



Wuhan Xinru Chemical Industry Co., Ltd

Add: Room 2805, North Fuxinhuiyu, Changqing Road, Wuhan, China 430015

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MATERIAL SAFETY DATA SHEET

Product Identification

【Product Name】

Dihydro-2H-pyran-2,6(3H)-dione

【Synonyms】

2H-Pyran-2,6(3H)-dione, dihydro-

Glutaric acid anhydride

Pentanedioic acid anhydride

Pentanedioic anhydride

Pyroglutaric acid

【CAS】 108-55-4

【Formula】 C₅H₆O₃

【Molecular Weight】 114.1

【EINECS】 203-593-6

【RTECS】 MA3850000

【RTECS Class】 Other

【Beilstein/Gmelin】 110051

【Beilstein Reference】 5-17-11-00009

【EC Class】 harmful, irritant

Physical and Chemical Properties

【Appearance】 White powder.

【Solubility in water】 Very soluble

【Melting Point】 52 - 55

【Boiling Point】 287



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【Vapor Pressure】 0.003 (25 C)

【Density】 1.411 g/cm³

【Partition Coefficient】 -.92

【Heat Of Vaporization】 52.6

【Heat Of Combustion】 -2207 kJ/mol

First Aid Measures

【Ingestion】

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

【Inhalation】

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

【Skin】

Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

【Eyes】

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Handling and Storage

【Storage】

Store in a cool, dry place. Keep container closed when not in use.

【Handling】

Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Hazards Identification

【Ingestion】

May cause central nervous system depression. May cause gastrointestinal tract damage. May be harmful if swallowed.

【Inhalation】



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Causes respiratory tract irritation.

【Skin】

Causes skin irritation. If absorbed, may cause symptoms similar to those for ingestion. May be harmful if absorbed through the skin.

【Eyes】 Causes eye irritation.

【EC Risk Phrase】 R 21/22 37/38 41

【EC Safety Phrase】 S 26 36/37/39

Exposure Controls/Personal Protection

【Personal Protection】

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure.

【Respirators】

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

【Poison Class】 4

Fire Fighting Measures

【Flash Point】 120

【Autoignition】 320

【Fire Fighting】

Wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Extinguishing media: Do NOT use water directly on fire. Use foam, dry chemical, or carbon dioxide.

【Upper exp. limit】 13.1

【Lower exp. limit】 2



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Accidental Release Measures

【Small spills/leaks】

Clean up spills immediately, using the appropriate protective equipment. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

Stability and Reactivity

【Disposal Code】 4

【Stability】

May decompose on exposure to moist air or water.

【Incompatibilities】

Strong oxidizing agents, acids, bases, alcohols, amines.

【Decomposition】

Carbon monoxide, carbon dioxide, acrid smoke and fumes.

Transport Information

【HS Code】 2917 19 90