

# Technical Data Sheet

# 5-(Hydroxymethyl)Furfural

# **Product Information**

Chemical Name Chemical Structure 5-(Hydroxymethyl) Furfural



CAS #	67-47-0
EINECS	200-654-9
Molecular Weight	126.11
Molecular Formula	C6H6O3
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#### Description

5-Hydroxymethylfurfural is a kind of Light yellow crystal, with melting point 28-34 °C(lit.), and boiling point 114-116 °C1 mm Hg(lit.). It can be used as pharmaceutical intermediates and to detect glucose infusion metabolites.

Hydroxymethylfurfural (HMF), also 5-(Hydroxymethyl)furfural, is an organic compound derived from dehydration of certain sugars. This yellow low-melting solid is highly water-soluble. The molecule consists of a furan ring, containing both aldehyde and alcohol functional groups. HMF has been identified in a wide variety of baked goods. HMF, which is derived from hexoses, is a potential "carbon-neutral" feedstock for fuels and chemicals.

#### **Physical Properties**

Appearance	Light yellow crystal
Melting point, °C	28-34 °C(lit.)
Boiling point, °C	114-116 °C1 mm Hg(lit.)
density	1.243 g/mL at 25 °C(lit.)
refractive index	n20/D 1.562(lit.)
Flash point, °F	175
Sensitivity	Air & Light Sensitive

#### Specification

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Items	Specification
Appearance	Light yellow crystal or amber liquid
Identification	Positive reaction
Content, % (GC)	≥95.0
Melting point, °C	30.0~36.0
Odor	Caramel, roasted and Zymolysis food odor

# Applications

- 1) Medicine grade: 5-Hydroxymethylfurfural can be used as pharmaceutical intermediates and to detect glucose infusion Metabolites
- 2) Spice grade: 5-Hydroxymethylfurfural can be used as Spices intermediates for baked products, dairy products, and tobacco products

# Packaging

Aluminum foil bag with net weight 1KG/bag

# Storage & Handling

1)Precautions:

Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material.

Do not ingest. Do not breathe dust. Wear suitable protective clothing.

If ingested, seek medical advice immediately and show the container or the label.

Avoid contact with skin and eyes.

Keep away from incompatibles such as oxidizing agents, reducing agents, alkalis.

2)Storage: Keep container tightly closed Keep container in a cool, well-ventilated area. Do not store above 0°C (32°F). Sensitive to light. Store in light-resistant containers.