

# KRETUS GROUP®



## Safety Data Sheet

### Section 1: Identification

**Product Name:** KRETUS® Polyaspartic 92 Low Odor, Part A (EZ, Fast)  
**Recommended Use:** For residential and industrial use  
**Manufacturer:** Kretus Group® 1426 W Collins Ave, Orange, CA 92867  
**Telephone:** (714) 681-2286  
**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 and Canadian Hazardous Product Act.

### Section 2: Hazard Identification

**Emergency Overview:** Combustible liquid. May cause allergic skin reaction. May cause skin, eye, and respiratory tract irritation. Vapors or mist may be a fire and explosion hazard when exposed to high temperatures or ignition.

**Component Information/Information on Non-Hazardous Components:** None.

**GHS Classification of the Substance or Mixture:**

**HEALTH HAZARDS:** May cause skin, eye, and respiratory tract irritation.

**GHS label elements: Hazard pictograms/symbols**



**GHS Signal Word:** WARNING!

**GHS Hazard Statements:**

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

**GHS Precautionary Statement(s):**

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P171: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

**GHS Response Phrases:**

P370 + P378: In case of fire, use water spray, carbon dioxide, dry chemical or foam for extinction.

P303+P361+P353: IF ON SKIN (or hair), Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P311: IF SWALLOWED, immediately call a POISON CENTER or doctor/physician.

P305+P351+P338: IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P331: Do NOT induce vomiting.

P332+P313: If skin irritation occurs, get medical advice/attention.

P337+P313: If eye irritation persists, get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

P370+P378: In case of fire, use dry sand, dry chemical or alcohol-resistant foam for extinction.

**GHS Storage Phrases:**

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P235: Keep cool.

P405: Store locked up.

**GHS Disposal Phrase:**

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): Prolonged or repeated skin contact may cause drying, cracking, or irritation.

**Other Information:** None known.

**Carcinogenicity:** No carcinogenic substances at > 0.1% by weight percent as defined by IARC, NTP and/or OSHA.

See Section 12 for Ecological Information.

### Section 3: Composition/ Information on Ingredients

**Substances**

Chemical Name	Identifiers	% (by weight)	Comments
Aspartic Acid, N, N'-(methylenebis(2-methyl-4,1-cyclohexanediy))bis-, 1,1',4,4'-tetraethyl ester	CAS 136210-32-7	TRADE SECRET	
Aspartic Acid, N, N'-(methylenedi-4,1-cyclohexanediy))bis-, 1,1',4,4'-tetraethyl ester	CAS 136210-30-5	TRADE SECRET	

See Section 11 for Toxicological Information.

### Section 4: First-Aid Measures

**Inhalation:** If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Skin:** In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Thoroughly clean shoes before reuse. Wash clothing and other apparel before reuse.

**Eye:** In case of contact, flush eyes with plenty of lukewarm water. Remove contact lenses if present and easy to do - continue rinsing. Use fingers to ensure that eyelids are separated and the eye is being irrigated. Get medical attention. A qualified physician can perform gastric lavage only when the airway (trachea) has been secured to prevent aspiration.

**Ingestion:** If ingested, do not induce vomiting. Do not give fluids. If spontaneous vomiting is inevitable, prevent aspiration by keeping the victim's head below the knees. Get medical attention.

### Section 5: Fire-Fighting Measures

**Suitable Extinguishing Media:** All extinguishing media are suitable. Use water with caution. Material will float and may ignite on surface of water. Use water spray to keep fire-exposed containers cool.

**Unsuitable Extinguishing Media:** None known.

**Unusual Fire and Explosion Hazards:** Combustible liquid. Over-heated drums may rupture. Vapors or mist may be a fire and explosion hazard when exposed to high temperature or ignition. Vapors may spread long distances and ignite. Vapors or fumes may form explosive mixture with air. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

**Hazardous Combustion Products:** carbon dioxide, carbon monoxide, oxides of nitrogen, dense black smoke and other undetermined compounds.

**Advice for Fire Fighters:** NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Vapors or mist may be a fire and explosion hazard when exposed to high temperature or ignition. Closed container may forcibly rupture under extreme heat. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Toxic gases/fumes may be given off during burning or thermal decomposition. Contain spill or release with a dike to prevent flow into sewers or streams. Pump into container for disposal or reclamation. Soak up small spills with absorbent material.

### Section 6: Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear appropriate personal protective equipment. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering.

Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

**Environmental Precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform authorities if the product has caused environmental pollution (sewers, drains, waterways or soil).

