

C2850 POLYASPARTIC RESIN

1. Identification

Product Name: C2850 POLYASPARTIC RESIN

Material Number: C2850

Chemical Family: Aspartic Ester / Polyaspartic Resin

Use: Raw material for coatings, inks, adhesives, sealants, elastomers, waterproofing, anti-corrosion coatings, flooring coatings, blade coatings, and automotive repair materials in industrial applications

2. Hazards Identification

GHS Classification

Skin sensitisation: Category 1

GHS Label Elements

Hazard pictograms:

Signal word:

Warning

Hazard statements:

May cause an allergic skin reaction.

Precautionary statements:

Prevention:

Avoid breathing dust, mist, gas, vapors or spray.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

Response:

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

Disposal:

Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.

Junaimei (Shandong) New Materials Co., Ltd.

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TRANSPORTATION EMERGENCY

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NON-TRANSPORTATION

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Information Email: info@junaimei.cn

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3. Composition/Information on Ingredients

Hazardous Components

Concentration Components CAS-No.

95 - 100% Aspartic Ester 152637-10-0

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

4. First Aid Measures

Most Important Symptom(s)/Effect(s)

Acute: May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

Eye Contact

In case of contact, flush eyes with plenty of lukewarm water. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Get medical attention if irritation develops.

Skin Contact

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

Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if irritation develops.

Ingestion

If ingested, do not induce vomiting unless directed to do so by medical personnel. Give two glasses of water for dilution. Call a physician immediately. Never give anything by mouth to an unconscious person.

5. Firefighting Measures

Suitable Extinguishing Media: All extinguishing media are suitable.

Unsuitable Extinguishing Media No Data Available

Fire Fighting Procedure

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

Hazardous Decomposition Products

By Fire and Thermal Decomposition: Carbon oxides, Nitrogen oxides (NO_x), Amines, other aliphatic fragments which have not been determined, Ammonia gas may be liberated at high temperatures.

Unusual Fire/Explosion Hazards

Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. Accidental Release Measures

Spill and Leak Procedures

Evacuate and keep unnecessary people out of spill area. Cleanup personnel must use appropriate personal protective equipment. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Prevent from entering open drains and waterways. Ventilate area to remove vapors or dust.

7. Handling and Storage

Handling/Storage Precautions

Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use. Do not breathe vapours or spray mist. Store in a cool, dry, well-ventilated place away from ignition sources, heat, moisture, and foreign materials. Material is hygroscopic and may absorb small amounts of atmospheric moisture. Do not reseal container if contamination is suspected.

Storage Temperature

Minimum: 0 °C (32 °F)

Maximum: 40 °C (104 °F)

Storage Conditions

Store separate from food products.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Substances to Avoid

Oxidizing agents, Acids, Isocyanates

8. Exposure Controls/Personal Protection

The recommendations in this section should not be a substitute for a personal protective equipment (PPE) assessment performed by the employer as required by 29 CFR 1910 Subpart I.

Exposure Limits

Country specific exposure limits have not been established or are not applicable

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

Industrial Hygiene/Ventilation Measures

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/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.

Respiratory Protection

The use of a positive pressure supplied air respirator is recommended if the airborne concentration is unknown or if spraying is performed in a confined space or area with limited ventilation. In spray applications, an organic vapor/particulate respirator or air supplied unit is necessary.

Hand Protection

Ensure gloves remain in good condition during use and replace if any deterioration is observed. Permeation resistant gloves., 4H laminate gloves., Butyl rubber gloves., Nitrile rubber gloves.

Eye Protection

Chemical safety goggles or safety glasses with side-shields., Chemical safety goggles in combination with a full face shield if a splash hazard exists.

