

Material Safety Data Sheet

TETRAHYDROFURFURYLAMINE

May be used to comply with OSHA's Hazard Communication Standard, 29CFR 1910.1200. Standard must be consulted for specific requirements.

Quick Identifier
QO®TETRAHYDROFURFURYLAMINE
Common Name (used on label and list)

Section I

Manufacturer's Name and Address
Penn Specialty Chemicals, Inc.
3324 Chelsea Avenue
Memphis, Tn 38108

Emergency Telephone Number
901-320-4092
HAZARD INFORMATION SERVICES:800-228-5635
(For Emergency Medical Information)

For Product Information and Other Calls:
Penn Specialty Chemicals, Inc.:877-895-7366
Effective: July 15, 2003

Supersedes: November 2, 1999

Section II-Hazardous Ingredients/ Identity Information

Hazardous Component(s) Chemical & Common Names(s)	OSHA PEL	ACGIH TLV	CAS NO.
Tetrahydrofurfurylamine	Not established	Not established	4795-29-3

Section III-Physical/Chemical Characteristics

Boiling Point	Vapor Density(Air=1)	Specific Gravity (H ₂ O = 1)	Vapor Pressure (mm Hg)
307-309°F, 153-154°C @ 750 mmHg	3.4	0.979	Not available

Solubility in Water
Complete

Reactivity in Water
Solution becomes basic.

Appearance and Color
Clear, colorless to yellow, mobile liquid.
Ammoniacal-amine odor.

Melting Point/Freezing Point
Not available

Section IV-Fire and Explosion Hazard Data

Flash Point	Method Used	Flammable Limits in Air, % Volume	LEL Lower	UEL Upper
113°F, 45.°C	Setaflash		1.6	14.1

Auto-Ignition temperature 518°F, 270°C	Extinguisher Media Water spray, dry chemical, carbon dioxide, "alcohol" foam
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Special Fire Fighting Procedures
Firefighters should have eye protection and wear self-contained breathing apparatus
Use water spray to cool containers exposed to fire.

Unusual Fire and Explosion Hazards
See Section V below.

Section V-Physical Hazards/Reactivity Data

Stability	Unstable Stable X	Conditions to Avoid High temperature: Under certain conditions ammonia gas may be generated.
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Incompatibility (Materials to Avoid)
Oxidizers. Acids. Carbon dioxide.

Hazardous Decomposition Products
Combustion produces carbon dioxide and carbon monoxide.

Hazardous Polymerization	May Occur Will Not Occur X	Conditions to Avoid
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Section VI - Health Hazards

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Yes No X	IARC Monographs Yes No X	OSHA Regulated Yes No X
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Signs and Symptoms

Exposure

Detectable odor

Acute Overexposure

Strong odor. Corrosive to skin, eyes and respiratory tract.

Chronic Overexposure

No data available.

Emergency and First Aid Procedures for Overexposure - Obtain prompt medical attention.

Inhalation

Move to fresh air. If necessary, restore and support breathing

Eyes

Immediately flush with water for 15 minutes while lifting eyelids and rolling eyes.
Get immediate medical attention.

Skin

Wash promptly with soap and water.

Ingestion

Get medical help. If conscious and medical help not readily available, give water.

Section VII - Special Precautions and Spill/Leak Procedures

Precautions to be taken in Handling and Storage

Store in a cool, dry, well ventilated location. Outside or detached storage is preferred. Separate from oxidizers, acids, and carbon dioxide.

Other Precautions

Avoid acid contamination and skin contact. Keep containers tightly closed. No smoking or eating in handling area. Head spaces in vessels may contain ammonia levels greater than 35 ppm.

Steps to be taken in case Material is Released or Spilled

Shut off sources of ignition. Pick up spill on sand, earth or other non-combustible, absorbent material. Place in covered container for disposal. Flush area with water to remove last traces.

Waste Disposal Methods (Consult Federal, State, and Local Regulations)

Dispose of as a corrosive waste in accord with regulations

Section VIII - Special Protection and Control Measures

Respiratory Protection (*Specify Type*)

NIOSH approved organic vapor air purifying respirator.
Ventilation and local exhaust required.

Eye Protection

Chemical goggles and face shield

Protective Gloves

Impervious chemical gloves.

Other Protective Clothing or Equipment

Eye fountain and safety shower

Work Hygienic Practices

Avoid direct contact with 2-Tetrahydrofurfurylamine. Wash thoroughly after handling.

Transport Information:

DOT: Tetrahydrofurfurylamine, 3, UN 2943, PG III.

Label: Flammable liquid.