**Containment/Clean-up Measures:** Clean up personnel must use appropriate personal protective equipment. Evacuate and keep unnecessary personnel out of spill area. Remove all sources of ignition, including flames, heat, and sparks. Stop leak if without risk. Move containers from spill area. Dike or dam spilled material with non-combustible, absorbent material (e.g., sand, earth, vermiculite or diatomaceous earth) and control further spillage, where possible. Collect and place spilled material in container for proper disposal according to appropriate local, state and federal regulations. Do not allow spilled material or wash water to enter sewers, surface waters or groundwater systems. Use grounded or non-sparking tools and equipment. Wash spill area with soap and water. Dispose any waste according to appropriate local, state, and federal regulations.

## Section 7: Handling and Storage

**Handling:** Remove all sources of ignition, including flames, heat and sparks. Take precautionary measures against static discharge. Ground and bond containers and equipment before transferring to avoid static sparks. Do not breathe vapors or spray mist. Avoid contact with eyes or skin. Avoid contact with clothing. Use only with adequate ventilation and personal protection. Remove contaminated personal protective equipment (PPE), then wash hands and face thoroughly after handling and before eating and drinking. Keep container closed when not in use. Empty containers retain product residue and can be hazardous. Do not get in eyes, on skin or on clothing. Do not ingest. Avoid release to the environment.

**Storage:** Storage period is 6 months after delivery by Quest Building Products. Maximum storage temperature is 30°C (86°F). Keep away from food products during use and storage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled, unapproved or reactive containers. Use appropriate containment to avoid environmental contamination. Personnel education and training in the safe use and handling of this product are required under OSHA Hazard Communication Standard 29 CFR 1910.1200.

**Incompatible Materials or Ignition Sources:** Hazardous polymerization does not occur. Avoid oxidizing agents. Avoid heat, flames and sparks. Hazardous decomposition products include chlorine and fluorine containing gases, carbon dioxide, carbon monoxide and other undetermined compounds.

## Section 8: Exposure Controls/ Personal Protection

**Special Note for Exposure Control:** Consult local authorities for further acceptable exposure limits.

Exposure Limits/ Guidelines		
Chemical Name	Result	ACGIH/OSHA
Aspartic Acid, N, N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-,1,1',4,4'-tetraethyl ester (CAS 136210-32-7)	STELs	None established
	TWAs	None established
	PEL	None established
Aspartic Acid, N, N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester	PEL	None established
	STELs	None established
	PEL	None established

**Engineering Measures/Controls:** General dilution and local exhaust as necessary to control airborne vapors, mists, dusts, and thermal decomposition products below appropriate airborne concentration standards and guidelines. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination. Curing ovens must be ventilated to prevent the build-up of explosive atmospheres and to prevent off-gases from entering the work place.

**Environmental Exposure Controls:** Avoid release to the environment. Construct a dike to prevent spreading of spills. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Hygiene Measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating and drinking, smoking or using the lavatory and at the end of the working period. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

**Respiratory:** In case of inadequate ventilation, wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use positive pressure supplied air respirator when airborne concentrations are not known, when airborne solvent levels are 10 times the appropriate TLV, and when spraying is performed or product is applied by aerosol in a confined space or area with limited ventilation. If respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Contact health and safety professional or manufacturer for specific information.

**Eye/Face:** Use chemical resistant goggles or safety glasses with side shields. Chemical safety goggles in combination with a full face shield must be used if a splash hazard exists (ANSI Z8.1).

**Hands:** Use permeation resistant gloves such as PVC or nitrile rubber for limited use. Wear chemical resistant gloves such as North Silver Shield (Siebe North, Inc.) or Viton (The Chemours Company).

**Skin/Body:** Wear rubber or plastic apron and permeation resistant clothing, chemical-resistant gloves, and long-sleeved shirts, and pants. Remove and wash contaminated clothing before re-use.

**General Industrial Hygiene Considerations:** Keep away from food and drink. Wash hands and face after use. Educate and train workers in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

### Key to Abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

TWA = Time-Weighted Averages are based on 8h/day 40hr/week exposures

## Section 9: Physical and Chemical Properties

### Information on Physical and Chemical Properties

Physical Form	Liquid
Color	Slightly yellow
Boiling Point	Not established
Specific Gravity	1.02 ± 0.1
Water Solubility	Insoluble
Flash Point	88°C (190°F) ca
Appearance/Description	Clear
Odor	Characteristic odor
Bulk Density	1024.755 kg/m <sup>3</sup> Approx.
UEL	Not established
LEL	Not established
NVW	84% ca

## Section 10: Stability and Reactivity

**Chemical Stability:** Stable

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Heat, flames and sparks.

