# 1. Identification

**Product Name**  
N,N-Diisopropylethylamine

**Cat No.**  
AC459590000; AC459590010; AC459591000

**Synonyms**  
Huenig's base; N-Ethylidiisopropylamine

**Recommended Use**  
Laboratory chemicals.

**Uses advised against**  
No Information available

**Details of the supplier of the safety data sheet**

<table>
<thead>
<tr>
<th>Company</th>
<th>Entity / Business Name</th>
<th>Emergency Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisher Scientific</td>
<td>Acros Organics</td>
<td>For information <strong>US</strong> call: 001-800-ACROS-01</td>
</tr>
<tr>
<td></td>
<td>One Reagent Lane</td>
<td>/ <strong>Europe</strong> call: +32 14 57 52 11</td>
</tr>
<tr>
<td>Fair Lawn, NJ 07410</td>
<td>Fair Lawn, NJ 07410</td>
<td>Emergency Number <strong>US</strong>:001-201-796-7100</td>
</tr>
<tr>
<td>Tel: (201) 796-7100</td>
<td></td>
<td><strong>Europe</strong>:+32 14 57 52 99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CHEMTREC Tel. No. <strong>US</strong>:001-800-424-9300</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Europe</strong>:001-703-527-3887</td>
</tr>
</tbody>
</table>

# 2. Hazard(s) identification

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

<table>
<thead>
<tr>
<th>Flammable liquids</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute Inhalation Toxicity - Vapors</td>
<td>Category 3</td>
</tr>
<tr>
<td>Skin Corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Target Organs - Respiratory system.</td>
<td></td>
</tr>
</tbody>
</table>

**Label Elements**

**Signal Word**  
Danger

**Hazard Statements**  
Highly flammable liquid and vapor  
Harmful if swallowed  
Toxic if inhaled  
Causes skin irritation  
Causes serious eye damage  
May cause respiratory irritation
Precautionary Statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge

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
Rinse mouth
Do NOT induce vomiting

Fire
In case of fire: Use CO2, dry chemical, or foam for extinction

Storage
Store locked up
Store in a well-ventilated place. Keep cool

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
None identified

3. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanamine, N-ethyl-N-(1-methylethyl)-</td>
<td>7087-68-5</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

4. First-aid measures

General Advice
Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

Skin Contact
Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Inhalation
Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.

Ingestion
Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms/effects
Breathing difficulties. Causes eye burns. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Notes to Physician
Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.

Unsuitable Extinguishing Media
Water may be ineffective

Flash Point
6 °C / 42.8 °F
Method -
No information available

Autoignition Temperature
260 °C / 500 °F

Explosion Limits
Upper
No data available
Lower
No data available

Specific Hazards Arising from the Chemical
Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. In the event of fire and/or explosion do not breathe fumes.

Hazardous Combustion Products
Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO₂) Thermal decomposition can lead to release of irritating gases and vapors

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. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

6. Accidental release measures

Personal Precautions
Use personal protective equipment. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions
Should not be released into the environment.

Methods for Containment and Cleanup
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. Handling and storage

Handling
Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe vapors or spray mist. Do not ingest. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat.
8. Exposure controls / personal protection

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures
Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection
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. Tightly fitting safety goggles. Face-shield.

Skin and body protection
Long sleeved clothing.

Respiratory Protection
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>-46 °C / -50.8 °F</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>127 °C / 260.6 °F @ 760 mmHg</td>
</tr>
<tr>
<td>Flash Point</td>
<td>6 °C / 42.8 °F</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Upper</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>14°C @ 20 hPa</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>0.7560</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient; n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>260 °C / 500 °F</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>0.88 cSt @ 20°C</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>C8 H19 N</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>129.24</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactive Hazard
None known, based on information available

Stability
Stable under recommended storage conditions.

Conditions to Avoid
Incompatible products. Excess heat. Keep away from open flames, hot surfaces and...
sources of ignition.

**Incompatible Materials**
Acids, Strong oxidizing agents, Metals, copper, Carbon dioxide (CO2), Butyl rubber

**Hazardous Decomposition Products**
Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Thermal decomposition can lead to release of irritating gases and vapors

**Hazardous Polymerization**
Hazardous polymerization does not occur.

**Hazardous Reactions**
None under normal processing.

## 11. Toxicological information

### Acute Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanamine, N-ethyl-N-(1-methylethyl)-</td>
<td>317 mg/kg (Rat)</td>
<td>Not listed</td>
<td>2.63 mg/L 4h (Rat)</td>
</tr>
</tbody>
</table>

**Toxicologically Synergistic Products**
No information available

**Irritation**
Severe eye irritant. Irritating to respiratory system and skin

**Sensitization**
No information available

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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanamine, N-ethyl-N-(1-methylethyl)-</td>
<td>7087-68-5</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**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**
Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**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.

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Algae</th>
<th>Freshwater Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanamine, N-ethyl-N-(1-methylethyl)-</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>&gt;100 mg/L 48h</td>
</tr>
</tbody>
</table>

**Persistence and Degradability**
Soluble in water Persistence is unlikely based on information available.
Bioaccumulation/ Accumulation  No information available.

Mobility  Will likely be mobile in the environment due to its water solubility.

<table>
<thead>
<tr>
<th>Component</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanamine, N-ethyl-N-(1-methylethyl)-</td>
<td>-1.8</td>
</tr>
</tbody>
</table>

### 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**

- UN-No: UN1992
- Proper Shipping Name: Flammable liquid, toxic, n.o.s
- Proper Technical Name: 2-Propanamine, N-ethyl-N-(1-methylethyl)-
- Hazard Class: 3
- Subsidiary Hazard Class: 6.1
- Packing Group: II

**TDG**

- UN-No: UN1992
- Proper Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S.
- Hazard Class: 3
- Subsidiary Hazard Class: 6.1
- Packing Group: II

**IATA**

- UN-No: UN1992
- Proper Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S.
- Hazard Class: 3
- Subsidiary Hazard Class: 6.1
- Packing Group: II

**IMDG/IMO**

- UN-No: UN1992
- Proper Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S.
- Hazard Class: 3
- Subsidiary Hazard Class: 6.1
- Packing Group: II

### 15. Regulatory information

All of the components in the product are on the following Inventory lists:  

X = listed

**International Inventories**

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanamine, N-ethyl-N-(1-methylethyl)-</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>230-392-0</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

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 Hazardous Categorization
Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

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
State Right-to-Know 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 Serious risk, Grade 3
Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class B2 Flammable liquid
D1B Toxic materials
D2B Toxic materials

16. Other information

Prepared By Regulatory Affairs
N,N-Diisopropylethylamine

Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 09-Nov-2010
Revision Date 27-May-2015
Print Date 27-May-2015
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 on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS