

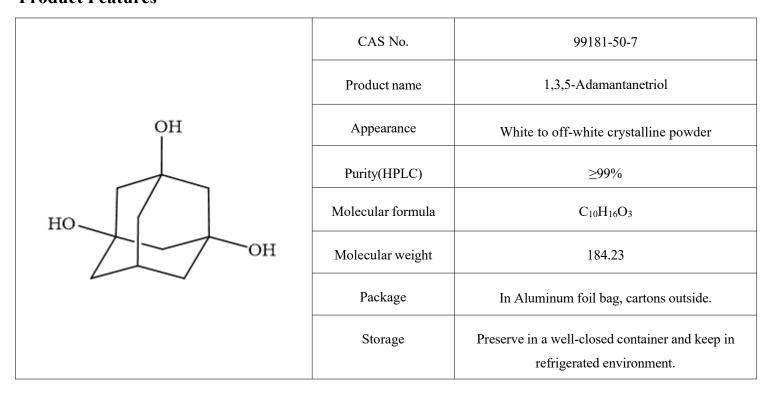
#### Heynova (Shanghai) New Material Technology CO., Ltd

Building 3, Zhangjiang Microelectronics Port, No. 690 Bibo Road, Pudong New Area, Shanghai

Tel: +86-178-2110-2608 Mail: <u>info@heynovachem.com</u> Web site: www.heynovachem.com Post Code: 201203

## CERTIFICATE OF ANALYSIS

### **Product Features**



1,3,5-Adamantanetriol is chemically stable and is not susceptible to chemical reactions under normal conditions. The chemical reactivity of the substance is focused on the three reactive hydroxyl groups in its structure, which have equivalent chemical reaction sites. Despite the presence of three equivalent hydroxyl groups, it has been shown that it is possible to selectively halogenate one of the hydroxyl groups, thereby introducing different functional groups into the molecule to expand its chemical diversity.

# **Application**

- > 1,3,5-Adamantanetriol is mainly used as a basic reagent for organic synthesis and applied in basic organic chemistry. 1,3,5-Adamantanetriol has some special characteristics in organic synthesis due to the large-site-resistance nature of the carbon atoms on the adamantane ring in 1,3,5-adamantanetriol. This large-site resistance property can be used for structural modification and synthesis of organic ligands. In organic synthesis, the large-site-resistance group can affect the regioselectivity and enantioselectivity of the reaction, which has good applications in the basic chemistry of asymmetric catalysis.
- > In addition, due to the nucleophilicity of the hydroxyl group, it can also be acylated with chloride compounds to obtain the corresponding ester derivatives.



#### Heynova (Shanghai) New Material Technology CO., Ltd

Building 3, Zhangjiang Microelectronics Port, No. 690 Bibo Road, Pudong New Area, Shanghai

Tel: +86-178-2110-2608 Mail: <u>info@heynovachem.com</u> Web site: www.heynovachem.com Post Code: 201203

## **Company Profile**

Heynova (Shanghai) New Material Technology co., Ltd. located in Shanghai is a technologically innovative company with integrated development of R&D, production and sales of high-end Electronic Materials and Specialty Polymer Materials. Meanwhile we are the agent of PI Resin, PI Engineering Plastics and 3D Printing materials.

- As technology R&D, the company has maintained close cooperation with a number of domestic research institutes for a long time, focusing on the design of the molecular structure of electronic materials, with a number of invention patents, the core formulations and processes independently controllable, with the ability to customize the development of the materials.
- As production and supply, our company has cooperative production bases in Shandong, Jiangsu, Sichuan and Northeast China, which can produce materials from gram to tonnage level, and has all the capabilities of small, medium and large-scale production.

### **Business Classification**

- Polyimide Materials: Including PI Monomers, PI Resin, PI Engineering Plastics. PI monomers are mainly Dianhydride and Diamine special monomers, which have been widely used in the production of colorless and transparent Flexible Polyimide Films, Flexible Display Materials, 5G New Materials, Photosensitive Polyimide and Semiconductor Materials, New Energy Automobile Special Insulating Materials, Aerospace Composites, and many other high-tech field products.
- ▶ Photoresist Materials: Including Photoresist monomer, PAG, PAC, Photoinitiators, Solvents and so on. At present, our company's Photoresist Monomer is mainly based on KrF, ArF Gel monomer, focusing on the provision of Display Photoresist, Semiconductor Photoresist and special Photoresist materials for Semiconductors, Panels, PCB and other fields.
- > **OLED Display Materials:** Specialized in providing OLED Display Intermediate materials for cell phones, TVs, flat panels, wearable devices, in-vehicle devices and other fields.
- Lithium Battery Materials: Specialized in providing Lithium Battery Diaphragm materials for transportation, electric power storage, mobile communication, new energy storage, aerospace military and other fields.
- > 3D Printing Materials: Specialized in providing 3D Printing Organic Resin materials and high-end Metal materials for aerospace, marine, nuclear industry, medical and other fields.
- ➤ Customized services: We can customize the development of products according to customer needs, and continuously optimize the material properties and key indicators, developed in collaboration with customers, established the direct channel of "R & D Validation Mass production".