**Incompatible Materials:** Oxidizing agent.

**Hazardous Decomposition Products:** Carbon dioxide, carbon monoxide, other undetermined compounds.

## Section 11: Toxicological Information

### ACUTE TOXICITY

LD50: Oral Rat Not established

LC50: Inhalation Rat Not established

LD50: Dermal Rabbit Not established

Primary Skin Irritation: Not established

Primary Eye Irritation: Not established

**Aspartic Acid, N, N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-, 1,1',4,4'-tetraethyl ester (CAS 136210-32-7)**

LD50: Oral Rat >2,000 mg/kg LC50 Inhalation Rat >4,224 mg/l, 4h

LD50: Dermal Rat >2,000 mg/kg

Skin Corrosion/Irritation (Rabbit, 24h): None

Skin Sensitization (Guinea Pig): Positive

Carcinogenicity: OSHA Not Listed. IARC Not Listed. NTP Not Listed.

## Section 12: Ecological Information

For **Aspartic Acid, N, N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-, 1,1',4,4'-tetraethyl ester (CAS 136210-32-7)** and **Aspartic Acid, N, N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester:**

Acute and Prolonged Toxicity to Fish:	Zebra Fish, 96h	LC50 66 mg/L
	Water Flea, 96h	LC50 88.6 mg/L
Acute Toxicity to Algae:		ErC50 113 mg/L

**Persistence and Degradability:** Not readily degradable

**Bioaccumulative Potential:** Bioaccumulation ca. 8,228 BCF

**Other Adverse Effects:** Toxicity to terrestrial Plants: EC50 ≥100 mg/kg, 14d)

**Other Information:** Toxicity to Microorganisms: EC 50: 3,110 mg/l (bacteria, 3 h)

## Section 13: Disposal Considerations

**Waste Treatment Methods:** Dispose in accordance with Federal, State, and Local laws and regulations. The generation of waste should be avoided or minimized wherever possible. Empty containers should be taken to an approved waste handling site for recycling or disposal. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Empty Container Precautions:** Do not heat or cut container with electric or gas torch. Recondition or dispose of empty container in accordance with governmental laws and regulations. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

**Section 14: Transport Information**

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(es)	14.4 Packing Group	14.5 Environmental Hazards
DOT	*Not Regulated	Not Regulated	Not Regulated	Not Regulated	-
IMO/IMDG	*Not Regulated	Not Regulated	Not Regulated	Not Regulated	-
IATA/ICAO	*Not Regulated	Not Regulated	Not Regulated	Not Regulated	-

Special Precautions for User: None Known.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

**Section 15: Regulatory Information****Safety and Environmental Regulations/ Legislation Specific for the Substance or Mixture****SARA Hazard Classifications**

State Right to Know				
Component	CAS	MA	NJ	PA
Aspartic Acid, N, N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-, 1,1',4,4'-tetraethyl ester	CAS 136210-32-7	CAS 136210-32-7	CAS 136210-32-7	CAS 136210-32-7
Aspartic Acid, N, N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester	CAS 136210-30-5	CAS 136210-30-5	CAS 136210-30-5	
Inventory				
Component	CAS	Canada DSL	Canada NDSL	TSCA
Aspartic Acid, N, N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-, 1,1',4,4'-tetraethyl ester	136210-32-7	136210-32-7	-	136210-32-7
Aspartic Acid, N, N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester	136210-30-5	136210-30-5	-	

**United States**

## Environment

U.S. – CERCLA/SARA – Hazardous Substances and their Reportable Quantities: None

U.S. – SARA – Section 311/312 Hazard Categories: Fire Hazard.

U.S. – CERCLA/SARA – Section 302 Extremely Hazardous Substances TPQs: None

U.S. – CERCLA/SARA – Section 313 – Emissions Reporting: None

U.S. – CERCLA/SARA – Section 313 – PBT Chemical Listing: None

**United States – California**

## Environment

U.S. – California – Proposition 65 – Carcinogens List: None

U.S. – California – Proposition 65 – Developmental Toxicity: None

U.S. – California – Proposition 65 – Maximum Allowable Dose Levels (MADL): None

U.S. – California – Proposition 65 – No Significant Risk Levels (NSRL): None

U.S. – California – Proposition 65 – Reproductive Toxicity – Female: None

U.S. – California – Proposition 65 – Reproductive Toxicity – Male: None

**Section 16: Other Information****Key to Abbreviations**

NDA = No data Available

**Hazardous Material Information System (HMIS):**

Scale 0-4		NFPA	HMIS
4 – Severe Hazard	Health	2	2
3 – Serious Hazard	Flammability	1	1
2 – Moderate Hazard	Reactivity	0	0
1 – Slight Hazard			
0 – Minimal Hazard			

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

**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 GROUP® 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 GROUP® assumes no legal responsibility for use or reliance on the information contained in this safety data sheet.

Last Revision Date: NDA

Preparation Date: 05-23-16