

Medical Grade Glycolide



Glycolide

Main features and benefits of Glycolide:

- Medical grade, manufactured under EN ISO 13485
- REACH registered
- Purity: ≥99.5%
- Synonym: 1,4-dioxane-2,5-dione
- CAS number: 502-97-6

Glycolide is the dimer of glycolic acid and commonly used for the synthesis of glycolide containing homo- and copolymers. ITVP produces medical-grade glycolide of

highest purity via multistep purification. This allows reproducible synthesis of high molecular weight PGA-based polymers.

Glycolide

| Description | | ITVP-Glycolide is a medical grade monomer for ring opening polymerization. Glycolide, the dimer of glycolic acid, is a white, crystalline solid with high purity. | | |
|----------------------|---|--|-------------------------|--|
| Specification | Test | Method | Specification | |
| | Appearance | Visual | White crystalline solid | |
| | Identification | NMR | Conforms to reference | |
| | Purity | NMR | ≥99.5% | |
| | Melting range | DSC | 83-87°C | |
| | Free Acid | NMR | ≤0.038 wt% | |
| | Water content | Titration | ≤ 0.02 wt% | |
| | Heavy metal | * | ≤10ppm | |
| Identification | Chemical name | 1,4-dioxane-2,5-dione | | |
| | Molecular formula | $C_4H_4O_4$ | | |
| | Molecular weight | 116.07 g/mol | 116.07 g/mol | |
| | CAS-No. | 502-97-6 | 502-97-6 | |
| Packaging | sists of an inner PE and | ITVP-Glycolide can be supplied in 1, 5 and 10 kg packages. Usual packaging consists of an inner PE and an outer bag of aluminum coated polyester-PE laminate. Products are shipped in additional boxes. | | |
| Storage and Handling | (<-15°C). Allow glycolic packaging. After openin | ITVP recommends to store glycolide in the original packaging at low temperatures (<-15°C). Allow glycolide to warm up to room temperature before opening the packaging. After opening the original packaging, please store glycolide under inert atmosphere at low temperatures. | | |

 $[\]ensuremath{^{*}}\xspace$ Heavy metal content is measured by an external certificated laboratory.

ITV Denkendorf Produktservice GmbH (ITVP) is a subsidiary of the DITF (German Institutes of Textile and Fiber Research Denkendorf), Europe's largest textile research center. ITVP is certified according EN ISO 13485 for the development and production of polymers, pre-products and devices for medical applications, but is not actively marketing medical devices for the final consumer. The

main focus lies on textile-based implants like e.g. surgical sutures and ligaments for wound closure, PP meshes for hernia repair and absorbable meshes for soft-tissue reinforcement and breast reconstruction, vascular prostheses for blood vessel replacement and stents for use in the trachea and oesophagus.

ITV Denkendorf Produktservice GmbH

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