



KRETUS®

Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name: KRETUS® ESD ADDITIVE

Recommended Use: For professional use only.

Manufacturer: Kretus, 1055 W. Struck Ave., Orange, CA 92867

Telephone: (714) 694-2061

24 Hour Emergency Telephone Number: (800) 255-3924 (CHEMTEL)

Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

Comments: To the best of our knowledge, this Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/EEC.

SECTION 2: HAZARD IDENTIFICATION

Specific target organ toxicity - repeated exposure (Inhalation): Category 1 (Lungs)

DANGER

Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.



Prevention: Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: Get medical advice/ attention if you feel unwell.

Storage: Keep container tightly closed and locked in a cool, well-ventilated place.

Disposal: Dispose of contents/container to an approved waste disposal plant in accordance with applicable laws and regulations, and product characteristics at time of disposal.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Chemical Name	CAS No.	Concentration (% by Weight)
mica (muscovite)	12001-26-2	30-50
quartz, alveolar (<10 µm)	14808-60-7	30-50
Tin antimony grey cassiterite	68187-54-2	30-50

SECTION 4: FIRST-AID MEASURES**Contact with Eyes**

Rinse out with plenty of water. Remove contact lenses.

Contact with Skin

Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Inhalation

fresh air. Call in physician.

Ingestion

immediately make victim drink water (two glasses at most). Consult a physician.

Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

SECTION 5: FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

For this substance/mixture no limitations of extinguishing agents are given.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet.

Special Protective Equipment for Fire-Fighting

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Specific Hazards during Fire-Fighting

Not combustible.

SECTION 6: ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment, and Emergency Procedures****For Non-Emergency Personnel:**

Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation.

Evacuate the danger area, observe emergency procedures, consult an expert.

For Emergency Responders:

Protective equipment see Section 8.

Indications about waste treatment see Section 13.

Environmental Precautions:

No special precautionary measures necessary.

Methods and Materials for Containment and Clean-up:

Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area.

Avoid generation of dusts.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe-Handling

Avoid dust formation. Observe label precautions.

Conditions for Safe Storage

Keep locked up or in an area accessible only to qualified or authorized persons.

Risks from decomposition products: See Section 10

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components	CAS-No.	Value Type (form of exposure)	Control Parameters / Permissible Concentration	Basis
General threshold limit value for dust	42945	TWA (total dust)	50 Million particles per cubic foot	OSHA Z-3
		TWA (total dust)	15 mg/m ³	OSHA Z-3
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-3
		TWA (respirable fraction)	15 Million particles per cubic foot	OSHA Z-3
mica (muscovite)	12001-26-2	TWA (Respirable fraction)	3 mg/m ³	ACGIH
		TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable)	3 mg/m ³	NIOSH REL
		TWA (Respirable dust fraction)	3 mg/m ³	OSHA P0
quartz, alveolar (<10 µm)	14808-60-7	TWA (Total dust)	30 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (Respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (Respirable)	250 mppcf / %SiO ₂ +2	OSHA Z-3
		TWA (Respirable dust fraction)	0.1 mg/m ³	OSHA P0
		TWA (Respirable fraction)	0.025 mg/m ³ (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m ³ (Silica)	NIOSH REL
Tin antimony grey cassiterite	68187-54-2	TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1
		PEL (Respirable)	0.05 mg/m ³	OSHA CARC
		TWA	2 mg/m ³ (Tin)	OSHA Z-1

		TWA	2 mg/m ³ (Tin)	ACGIH
		TWA	2 mg/m ³ (Tin)	OSHA P0
		TWA	2 mg/m ³ (Tin)	NIOSH REL

Engineering Measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See Section 7.

Personal Protective Equipment

Respiratory protection: Required when dusts are generated.

Hand protection - additional Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection: Safety glasses

Hygiene measures: Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Powder, solid, light gray
Odor	Odorless
Odor Threshold	Not applicable
pH	5-8 at 100 g/l, 68°F (20°C), (slurry)
Melting/Freezing Point	No data available
Initial Boiling Point and Boiling Range	No data available
Flash Point	No data available
Evaporation Rate	No data available
Flammability	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Auto-ignition Temperature	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Density	3.3-3.5 g/cm ³ at 68°F (20°C)
Relative Density/Specific Gravity	No data available
Solubility(ies)	at 68°F (20°C) insoluble
Partition Coefficient: n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
VOC (Volatile Organic Compounds)	Not applicable
Particle Size	1 - 60 µm

SECTION 10: STABILITY AND REACTIVITY

Reactivity: See below.

