



SHANGHAI FREEMEN CHEMICALS CO.,LTD.

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Product: **4-Methylumbelliferone**

4-Methylumbelliferone, off-white to yellow crystals, odorless and tasteless. Insoluble in water, slightly soluble in methanol, ethanol, easily soluble in sodium hydroxide solution It is used in organic synthesis for condensation reactions. It also is a catalyst in many organic reactions. 4-MU is an already approved drug in Europe and Asia called “hymecromone” where it is used to treat biliary spasm.

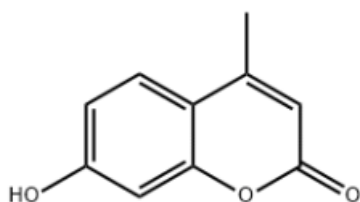
Alias: **2H-1-Benzopyran, 7-hydroxy-4-methyl-2-oxo-; 2H-1-Benzopyran-2-one, 7-**

hydroxy-4-methyl-; 2H-1-Benzopyren-2-one, 7-hydroxy-4-methyl-; 4-

Methylumbelliferon; 7-hydroxy-4-methyl-2h-1-benzopyran-2-on

CAS No: **90-33-5**

Molecule structure



Specifications:

Appearance: off-white crystal

Purity: 99.0%min

Melting Point(°C):70~73

Loss on drying (%):0.3 max

Residue on Ignition (%):0.3 max

Packing & Delivery 25kg/drum

UN No.1993, Class:3, Packing group:I



Application

- 4-methylumbelliferone (4-MU) is a dietary supplement that inhibits hyaluronic acid (HA) synthesis. Hyaluronan (HA) is a prominent component of the extracellular matrix at many sites of chronic inflammation, including type 1 diabetes (T1D), multiple sclerosis, and numerous malignancies. 4-MU is an already approved drug in Europe and Asia called “hymecromone” where it is used to treat biliary spasm.
- It is also useful in the kinetic investigation of enzyme activity.
- 4-Methylumbelliferone is primarily used in synthesizing medicinal compounds and as a building block for fluorescent probes. Applications include synthesis of:

coumarin triazole derivatives as potential antimicrobial agents.

coumarin salen-based fluorescence sensors for Mg²⁺ detection.

pyranocoumarin derivatives as anti-hyperglycemic and anti-dyslipidemic agents.

coumarin piperazine derivatives as potential multireceptor atypical antipsychotics.

4-methylumbelliferyl T-antigen as a substrate for endo- α -N-acetylgalactosaminidase.