

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision date 26-Sep-2023

Revision Number 7

Product identifier

Other means of identification

Product Code(s) 1000

Synonyms CTC55 E-SY 2000

Recommended use of the chemical and restrictions on use

Recommended use Refractory

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address	Manufacturer Address
Almatis, Inc.	Almatis GmbH
P.O. Box 300	Giulinistrasse 2
4701 Alcoa Road	67065 Ludwigshafen
Bauxite, AR 72022	Germany
USA	Telephone: +49-621-5707-0
Telephone: +1 501-776-4677	

Emergency telephone number

Emergency Telephone

Argentina: +54 11 5219 8871

Classification

Hazards not otherwise classified (HNOC) Not applicable

Label elements

Hazard statements

Other information No information available.

Substance

Not applicable.

<u>Mixture</u>

Synonyms

CTC55. E-SY 2000.

Chemical name	CAS No	Weight-%	Trade secret
Spinel (Mg(AIO2)2)	1302-67-6	40-60	*
Aluminum oxide	1344-28-1	40-60	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Description of first aid measures

Inhalation	Remove to fresh air.	
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash skin with soap and water.	
Ingestion	Rinse mouth.	
Most important symptoms and effe	ects, both acute and delayed	
Symptoms	Contact with dust can cause mechanical irritation or drying of the skin.	
Effects of Exposure	No information available.	
Indication of any immediate medica	al attention and special treatment needed	
Note to physicians	Treat symptomatically.	
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.	
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.	
Specific hazards arising from the chemical	No information available.	
Explosion data Sensitivity to mechanical impact None.		
Sensitivity to static discharge	None.	
Special protective equipment and	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.	

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.	
Methods and material for contain	ment and cleaning up	
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	
Reference to other sections	Personal protective equipment [PPE]. Disposal. Advices on safe handling.	
Precautions for safe handling		
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.	
Conditions for safe storage, inclu	uding any incompatibilities	
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.	

Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Aluminum oxide	TWA: 1 mg/m ³ respirable	TWA: 15 mg/m ³ total dust	-
1344-28-1	particulate matter	TWA: 5 mg/m ³ respirable	
		fraction	
		(vacated) TWA: 10 mg/m ³ total	
		dust	
		(vacated) TWA: 5 mg/m ³	
		respirable fraction	

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, suc	ch as personal protective equipment
Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

Information on basic physical and chemical properties			
Physical state	Solid		
Appearance	white Powder		
Color	white		
Odor	None		
Odor threshold	No information available		
Property_	<u>Values</u>	Remarks • Method	
рН	9.00	aqueous solution	
pH (as aqueous solution)		None known	
Melting point / freezing point	1900 - 2135 °C / °F		
Initial boiling point and boiling rang		Estimated	
Flash point	- / °F	Not applicable	
Evaporation rate	No data available	None known	
Flammability	No data available	None known	
Flammability Limit in Air	NI 17 111	None known	
Upper flammability or explosive	No data available		
limits	No data available		
Lower flammability or explosive limits	INU UALA AVAIIANIE		
Vapor pressure	No data available	None known	
Relative vapor density	No data available	No information available	
Relative density	No data available	None known	
Water solubility	No data available insoluble		
Solubility(ies)	insoluble		
Partition coefficient	No data available	None known	
Autoignition temperature	- / °F	Does not ignite	
Decomposition temperature		None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity	No data available	None known	
Other information			
Explosive properties	No information available		
Oxidizing properties	No information available		
Softening point	No information available		
Molecular weight	No information available		
VOC content	No information available		
Liquid Density	=3.2 g/cm3		
Bulk density	Not determined		
Reactivity	No information available.		
Chemical stability	Stable under normal conditions.		
Possibility of hazardous reactions	s None under normal processing.		
Conditions to avoid	None known based on information supplied.		
Incompatible materials	None known based on information su	pplied.	
Hazardous decomposition products Not applicable.			

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.

Skin contact	Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Spinel (Mg(AIO2)2) 1302-67-6	-	-	> 3.5 mg/L (Rat)4 h
Aluminum oxide 1344-28-1	> 5000 mg/kg (Rat)	-	-

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

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.
Ecotoxicity	Aquatic toxicity is unlikely due to low solubility.

Persistence and degradability	No information available.			
Bioaccumulation	There is no data for this product.			
Mobility	No information available.			
Other adverse effects	No information available.			
Disposal methods				
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.			
Contaminated packaging	Do not reuse empty containers.			
DOT	Not regulated			
TDG	Not regulated			
MEX	Not regulated			
ICAO (air)	Not regulated			
IATA	Not regulated			
IMDG	Not regulated			
International Inventories				
TSCA	Complies.			
DSL/NDSL EINECS/ELINCS ENCS IECSC KECL PICCS AIIC NZIOC	Not Listed. Complies. Complies. Not Listed. Complies. Not Listed. Complies. Complies.			
Legend: TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances				

NZIOC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %	
Aluminum oxide - 1344-28-1	1.0	

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Spinel (Mg(AlO2)2) 1302-67-6	-	-	Present
Aluminum oxide 1344-28-1	Х	X	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

NFPA HMIS	Health hazards 0 Health hazards 0	Flammability 0 Flammability 0	Instability 0 Physical hazards 0	Special hazards $\ \ -$ Personal protection $\ \ X$				
Key or legend to abbreviations and acronyms used in the safety data sheetLegendSection 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONTWATWA (time-weighted average)STELCeilingMaximum limit value*StructureStr								
Agency for Tox U.S. Environme	references and sources for data ic Substances and Disease Registr antal Protection Agency ChemView	y (ATSDR)						

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

Prepared By

Product Safety Department Almatis B.V. Theemsweg 30 3197 KM Botlek Rt The Netherlands +31-181-270124 info@almatis.com. 26-Sep-2023 No information available.

Revision date Revision Note <u>Disclaimer</u>

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 Safety Data Sheet

US SDS version information - AGHS UL release: GHS Revision 3 2023 Q1