Skin Protection

Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact., Where spray mist/vapor is anticipated, permeation resistant clothing is recommended.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

9. Physical and Chemical Properties

Physical state: liquid

Appearance: liquid

Color: Colorless to light yellow

Odor: slight

Amine Value: 170 - 210

Color Value (APHA): max. 250

NH Equivalent: 290 g/mol

Equivalent OH Content: 5.8 - 5.9%

Solid Content: 97 ± 2%

Odor Threshold: No Data Available

pH: ca. 10

Melting Point: ca. -61 °C (-77.8 °F) (EG A1)

Flash Point: 94 °C (C2850 TDS); ca. 194 °C (381.2 °F) @ 1,013 hPa (DIN EN ISO 2719, reference data)

Evaporation Rate: No Data Available

Lower explosion limit: No Data Available

Upper Explosion Limit: No Data Available

Vapor Pressure: No Data Available

Vapor Density: No Data Available

Relative Density: 1.08 @ 25 °C (C2850 TDS)

Density: ca. 1.06 g/cm³ @ 20 °C (68 °F) (EG A3, reference data)

Relative Vapor Density: No Data Available

Specific Gravity: No Data Available

Solubility in Water: No Data Available

Partition Coefficient: n-octanol/water:

No Data Available

Auto-ignition Temperature: ca. 365 °C (689 °F) (EG A15)

Decomposition Temperature: No Data Available
Unblocking Temperature: No Data Available
Dynamic Viscosity: ≥ 80 mPa.s @ 25 °C (C2850 TDS)
Reference Dynamic Viscosity: ca. 150 mPa.s @ 20 °C (68 °F) (DIN EN ISO 3219/A.3)
Kinematic Viscosity: No Data Available
Bulk Density: No Data Available
Molecular Weight: No Data Available
Self Ignition: not applicable
Particle characteristics: No Data Available

10. Stability and Reactivity

Hazardous Reactions
Hazardous polymerisation does not occur.

Stability
Stable

Materials to Avoid
Oxidizing agents, Acids, Isocyanates

Conditions to Avoid
Avoid extreme heat.

Hazardous Decomposition Products
By Fire and Thermal Decomposition: Carbon oxides, Nitrogen oxides (NO_x), Amines, other aliphatic fragments which have not been determined, Ammonia gas may be liberated at high temperatures .

11. Toxicological Information

Likely Routes of Exposure: Skin Contact
Eye Contact
Inhalation
Ingestion

Health Effects and Symptoms
Acute: May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.
Chronic: Not expected to cause adverse chronic health effects.

Toxicity Data for: C2850 POLYASPARTIC RESIN

Data on the product is not available.

Please find the data available for the components.

Acute Oral Toxicity
Acute toxicity estimate: 2,502 mg/kg (Calculation method)

Acute Dermal Toxicity
Acute toxicity estimate: 2,502 mg/kg (Calculation method)

Toxicity Data for: Aspartic Ester

Acute Oral Toxicity
LD50: > 2,000 mg/kg (rat, female) (OECD Test Guideline 423)
Toxicological studies at the product

Acute Inhalation Toxicity
LC50: > 4.224 mg/l, 4 h, dust/mist (rat, male/female) (OECD Test Guideline 403)
Toxicological studies of a comparable product.

Acute Dermal Toxicity
LD50: > 2,000 mg/kg (rat) (Directive 67/548/EEC, Annex V, B.3.)
Studies of a comparable product.

Skin Irritation
rabbit, OECD Test Guideline 404, slight irritant
Toxicological studies of a comparable product.

Eye Irritation

rabbit, OECD Test Guideline 405, slight irritant

Toxicological studies of a comparable product.

Rat,

Effect on the respiratory tract: slight irritant

Sensitization

Skin sensitization (local lymph node assay (LLNA)):: positive (Mouse, OECD Test Guideline 429)

Studies at the product.

Repeated Dose Toxicity

Subacute oral toxicity: NOAEL: 1,000 mg/kg, (rat)

Toxicological studies of a comparable product.

