

Aspartic Polyurea Resins Model NO. F420
Material Safety Data Sheet

Part One Chemical and Company Identification

Product Name: polyaspartic acid ester resin

Model: F420

Manufacturer: Zhuhai Feiyang Chemical Co., Ltd.

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Part Two Composition/Component Information

Main components are resins with -NH functional groups, which react with -NCO groups, content >95% .

Aspartic Acid, N,N'-(methylenedi-4,1-cyclohexanediy)bis-, 1,1',4,4'-tetraethyl ester

CAS No.: 136210-30-5

Part Three Hazards Identification

Pathways: inhalation, eye contact, skin contact, ingestion.

Health Hazards: dizziness, headache, nausea.

Environmental hazards: Once the resin into the sewer, polluted river water.

Blasting risk: It can burn.

Fire Hazard: This product is combustible requirements away from sources of ignition.

Toxicity: oral micro-toxic, non-toxic skin absorption, but weak irritant to the skin, a strong irritant to the eyes.

Part Four First Aid Measures

Eye contact: eye contact immediately with water or saline irrigation water for at least 5 minutes, and the necessary medical observation.

Inhalation: speed away from the scene to fresh air. Keep the environment ventilation

Ingestion: Wash out mouth, vomiting. Seek medical advice

Part Five Fire Fighting Measures

Hazardous characteristics: flammable.

Hazardous combustion products: carbon monoxide, carbon dioxide, oxides of nitrogen.

Fire fighting methods: Wear self-contained breathing apparatus for fire fighting if necessary.
To use fire extinguishing agent, extinguishing agents: water-resistant foam, dry powder, carbon dioxide, sand.

Part Six Accidental Release Measures

Products accidental spills:

To eliminate all possible sources of ignition, such as flame, sparks. Keep away from the area and avoid breathing the gas. To wear breathing apparatus, respiratory masks can only use in the evacuation.

A small leak:

To use sand or soil to absorb the liquid, and then moved to a safe area, pending future disposal.

Large leak:

To use sand or soil to prevent the spread of spilled liquids, such as overflow of liquid into the sewer, there is a potential danger of explosion or toxic; to call the relevant authorities (especially Fire Department) immediately. To put leakage into the tank for recycling or treatment, if possible.

Part Seven Handling and Storage

Handling Precautions: To handle it with care, and keep away from sources of ignition.

Storage:

- 1 To store in a well-ventilated area, independently.
- 2 No fireworks; workshop maintain good ventilation;
3. To prevent static electricity;
4. Sealed in containers.

Part Eight Exposure Controls/Personal Protection

Construction site control: Keep it well-ventilated

Respiratory protection : To wear activated carbon masks at least, and to use self air-purifying full-face respirators, when available.

Eye protection: No special measures.

Body protection: To wear professional suit.

Hand protection : Handle with protective gloves.

Others: No smoking: to avoid prolonged or repeated contact.

Part Nine Physical and Chemical Properties

Appearance	Colorless or slight yellow liquid
Solvency	Slightly soluble in water, miscible in most organic solvents.
Molecular weight	554
-NH Equivalent (g/eq)	277
Viscosity (mpa.s/25°C)	1000-1500

Solid Content %	≥95
Density (25°C)	1.06
Flash Point /°C	90-95

Application: Resins as raw materials for aspartic polyurea coatings, including water-proof, non yellowing and wearing-resistant finishes.

Part Ten Stability and Reactivity

Storage Stability : Stable for one year under recommended storage conditions.

Materials to avoid : Strong acids, acid chlorides, acid anhydrides, strong oxidants, isocyanates.

Part Eleven Ecological Information

Other harmful effects: the substance may be harmful for water environment, should be given special attention.

Part Twelve Disposal Considerations

Waste disposal methods: disposal by incineration, to remove residues through the scrubber

Part Thirteen Toxicity

Acute toxicity, by mouth:

Aspartic Acid, N,N'-(methylenedi-4,1-cyclohexanediy)bis-, 1,1',4,4'-tetraethyl ester

The median lethal dose (LD50) in rats:: > 2,000 mg/kg

Part Fourteen Transportation Information

Package: To seal in plastic or iron containers.

Transport Remarks: Strictly in accordance with *The regulations of Dangerous Goods Transportation*, made by the Ministry of Railway Transport. Make sure the package is completed and safe, No leak, no falls, damage during the whole transportation. Tank (tank) used in transport vehicles should have grounded chains, equipped some tools to reduce shock and avoid static electricity .

Non-mixed with acids, food chemicals shipped.

Part Fifteen Regulatory Information

Regulatory Information: Chemical Dangerous Goods Safety Management Regulations (February 17, 1987 issued by the State Council), the dangerous chemicals Security Implementation Rules (of labor [1992] No. 677), the safe use of chemicals in the workplace regulations ([1996]Ministry of Labor No. 423), and regulations for the safe use of hazardous chemicals, production, storage, transport, handling and other aspects have made

the corresponding provisions; hazardous chemicals commonly used classification and marking (GB 13690-92)
the material designated 8.2 class alkaline corrosive substances.

Part Sixteen Other Information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

Made by : Research department of Zhuhai Feiyang Chemical Co., Ltd