Chemical Stability: The product is chemically stable under standard ambient conditions (room temperature) .

Chemical Incompatibility: No data available

Conditions to be avoided: No data available

Substances to be avoided: No data available

Further information: No data available

Hazardous decomposition products: In the event of fire, sSee Section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

Carinogenicity

IARC: Group 1: Carcinogenic to humans - quartz, alveolar (<10 µm), 14808-60-7

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP: Known to be human carcinogen: quartz, alveolar (<10 µm), 14808-60-7

Likely route of exposure: Inhalation, Eye contact, Skin contact, Ingestion

Acute inhalation toxicity

Symptoms: Shortness of breath
absorption

Experience with human exposure

STOT-repeated exposure

Target Organs: Lungs

Assessment: Mixture causes damage to organs through prolonged or repeated exposure.

Other Relevant Toxicity Information:

Chronic intoxication: Pneumokoniosis (silicosis)

Other dangerous properties can not be excluded., Handle in accordance with good industrial hygiene and safety practice.

Components

Tin antimony grey cassiterite (68187-54-2):

Acute oral toxicity

LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 423(ECHA)

Acute inhalation toxicity

LC50 Rat: > 5.07 mg/l; 4 h; dust/mist (ECHA); OECD Test Guideline 436

Skin irritation

human skin, Result: No skin irritation; OECD Test Guideline 439 (ECHA)

Eye irritation

Rabbit, Result: No eye irritation ; OECD Test Guideline 405 (ECHA)

Sensitization

Local lymph node assay (LLNA) Mouse, Result: negative ; Method: OECD Test Guideline 429 (ECHA)

Further information

No other information available.

SECTION 12: ECOLOGICAL INFORMATION

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility in soil: No information available.

Additional ecological information: No ecological problems are to be expected when the product is handled and used with due care and attention.

Components

Tin antimony grey cassiterite (68187-54-2):

Toxicity to fish

static test LC50: > 100 mg/l; 96 h; OECD Test Guideline 203 (ECHA)

Toxicity to daphnia and other aquatic invertebrates

static test NOEC Daphnia magna (Water flea): 100 mg/l; 48 h ; OECD Test Guideline 202 (ECHA)

static test EC50 Daphnia magna (Water flea): > 100 mg/l; 48 h ; OECD Test Guideline 202 (ECHA)

Further information

No other information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste material must be disposed of in accordance with national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: TRANSPORT INFORMATION

	UN NUMBER	UN PROPER SHIPPING NAME	TRANSPORT HAZARD CLASSES	PACKING GROUP	ENVIRONMENTAL HAZARDS
DOT	Not Regulated	Not Regulated	Not Regulated	Not Regulated	Not Regulated
IMO/IMDG	Not Regulated	Not Regulated	Not Regulated	Not Regulated	Not Regulated
IATA/CAO	Not Regulated	Not Regulated	Not Regulated	Not Regulated	Not Regulated

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313: Tin antimony grey cassiterite 68187-54-2

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61): Tin antimony grey cassiterite, 68187-54-2

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMII Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307:

Tin antimony grey cassiterite, 68187-54-2

US State Regulations

	Chemical Name	CAS No.
Massachusetts Right To Know	mica (muscovite)	12001-26-2
	quartz, alveolar (<10 µm)	14808-60-7
Pennsylvania Right To Know	mica (muscovite)	12001-26-2
	quartz, alveolar (<10 µm)	14808-60-7
	Tin antimony grey cassiterite	68187-54-2
New Jersey Right To Know	mica (muscovite)	12001-26-2
	quartz, alveolar (<10 µm)	14808-60-7
	Tin antimony grey cassiterite	68187-54-2

California Prop. 65



WARNING: This product can expose you to silicon dioxide, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

TSCA : All substances listed on the TSCA Active Inventory.

SECTION 16: OTHER INFORMATION

Personal Protection: Safety goggles, neoprene rubber gloves, vapor respirator

Prepared by Kretus, Inc.

Revision Date 1/16/23

Revision Note Reformatting

Disclaimer

The information and recommendations presented herein are accurate to the best of our knowledge. User must conduct their own tests to determine the suitability of these products for their particular purposes and usage. Because of numerous factors affecting results, KRETUS® and its affiliation makes no warranty of any kind, express or implied, including those of merchantability and fitness for purpose, other than material conforms to our applicable

current specifications. KRETUS® assumes no legal responsibility for use or reliance on the information contained in this safety data sheet.