

Material Safety Data Sheet

2-FURFURYLAMINE

Quick Identifier

OO® 2-FURFURYLAMINE

Common Name (used on label and list):

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

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: 1-800-228-5635
(For Emergency Medical Information)

For Product Information and Other Calls:

Penn Specialty Chemicals, Inc. :877-895-7366

Effective: July 15, 2003

Supersedes: October 28, 1999

Section II-Hazardous Ingredients/Identity Information

| Hazardous Component(s) Chemical & Common Name(s) | OSHA PEL | ACGIH TLV | CAS |
|--|-----------------|-----------------|----------|
| NO | | | |
| 2-Furfurylamine: | Not established | Not established | 617-89-0 |
| 2-Furanmethylamine | | | |

Section III-Physical/Chemical Characteristics

| Boiling Point | Vapor Density(Air=1) | Specific Gravity (H ₂ O=1) | Vapor Pressure (mm Hg) |
|----------------------|----------------------|---------------------------------------|------------------------|
| 293-295°F, 145-146°C | 3.35 | 1.057 | 10@ 120-122°F, 49-50°C |

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

<-76°F, <-60°C

Section IV-Fire and Explosion Hazard Data

| Flash Point | Method Used | Flammable Limits in Air,% Volume | LEL Lower | UEL Upper |
|-------------|-------------|----------------------------------|-----------|-----------|
| 99°F, 37°C | Setaflash | | 2.0 | 15.0 |

Auto-Ignition temperature

734°F, 390°C

Extinguisher Media

Water spray, dry chemical, carbon dioxide, foam

Special Fire Fighting Procedures

Firefighters should have eye protection and wear self-contained breathing apparatus.
Use water to spray to cool containers exposed to fire.

Unusual Fire and Explosion Hazards

Section V-Physical Hazards/Reactivity Data

| Stability | Unstable | Conditions to Avoid |
|-----------|----------|---------------------|
| | Stable X | Normally stable |

Incompatibility (Materials to Avoid)

Acids. Oxidizers. Carbon dioxide.

Hazardous Decomposition Products

Combustion produces carbon dioxide and carbon monoxide.

Hazardous Polymerization

Will Occur

Will Not Occur X

2-FURFURYLAMINE

Section VI-Health Hazards

| | | | |
|--|---------------------------------|-----------------------------|-------------------|
| Chemical Listed as Carcinogen or Potential Carcinogen | National Toxicology Yes No X | IARC Monographs Yes No X | OSHA Regulate Yes |
|--|---------------------------------|-----------------------------|-------------------|

Signs and Symptoms

Exposure

Detectable odor

Acute Overexposure

Strong odor. Irritation of skin, eyes and respiratory tract.

Chronic Overexposure

No data available

Emergency and First Air 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 acids, oxidizers, and carbon dioxide.

Other Precautions

Avoid 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. Flush area with water to remove last traces.

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

Dispose of as an ignitable, 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-furfurylamine. Wash thoroughly after handling.

Transport Information:

Dot: 2-Furfurylamine, 3, UN 2526, PG III

Label: Flammable liquid.

Subsidiary risk information applies only to shipments via aircraft (ICAO/IATA) and vessel (IMO) for PGIII materials, Subsidiary Risk, 8.

The data continued herein is based on information currently available to Penn Specialty Chemicals, Inc., and believed to be factual and the opinions expressed to be those of qualified experts; however, this data is not to be taken as a warranty or representation for which Penn Specialty Chemicals, Inc. assumes legal responsibility.