

## SAFETY DATA SHEET

Revision Date 26-May-2017

Revision Number 2

### 1. Identification

**Product Name** 1-(Tetrahydro-2-furoyl)piperazine

**Cat No. :** AC367160000; AC367160010; AC367160050; AC367160250

**Synonyms** None Known.

**Recommended Use** Laboratory chemicals.

**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |              |
|--|--------------|
| Skin Corrosion/irritation                        | Category 1 C |
| Serious Eye Damage/Eye Irritation                | Category 1   |
| Specific target organ toxicity (single exposure) | Category 3   |
| Target Organs - Respiratory system.              |              |

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Causes severe skin burns and eye damage

May cause respiratory irritation



#### **Precautionary Statements**

**Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Use only outdoors or in a well-ventilated area

**Response**

Immediately call a POISON CENTER or doctor/physician

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Skin**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**Ingestion**

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition / information on ingredients

| Component                         | CAS-No     | Weight % |
|-----------------------------------|------------|----------|
| 1-(Tetrahydro-2-furoyl)piperazine | 63074-07-7 | >95      |

### 4. First-aid measures

|  |   |
|--|---|
| <b>Eye Contact</b>                     | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.  |
| <b>Skin Contact</b>                    | Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician immediately.   |
| <b>Inhalation</b>                      | Remove from exposure, lie down. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately. |
| <b>Ingestion</b>                       | Do not induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.  |
| <b>Most important symptoms/effects</b> | Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation                         |
| <b>Notes to Physician</b>              | Treat symptomatically   |

### 5. Fire-fighting measures

|                                       |  |
|---------------------------------------|--|
| <b>Suitable Extinguishing Media</b>   | Water spray. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam. |
| <b>Unsuitable Extinguishing Media</b> | No information available   |
| <b>Flash Point</b>                    | No information available   |

|   |                          |
|---|--------------------------|
| <b>Method -</b>                         | No information available |
| <b>Autoignition Temperature</b>         | No information available |
| <b>Explosion Limits</b>                 |                          |
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

**Hazardous Combustion Products**

Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>) Nitrogen oxides (NO<sub>x</sub>)

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

**Health**  
3

**Flammability**  
1

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

|   |  |
|---|--|
| <b>Personal Precautions</b>                             | Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and inhalation of vapors.                                 |
| Refer to protective measures listed in Sections 7 and 8 |  |
| <b>Environmental Precautions</b>                        | Do not allow material to contaminate ground water system. Should not be released into the environment. See Section 12 for additional ecological information. |
| <b>Methods for Containment and Clean Up</b>             | Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.  |

## 7. Handling and storage

|                 |   |
|-----------------|---|
| <b>Handling</b> | Use only under a chemical fume hood. Wear personal protective equipment. Avoid breathing vapors or mists. Do not get in eyes, on skin, or on clothing. Do not ingest. |
| <b>Storage</b>  | Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.   |

## 8. Exposure controls / personal protection

|                                      |   |
|--------------------------------------|---|
| <b>Exposure Guidelines</b>           | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.                               |
| <b>Engineering Measures</b>          | Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.   |
| <b>Personal Protective Equipment</b> |   |
| <b>Eye/face Protection</b>           | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| <b>Skin and body protection</b>      | Wear appropriate protective gloves and clothing to prevent skin exposure.   |
| <b>Respiratory Protection</b>        | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if            |

exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|  |                          |
|--|--------------------------|
| Physical State                         | Viscous liquid           |
| Appearance                             | Colorless to yellowish   |
| Odor                                   | No information available |
| Odor Threshold                         | No information available |
| pH                                     | No information available |
| Melting Point/Range                    | No data available        |
| Boiling Point/Range                    | 140 °C / 284 °F @ 2 mbar |
| Flash Point                            | No information available |
| Evaporation Rate                       | No information available |
| Flammability (solid,gas)               | No information available |
| Flammability or explosive limits       |                          |
| Upper                                  | No data available        |
| Lower                                  | No data available        |
| Vapor Pressure                         | No information available |
| Vapor Density                          | No information available |
| Specific Gravity                       | 1.17                     |
| Solubility                             | No information available |
| Partition coefficient; n-octanol/water | No data available        |
| Autoignition Temperature               | No information available |
| Decomposition Temperature              | No information available |
| Viscosity                              | No information available |
| Molecular Formula                      | C9 H16 N2 O2             |
| Molecular Weight                       | 184.24                   |

## 10. Stability and reactivity

|                                  |  |
|----------------------------------|--|
| Reactive Hazard                  | None known, based on information available   |
| Stability                        | Stable under normal conditions.  |
| Conditions to Avoid              | Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.<br>Excess heat. |
| Incompatible Materials           | Strong oxidizing agents, Strong acids, Strong bases, Acid anhydrides, Acid chlorides                     |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Nitrogen oxides (NO <sub>x</sub> )              |
| Hazardous Polymerization         | No information available.  |
| Hazardous Reactions              | None under normal processing.  |

## 11. Toxicological information

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Component Information** No information available

**Products****Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** May cause sensitization by inhalation

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component                         | CAS-No     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| 1-(Tetrahydro-2-furoyl)piperazine | 63074-07-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects**

No information available

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Teratogenicity**

No information available.

**STOT - single exposure**

Respiratory system

**STOT - repeated exposure**

None known

**Aspiration hazard**

No information available

**Symptoms / effects, both acute and delayed**

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information**

No information available

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**

Do not empty into drains.

**Persistence and Degradability**

No information available

**Bioaccumulation/ Accumulation**

No information available.

**Mobility**

No information available.

## 13. Disposal considerations

**Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT**

Not regulated

**Proper technical name**

1-(Tetrahydro-2-furoyl)piperazine

**TDG**

Not regulated

**IATA****UN-No**

UN3267

**Proper Shipping Name**

Corrosive liquid, basic, organic, n.o.s

**Hazard Class**

8

**Packing Group**

III

**IMDG/IMO****UN-No**

UN3267

**Proper Shipping Name**

Corrosive liquid, basic, organic, n.o.s

**Hazard Class**

8

**Packing Group**

III

## 15. Regulatory information

**International Inventories**

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

TSCA 12(b) Not applicable

SARA 313 Not applicable

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire Hazard                       | No  |
| Sudden Release of Pressure Hazard | No  |
| Reactive Hazard                   | No  |

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration  
Not applicable**CERCLA**

Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations Not applicable

**U.S. Department of Transportation**

|                             |   |
|-----------------------------|---|
| Reportable Quantity (RQ):   | N |
| DOT Marine Pollutant        | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

Mexico - Grade No information available

**16. Other information**

|             |  |
|-------------|--|
| Prepared By | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com |
|-------------|--|

**Revision Date** 26-May-2017**Print Date** 26-May-2017**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**