



TECHNICAL DATA SHEET

Product name: Tetrahydrofuran



Specifications		
Parameters	Specifications	Typical results
Appearance	A clear colourless liquid	A clear colourless liquid
Peroxide (as H ₂ O ₂)	NMT 0.02%	0.005%
Water % by KF	NMT 0.05%	0.011%
Specific gravity (at 20°C)	0.89	0.89
Assay by GC	NLT 99.0%	99.98%

Stability and storage:

Tetrahydrofuran (THF) is a stable compound under normal conditions, but it can form organic peroxides during long-term storage.

THF can form explosive organic peroxides upon exposure to oxygen and light.

Ensure the storage area is adequately ventilated to prevent the buildup of flammable vapours.

Store in a cool, dry, and well-ventilated area.

Store THF in tightly sealed, air-impermeable containers, preferably amber glass or metal drums, to minimize exposure to air.

Application Area:

Tetrahydrofuran is used as a solvent in organic synthesis, particularly for reactions involving organometallic compounds like Grignard reagents and lithium aluminium hydride. It's also a key component in the production of polymers, notably poly (tetramethylene ether) glycol (PTMEG), which is used to manufacture Spandex fibres. Additionally, THF serves as a solvent in adhesives, coatings, and printing inks.

THF also finds use as a solvent in film casting, in the extraction of specific active substances, and for recrystallization of certain compounds.

General information

CAS No. : 109-99-9
IUPAC Name : Oxolane
Synonyms : Furanidin, THF


EC No. : 203-726-8

Physical/Chemical properties:

Molecular Formula : C₄H₈O
Molecular weight : 72.11
Boiling point : 66°C
Density : 0.887 g/cm³
Physical state at 20°C : Liquid
Flash Point : >230°F

Hazard classification & labelling:

Single Word : Danger

Pictogram : 

Classification according to Regulation (EC) No 1272/2008 : H225, H302, H319, H335, H336, H351

Precautionary statement(s) : P201, P202, P210, P301+P312, P305+P351+P338, P308+P313