C1524 Polyaspartic Resin

1. Identification

Product Name: C1524 Polyaspartic Resin

Material Number: C1524

Chemical Family: Aspartic Ester / Polyaspartic Resin

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

Product Description: Solvent-free resin containing secondary amino groups reactive with -NCO. Compared with C1420 and C1520, its reactivity is between the two and toughness is improved.

Restrictions on Use: Not recommended for DIY / non-industrial applications.

Supplier: Junaimei (Shandong) New Materials Co., Ltd.

Address: No. 7, Circular Economy Demonstration Park, Tieying Town, Leling, Dezhou, Shandong, China

Emergency Phone: +86 534 683 6668 / +86 185 1680 0818

Information Email: info@junaimei.cn; Website: www.junaimei.cn

2. Hazards Identification

GHS Classification: Skin sensitisation, Category 1.

GHS Label Elements: Exclamation mark (GHS07).

Signal Word: Warning.

Hazard Statement: May cause an allergic skin reaction.

Precautionary Statements - Prevention: Wear protective gloves. Avoid breathing dust, mist, gas, vapors or spray. Contaminated work clothing must not be allowed out of the workplace.

Precautionary Statements - 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.

Precautionary Statements - Disposal: Dispose of contents and container in accordance with applicable national, local, and site environmental control regulations.

3. Composition/Information on Ingredients

Hazardous components are treated as aspartic ester resin components consistent with the same product family. The specific chemical identity and/or exact percentage of component(s) may be withheld as a trade secret.

Main component: Aspartic Ester / Polyaspartic Resin.

4. First Aid Measures

Most Important Symptoms/Effects (Acute): May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash. May cause skin, eye, and respiratory tract irritation.

Eye Contact: Flush eyes with plenty of lukewarm water. Use fingers to ensure eyelids are separated and the eye is being irrigated. Get medical attention if irritation develops or persists.

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 or persists.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting unless directed 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 wear self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize rupture risk.

Hazardous Decomposition Products: Fire and thermal decomposition may produce carbon oxides, nitrogen oxides (NOx), amines, and other undetermined aliphatic fragments. 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

Evacuate personnel and keep unnecessary people out of the spill area. Cleanup personnel must use appropriate PPE. Cover spill with inert material, such as dry sand or earth, and collect for proper disposal. Prevent entry into drains and waterways. Ventilate area to remove vapors or dust.

7. Handling and Storage

Avoid contact with skin, clothing, and eyes. Use only with adequate ventilation and personal protection. Wash thoroughly after handling. Keep container closed when not in use. Do not breathe vapors or spray mist.

Store in a cool, dry, well-ventilated place away from ignition sources, heat, moisture, and foreign materials. The material is hygroscopic and may absorb small amounts of atmospheric moisture. Do not reseal container if contamination is suspected.

Storage Temperature: Store at low temperature, not above 40 deg C.

Packaging and Shelf Life: 20 kg or 200 kg per drum. In original unopened and undamaged sealed containers under specified conditions, shelf life is one year.

Substances to Avoid: Oxidizing agents, acids, isocyanates.

Coatings prepared with this product should be cured for one week before performance testing.

8. Exposure Controls/Personal Protection

Exposure Limits: No known ACGIH TLV, OSHA PEL, or supplier-recommended occupational exposure limit is available for components not otherwise listed.

Engineering Controls: Use general dilution and local exhaust ventilation as necessary to control airborne vapors, aerosols, and thermal decomposition products. Heating may generate airborne vapors and/or aerosols.

Respiratory Protection: If vapors form, respiratory protection is recommended. In spray applications or confined/poorly ventilated areas, use an organic vapor/particulate respirator or supplied-air unit.

Hand Protection: Use permeation-resistant gloves such as 4H laminate, butyl rubber, nitrile rubber, or equivalent gloves. Replace gloves if deterioration is observed.

Eye Protection: Wear chemical safety goggles or safety glasses with side shields. Use a full face shield if a splash hazard exists.

Skin Protection: Avoid all skin contact. Wear appropriate protective clothing. Where spray mist or vapor is anticipated, permeation-resistant clothing is recommended.

Additional Protective Measures: Employees should wash hands and face before eating, drinking, or using tobacco products. Emergency showers and eye wash stations should be available.

9. Physical and Chemical Properties

Physical State / Appearance: Colorless to light yellow liquid.

Odor: Mild / inherent odor.

Amine Value: 160 - 180.

Color Value (APHA): Max. 250.

NH Equivalent: 333 g/mol.

Equivalent OH Content: 5.1%.

Relative Density: 1.02 at 25 deg C.

Dynamic Viscosity: 1600 - 2800 mPa.s at 25 deg C.

Solids Content: 97 +/- 2%.

Flash Point: 94 deg C.

Water Solubility: Insoluble / no data available.

Other properties not listed: No data available or not established.

10. Stability and Reactivity

Hazardous Reactions: Hazardous polymerisation does not occur.

Stability: Stable under recommended storage and handling conditions.

Materials to Avoid: Oxidizing agents, acids, isocyanates.

Conditions to Avoid: Avoid extreme heat and contamination.

Hazardous Decomposition Products: Fire and thermal decomposition may produce carbon oxides, nitrogen oxides (NOx), amines, and other undetermined aliphatic fragments. 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. May cause skin, eye, and respiratory tract irritation.

Acute Oral Toxicity Estimate: > 5000 mg/kg, based on same-family reference data/calculation method.

Aspartic ester same-family data indicate low acute toxicity, possible slight irritation, and positive skin sensitisation potential.

Carcinogenicity: No carcinogenic substances as defined by IARC, NTP and/or OSHA are expected based on available same-family information.

12. Ecological Information

Product-specific ecological data are not available. Avoid release to the environment, drains, and waterways.

Same-family aspartic ester information indicates the material may not be readily biodegradable. Use appropriate containment and disposal practices.

13. Disposal Considerations

Waste disposal should comply with applicable national, local, and site environmental control regulations.

Empty containers may retain product residue and can be dangerous. Do not reuse empty containers without proper cleaning. Do not heat or cut containers with electric or gas torch.

14. Transportation Information

C1524 TDS indicates the product is combustible. During transport and storage, keep away from ignition sources and heat, and prevent packaging damage.

15. Regulatory Information

Chemical inventory and regional regulatory status should be confirmed by the supplier or importer/user according to applicable regulations.

SARA 311/312 hazard categories should be assessed according to Section 2 classification.

Users are responsible for determining regulatory applicability for their location, formulation, and use conditions.

16. Other Information

Two-component systems containing reactive aspartic esters in combination with isocyanate hardeners require the protective measures referenced in this SDS. These systems are recommended only for industrial or trade (commercial) applications and are not suitable for DIY applications.

Contact: Technical / Product Safety Department.

Telephone: +86 534 683 6668 / +86 185 1680 0818.

Email: info@junaimei.cn.