION

PRIMARY ENTRY ROUTES: Inhalation.

• SHORT TERM EXPOSURE

Inhalation	May cause coughing and shortness of breath. May affect breathing capacity
Skin	May cause skin abrasion.
Eyes	Dust can be an irritant.
Ingestion	May cause vomiting and nausea.

• LONG TERM EXPOSURE

Carcinogenicity	None.
Teratogenicity, Mutagenicity and other reproductive effects	None.
Skin Sensitization	Prolonged contact may cause skin abrasion.
Respiratory tract sensitization	Dust may slightly be irritating to the respiratory tract at high concentrations.
Synergistic materials	None.

MATERIAL SAFETY DATA SHEET • MSDS



SECTION VII • PRECAUTIONARY INFORMATION

PERSONAL PROTECTIVE MEASURES

Eyes, face & hands	Recommend standard face and eye protection at all times while using the product.
Respiratory protection	As needed, use approved dust respirator (OSHA CFR1910.134)
Ventilation	Do not use without adequate ventilation (OSHA 29CFR1910.94) (OSHA 29CFR1910.1000) (OSHA CFR1910.213) (OSHA 1910.243). Use adequate local and mechanical exhaust ventilation.
Hearing	As needed in accordance with OSHA 1910-215.
HMIS Hazard Ratings	Health : 1 Flammability : 0 Reactivity : 0

SECTION VIII • SAFETY PRECAUTIONS IN CASE OF LEAKS OR SPILLS

Spill or leak procedure	Use ordinary precautions for dusts and particulates.
Waste disposal	Disposal should be in accordance with local, state, or national legislation. Incinerate under approved controlled conditions.

SECTION IX • STORAGE AND HANDLING

Storage	No special requirements.
Handling	Minimize generation of dust.
Shipping classification DOT hazard class	<ul style="list-style-type: none">• Dot Shipping Name: Not regulated.• TDG/UN Shipping Names: Not regulated.• UN Number: Not regulated.• Hazard Class: Not regulated.• Packing Group: Not regulated.• TDG Exemption: Not regulated.• Label: Not regulated.• IATA Class: Not regulated.• IMDG Class: Not regulated.
HMIS Coding	Health: 1 Flammability: 0 Reactivity: 0



SECTION X • ECOLOGICAL INFORMATION

Environmental Fate and Distribution	Not established.
Persistence and Degradation	Not established.
Toxicity	Not established.
Effect of effluent treatment	Not established.

SECTION XI • REGULATORY INFORMATION

<p>• EC REGULATIONS:</p> <p>TSCA STATUS: On Toxic Substance Control Inventory. CERCLA REPORTABLE QUANTITY: None. SARA TITLE III</p> <ul style="list-style-type: none"> • Section 302: None. • Section 311/312: Chronic. • Section 313: Aluminum Oxide (Fibrous Forms). <p>RCRA STATUS: Not regulated.</p>

<p>• CANADIAN REGULATIONS:</p> <p><u>WHMIS Classification: Not regulated.</u></p>
--

Anamet Inc. declines all warranties of description, merchantability or fitness for a particular purpose or any other warranties expressed or implied. All information contained in this data sheet result from figures supplied by the merchant and/or other recognized technical sources. Although this information is presumed to be complete and exact, Anamet Inc. does not guaranty any of the claims expressed or implied. Since the use of this product is not supervised by Anamet Inc., users are therefore responsible to verify if the product is designed for their particular application. They must also assume all risks associated with its use, manipulation and the elimination of the product as well as those arising from the publication, utilization or exactitude of the information contained in the present data sheet. This information pertains only of the product referred to in this specific data sheet and does not apply to its use in combination with other products or in any other process. In no event, Anamet Inc. will be liable for incidental or consequential damages resulting from the use or misuse of this product.



TERMINOLOGY

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service

CFR: Code of Federal Regulations (Transportation in U.S.A.)

DOT: Department of Transportation (USA)

DSL: Domestic Substance List

IARC: International Agency for Research and Cancer

LC: Lethal Concentration

LD: Lethal Dosage

MSHA: Mine Safety and Health Administration (USA)

NIOSH: National Institute for Occupational Safety and Health (USA)

NTP: National Toxicology Program (U.S.A.)

OSHA: Occupational Safety and Health Administration (USA)

PEL: Permissible exposure limit.

STEL: Short term exposure limit.

TDG: Transportation of Dangerous Goods

TLV: Threshold limits value.

TSCA: Toxic Substances Control Act

TWA: Time-weighted average

USEPA: United States Environmental Protection Agency

WHMIS: Workplace Hazardous Materials Information System