Mutagenicity

Genetic Toxicity in Vitro:

Chromosome aberration test in vitro: negative

Toxicological studies of a comparable product.

Salmonella/microsome test (Ames test): No indication of mutagenic effects. (Metabolic Activation: with/without)

Studies at the product.

Genetic Toxicity in Vivo:

Micronucleus test: negative (Mouse)

Toxicological studies of a comparable product.

negative

Toxicity to Reproduction/Fertility

Two-generation study, Oral, (rat, male/female) Toxicological studies of a comparable product.

Developmental Toxicity/Teratogenicity

rat, female, Oral, NOAEL (teratogenicity): 1,000 mg/kg, NOAEL (maternal): 1,000 mg/kg , Studies of a comparable product.

Carcinogenicity:

No carcinogenic substances as defined by IARC, NTP and/or OSHA

12. Ecological Information

Ecological Data for: C2850 POLYASPARTIC RESIN

Data on the product is not available. Please find below the ecotoxicological data available to us for the components.

Ecological Data for Aspartic Ester

Biodegradation

0 %, Exposure time: 28 d, i.e. not inherently degradable

Ecotoxicological studies of the product

23 %, Exposure time: 28 d, i.e. not readily degradable

Studies at the product.

Acute and Prolonged Toxicity to Fish

LC50: 66 mg/l (Danio rerio (zebra fish), 96 h)

Ecotoxicological reports on a comparable product

Acute Toxicity to Aquatic Invertebrates

EC50: > 100 mg/l (Daphnia magna (Water flea), 48 h)

Studies at the product.

Toxicity to Aquatic Plants

ErC50: > 100 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)

Studies at the product.

Toxicity to Microorganisms

EC50: > 1,000 mg/l, (activated sludge, 3 h)

Studies at the product.

13. Disposal Considerations

Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions

Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning. Empty containers retain product residue (dust, liquid, vapor and/or gases) and can be dangerous. Do not heat or cut container with electric or gas torch.

14. Transportation Information

Land transport (DOT)

Non-Regulated

Sea transport (IMDG)

Non-Regulated

Air transport (ICAO/IATA)

Non-Regulated

15. Regulatory Information

United States Federal Regulations

US. Toxic Substances Control Act: Listed on the Active Portion of the TSCA Inventory.

SNUR Components

No substances are subject to Section 5 Significant New Use Rule (SNUR) requirements.

Section 6 Risk Management Components:

No substances are subject to Section 6 Risk Management rule requirement.

Section 12b Components:

No substances are subject to TSCA 12(b) export notification requirements.

Section 4 Test Order/Rule Components:

No substances are subject to Section 4 Final Test Orders or Rules.

Consent Order:

No substances are subject to Section 5 Consent Order requirements.

US. EPA CERCLA Hazardous Substances (40 CFR 302.4) Components:

None

SARA Section 311/312 Hazard Categories:

Refer to hazard classification information in Section 2.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components:

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components:

None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

Concentration Components CAS-No.

95 - 100% Aspartic Ester 152637-10-0

California Proposition 65 List:

None.

CFATS (Chemical Facility Anti-Terrorism Standards) Chemicals

To the best of our knowledge, this product does not contain Appendix A Chemicals of Interest (COI), at or above the Screening Threshold Quantity (STQ), as defined by the Department of Homeland Security Chemical Facility Anti-terrorism Standard (CFATS, 6 CFR Part 27).

Based on information provided by our suppliers, this product is considered "DRC Conflict Free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 2012-08-22).

16. Other Information

The method of hazard communication for Junaimei (Shandong) New Materials Co., Ltd. is comprised of product labels and safety

The handling of two component systems containing reactive aspartic esters in combination with isocyanate hardeners requires appropriate protective measures referred to in this SDS. These systems are therefore recommended only for use in industrial or trade (commercial) applications. They are not suitable for use in Do-It-Yourself applications.

Contact: Technical / Product Safety Department

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