

SAFETY DATA SHEET

Revision Date 02-April-2024 Revision Number 3

1. Identification

Product Name Aluminum oxide-silicon oxide (13%), catalyst support

Cat No.: 43863

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

WHMIS 2015 Classification Not classified under the Hazardous Products Regulations (SOR/2015-17)

Based on available data, the classification criteria are not met

Label Elements

None required

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Aluminum oxide (Al2O3)	1344-28-1	87.0
Silica, amorphous	7631-86-9	13.0

4. First-aid measures

Eve Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention **Skin Contact**

immediately if symptoms occur.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms/effects

Notes to Physician

None reasonably foreseeable.

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Not combustible.

No information available **Unsuitable Extinguishing Media**

Flash Point No information available Method -No information available

Autoignition Temperature

Explosion Limits

Upper

No data available No data available

No information available

Lower Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Metal oxides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health **Flammability** Instability **Physical hazards** 0

Accidental release measures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust **Personal Precautions**

formation.

Should not be released into the environment. See Section 12 for additional Ecological **Environmental Precautions**

Information. Do not allow material to contaminate ground water system. Do not flush into

surface water or sanitary sewer system.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Up

7. Handling and storage

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid Handling

contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage.

Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Acids. Halogens. Interhalogens. Oxidizing agent.

8. Exposure controls / personal protection

Exposure Guidelines

Component	Alberta		Ontario TWAEV	Quebec	ACGIH TLV	OSHA PEL	NIOSH
		Columbia					
Aluminum oxide (Al2O3)	TWA: 10 mg/m ³	TWA: 1.0 mg/m ³	TWA: 1 mg/m ³	TWA: 10 mg/m ³	TWA: 1 mg/m ³	(Vacated) TWA:	
						10 mg/m ³	
						(Vacated) TWA:	
						5 mg/m ³	
						TWA: 15 mg/m ³	
						TWA: 5 mg/m ³	
Silica, amorphous						(Vacated) TWA:	IDLH: 3000
						6 mg/m ³	mg/m³
							TWA: 6 mg/m ³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering MeasuresNone under normal use conditions.

Personal protective equipment

Eye Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Hand Protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Glove material	Breakthrough time	Glove thickness	Glove comments
Natural rubber	See manufacturers	-	Splash protection only
Nitrile rubber	recommendations		
Neoprene			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection

No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter

Environmental exposure controls

No information available.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

9. Physical and chemical properties

Physical State Solid Spheres

Appearance No information available

Odor Odorless

Odor Threshold
pH

No information available
No information available

Melting Point/RangeNo data availableBoiling Point/RangeNo information availableFlash PointNo information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available Flammability or explosive limits

UpperNo data availableLowerNo data availableFor Pressure<=1100 hPa @ 50 °C</th>

Vapor Pressure<=1100 hPa @ 50 °C</th>Vapor DensityNot applicableSpecific GravityNo information available

Solubility
No information available
Partition coefficient; n-octanol/water
No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information available

Viscosity Not applicable

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Acids, Halogens, Interhalogens, Oxidizing agent

Hazardous Decomposition Products Metal oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous ReactionsNone under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Oral LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Mist LC50

Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Aluminum oxide (Al2O3)	> 5000 mg/kg (Rat)	Not listed	> 2.3 mg/l 4 h	
	(OECD Guideline 401)		(OECD Guideline 403)	
Silica, amorphous	>5000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	-	

Toxicologically Synergistic

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

 Irritation
 No information available

 Sensitization
 No information available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Aluminum oxide (Al2O3)	1344-28-1	Not listed				
Silica, amorphous	7631-86-9	Not listed	Known	Not listed	Not listed	Not listed

Mutagenic Effects

No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Teratogenicity

No information available.

STOT - single exposure STOT - repeated exposure None known None known

Aspiration hazard

No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information

No information available

Other Adverse Effects

The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

	Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea	
Γ	Silica, amorphous	EC50: 440 mg/L/72h	LC50: 5000 mg/L/96 h	Not listed	EC50: 7600 mg/L/48h	

Persistence and Degradability

Insoluble in water May persist

Bioaccumulation/ Accumulation

No information available.

Mobility

Is not likely mobile in the environment due its low water solubility.

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information					
DOT	Not regulated				
DOT TDG IATA	Not regulated				
IATA	Not regulated				
IMDG/IMO	Not regulated				
	15. Regulatory information				

International Inventories

Component	CAS-No	DSL	NDSL	notification - Active-Inactive		EINECS	ELINCS	NLP
Aluminum oxide (Al2O3)	1344-28-1	Х	-	Х	ACTIVE	215-691-6	-	-
Silica, amorphous	7631-86-9	Х	-	Х	ACTIVE	231-545-4	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Aluminum oxide (Al2O3)	1344-28-1	Х	KE-01012	Х	X	Х	Х	Х	Х
Silica, amorphous	7631-86-9	Х	KE-31032	Х	X	Х	Х	Х	Х

Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Component	Canada - National Pollutant Release Inventory (NPRI)	Canadian Environmental Protection Agency (CEPA) - List of Toxic Substances	Canada's Chemicals Management Plan (CEPA)
Aluminum oxide (Al2O3)	Part 1, Group A Substance		

Legend

NPRI - National Pollutant Release Inventory

Other International Regulations

Authorisation/Restrictions according to EU REACH

Not applicable

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Aluminum oxide (Al2O3)	1344-28-1	Listed	Not applicable	Not applicable	Not applicable
Silica, amorphous	7631-86-9	Listed	Not applicable	Not applicable	Not applicable

	Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	(2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Ī	Aluminum oxide (Al2O3)	1344-28-1	Not applicable	Not applicable	Not applicable	Not applicable
Γ	Silica, amorphous	7631-86-9	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By Product Safety Department

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www.thermofisher.com

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Revision Summary New emergency telephone response service provider.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS