

SAFETY DATA SHEET

Revision Date 08/04/2023

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product identifiers**
 Product name : DIPEA
 Product Number : RB8433
 Brand : Advanced ChemTech
 CAS-No. : 7087-68-5
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
 Identified uses : Laboratory chemicals, Manufacture of substances
- 1.3 Details of the supplier of the safety data sheet**
 Company : Advanced ChemTech
 5609 Fern Valley Rd, Louisville, KY 40228 USA
 Telephone : +1 833-317-5620
 Fax : +1 502-968-1000
- 1.4 Emergency telephone number** : +1 800-424-9300 Chemtrec

2. HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
 Flammable liquids (Category 2), H225
 Acute toxicity, Oral (Category 4), H302
 Acute toxicity, Inhalation (Category 3), H331
 Serious eye damage (Category 1), H318
 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
 Acute aquatic toxicity (Category 3), H402
 For the full text of the H-Statements mentioned in this Section, see Section 16.

- 2.2 GHS Label elements, including precautionary statements:**

Pictogram



Signal word

Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.
 H302 Harmful if swallowed.
 H318 Causes serious eye damage.
 H331 Toxic if inhaled.
 H335 May cause respiratory irritation.
 H402 Harmful to aquatic life.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ eye protection/ face protection.
 P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P304 + P340 + P311 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P501 Dispose of contents/ container to an approved waste disposal plant.

- 2.3 Hazards not otherwise classified (HNO) or not covered by GHS – none**

3. COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substances**
 Synonyms : N-Ethyl-diisopropylamine
 'Hünig's base'
 Ethyl-diisopropylamine
 Formula : C₈H₁₉N
 Molecular Weight : 129.25g/mole
 CAS-No. : 7087-68-5

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Hazardous Components		
Component	Classification	Concentration
Ethyldiisopropylamine	Flam. Liq. 2; Acute Tox. 4; Acute Tox. 3; Eye Dam. 1; STOT SE 3; Aquatic Acute 3; H225, H302, H318, H331, H335, H402	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

- 4.1 Description of first aid measures**
General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician
If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- 4.2 Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11
- 4.3 Indication of any immediate medical attention and special treatment needed:** No data available

5. FIREFIGHTING MEASURES

- 5.1 Extinguishing media**
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2 Special hazards arising from the substance or mixture:** No data available
- 5.3 Advice for firefighters:** Wear self-contained breathing apparatus for fire fighting if necessary.
- 5.4 Further information:** Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions, protective equipment, and emergency procedure:** Wear respiratory protection. Avoid breathing vapours, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection, see section 8.
- 6.2 Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- 6.3 Methods and materials for containment and cleaning up:** Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
- 6.4 Reference to other sections:** For disposal, see section 13.

7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Flash back possible over considerable distance. Container explosion may occur under fire conditions. Vapours may form explosive mixture with air. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Handle and store under inert gas. Storage class (TRGS 510): Flammable liquids
- 7.3 Specific end use(s):** Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
Components with workplace control parameters: Contains no substances with occupational exposure limit values.
- 8.2 Exposure controls**
Appropriate engineering controls: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product
- Personal protective equipment**
Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection: Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties**
- | | |
|--|---|
| a) Appearance | Form: Clear and colorless liquid |
| b) Odor | strong, amine-like |
| c) Odor Threshold | no data available |
| d) pH | 12.3 |
| e) Melting point/freezing point | Melting point/range: -50 °C (-58 °F) - lit. |
| f) Initial boiling point and boiling range | 127 °C (261 °F) - lit |
| g) Flash point | 12 °C (54 °F) |

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9.2	h) Evaporation rate	no data available
	i) Flammability (solid, gas)	no data available
	j) Upper/lower flammability or explosive limits	Upper explosion limit: 17 %(V) Lower explosion limit: 3 %(V)
	k) Vapor pressure	14.25 hPa (10.69 mmHg) at 20 °C (68 °F) - OECD Test Guideline 104
	l) Vapor density	no data available
	m) Relative density	0.742 g/mL at 25 °C (77 °F) - lit.
	n) Water solubility	4.01 g/l at 20 °C (68 °F) - OECD Test Guideline 105
	o) Partition coefficient: n- octanol/water	log Pow: -1.799 at 22.5 °C (72.5 °F) - OECD Test Guideline 107
	p) Auto-ignition temperature	no data available
	q) Decomposition temperature	no data available
9.2	r) Viscosity	0.88 mm ² /s at 20 °C (68 °F) -
	s) Explosive properties	no data available
	t) Oxidizing properties	no data available
	Other safety information: Solubility in other solvents	Ethanol - soluble

10. STABILITY AND REACTIVITY

- 10.1 Reactivity:** No data available
- 10.2 Chemical stability:** Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions:** Vapours may form explosive mixture with air
- 10.4 Conditions to avoid:** Heat, flames and sparks
- 10.5 Incompatible materials:** acids, Acid chlorides, Acid anhydrides, Carbon dioxide (CO₂), Copper, Brass, RubberOxidizing agents, Nitrates, Peroxides, Water, Metals
- 10.6 Hazardous decomposition products:** Other decomposition products - no data available. In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects**
- Acute toxicity:** LD₅₀ Oral - Rat - 317 mg/kg
(OECD Test Guideline 423)
- Inhalation:** LC₅₀ Inhalation - Rat - 4 h - 2.63 mg/l
(OECD Test Guideline 403)
Remarks: Irritating to respiratory system
- Dermal:** LD₀ Dermal - Rat - > 2,000 mg/kg
(OECD Test Guideline 402)
Remarks: No adverse effect has been observed in acute toxicity tests.
- Skin corrosion/irritation:** Skin - Rabbit Result: Mild skin irritation (OECD Test Guideline 404)
- Serious eye damage/eye irritation:** Eyes - In vitro study Result: Severe eye irritation (OECD Test Guideline 437)
- Respiratory or skin sensitization:** - Guinea pig Does not cause skin sensitisation. (OECD Test Guideline 406)
- Germ cell mutagenicity:** No data available
- Carcinogenicity:**
- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
- Reproductive toxicity:** No data available
- Specific target organ toxicity - single exposure:** Inhalation - May cause respiratory irritation. - Respiratory Tract
- Specific target organ toxicity - repeated exposure:** No data available
- Aspiration hazard:** No data available
- Additional Information:** RTECS: Not available burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity:**
- Toxicity to fish: LC₅₀ - Danio rerio (zebra fish) - > 69.7 mg/l - 96 h (OECD Test Guideline 203)
- Toxicity to daphnia and other aquatic invertebrates: EC₅₀ - Daphnia magna (Water flea) - 28.1 mg/l - 48 h (OECD Test Guideline 202)
- Toxicity to algae: EC₅₀ - Pseudokirchneriella subcapitata (green algae) - 150 mg/l - 72 h (OECD Test Guideline 201)
- 12.2 Persistence and degradability:** Biodegradability: Biotic/Aerobic - Exposure time 28 d Result: <= 10 % - Not readily biodegradable
- 12.3 Bioaccumulative potential:** No bioaccumulation is to be expected (log Pow <= 4).
- 12.4 Mobility in soil:** No data available
- 12.5 Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- 12.6 Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods**
- Product:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
- Contaminated packaging:** Dispose of as unused product.

14. TRANSPORT INFORMATION

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DOT (US)

UN number: 2733 Class: 3 (8) Packing group: II
 Proper shipping name: Amines, flammable, corrosive, n.o.s. (N,N-Diisopropylethylamine)
 Reportable Quantity (RQ):
 Poison Inhalation Hazard: Hazard zone B

IMDG

UN number: 2733 Class: 3 (8) Packing group: II EMS-No: F-E, S-D
 Proper shipping name: Amines, flammable, corrosive, n.o.s. (N,N-Diisopropylethylamine)

IATA

UN number: 2733 Class: 3 (8)
 Proper shipping name: Amines, flammable, corrosive, n.o.s. (N,N-Diisopropylethylamine)
 IATA Passenger: Not permitted for transport
 IATA Cargo: Not permitted for transport

15. REGULATORY INFORMATION

SARA 302 Components: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right to Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

DIPEA	CAS-No.	Revision Date
	7087-68-5	

New Jersey Right to Know Components

DIPEA	CAS-No.	Revision Date
	7087-68-5	

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Eye Dam.	Serious eye damage
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H402	Harmful to aquatic life.
STOT SE	Specific target organ toxicity - single exposure

HMIS Rating

Health hazard:	2
Chronic Health Hazard:	
Flammability:	3
Physical Hazard	0

NFPA Rating

Health hazard:	4
Fire Hazard:	3
Reactivity Hazard:	0

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Advanced ChemTech shall not be liable for any damage resulting in the handling or from contact with the above product.