

Hefei TNJ Chemical Industry Co.,Ltd.

B911 Xincheng Business Center, Qianshan Rd. Hefei 230022 China

Tel: (0086) 551 65418695
Fax: (0086) 551 65418697
Email: info@tnjchem.com
Site: www.tnjchem.com

Technical Data Sheet

Tetrahydrofurfuryl alcohol(THFA)

Product Information

Chemical Name Tetrahydrofurfuryl alcohol

Chemical Structure

CAS # 97-99-4 EINECS 202-625-6

Synonyms (tetrahydro-furan-2-yl)-methanol;2-Furanmethanol,tetrahydro-.

Description

Tetrahydrofurfuryl alcohol, a clear colorless liquid with a mild odor. Flash point 167° F. Vapors are heavier than air. It can be used as aw material of all kinds of furan resin, furfuryl alcohol resin and phenol resin, tetrahydrofurfuryl alcohol, anti-corrosion coating, etc.

Acetyl bromide reacts violently with alcohols or water [Merck 11th ed. 1989]. Mixtures of alcohols with concentrated sulfuric acid and strong hydrogen peroxide can cause explosions. Example: An explosion will occur if dimethylbenzylcarbinol is added to 90% hydrogen peroxide then acidified with concentrated sulfuric acid. Mixtures of ethyl alcohol with concentrated hydrogen peroxide form powerful explosives. Mixtures of hydrogen peroxide and 1-phenyl-2-methyl propyl alcohol tend to explode if acidified with 70% sulfuric acid [Chem. Eng. News 45(43):73. 1967; J, Org. Chem. 28:1893. 1963]. Alkyl hypochlorites are violently explosive. They are readily obtained by reacting hypochlorous acid and alcohols either in aqueous solution or mixed aqueous- carbon tetrachloride solutions. Chlorine plus alcohols would similarly yield alkyl hypochlorites. They decompose in the cold and explode on exposure to sunlight or heat. Tertiary hypochlorites are less unstable than secondary or primary hypochlorites [NFPA 491 M 1991]. Base-catalysed reactions of isocyanates with alcohols should be carried out in inert solvents. Such reactions in the absence of solvents often occur with explosive violence [Wischmeyer 1969].

Physical Properties

Physical state and appearance: Liquid.

Odor: Not available Taste: Not available.

Color: Colorless to light yellow pH (1% soln/water): Not applicable.

Boiling Point: 178 °C(lit.) Melting Point: -80 °C Flash point, °F: 183

Vapor Pressure: 2.3 mm Hg (39 ° C) Refractive index : n20/D 1.452(lit.)

Sensitive: Hygroscopic

Specification

| Items | Specification |
|----------------------|---------------|
| Purity,% | 99Min |
| Furfuryl Alcohol,% | 0.08Max |
| Moisture, % | 0.10Max |
| Specific Gravity | 1.051-1.054 |
| (20/20℃) | |
| Refractive Index | 1.449-1.453 |
| (n 20/D) | |
| 5-Methyl THFA(Wt%) | 0.05Max |
| APHA Color | 20Max |
| 1,2-Pentanediol(Wt%) | 0.3Max |

Applications

- 1) Used as aw material of all kinds of furan resin, furfuryl alcohol resin and phenol resin, tetrahydrofurfuryl alcohol, anti-corrosion coating, etc.
- 2) Good solution of vanish and dye.
- 3)Sythetic febric, rubber, pesticide
- 4)Used as binder of sand core of sand core of thermal core shooting box in precise foundry industry.
- 5) used as solvents, thinner or other organic raw material.

Packaging

220kg per plastic drum.17.6mt per 20ft container

Storage & Handling

1)Precautions:

Keep away from heat. Keep away from sources of ignition.

Ground all equipment containing material.

Do not ingest.

Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing.

In case of insufficient ventilation, wear suitable respiratory equipment.

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.

2)Storage:

Keep container in a cool, well-ventilated area.

Keep container tightly closed and sealed until ready for use.

Avoid all possible sources of ignition (spark or flame).