

Peptide
Synthesis

Agrochemical

Fine
Chemical

Specialty
Polymer

Pharmaceutical

N,N-Diisopropylethylamine (DIPEA)

PRODUCT IN FOCUS

EXSYN[®]
ESSENTIAL CHEMISTRY

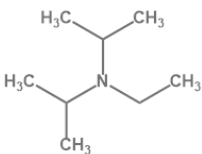
N,N-Diisopropylethylamine

INTRODUCTION

N,N-Diisopropylethylamine (DIPEA), also known as Hünig's Base, is a sterically hindered tertiary amine. It is a colorless liquid with a strong amine odor and is widely used as a low nucleophilic organic base in pharmaceutical, agrochemical, and fine chemical synthesis. Due to its bulky structure, DIPEA effectively scavenges acids without participating in unwanted side reactions.

MANUFACTURE

DIPEA is typically manufactured by the alkylation of diisopropylamine with ethyl halides (such as ethyl chloride or ethyl bromide) in the presence of a suitable base under controlled temperature and pressure. The reaction mixture is purified by distillation to obtain high-purity N,N-Diisopropylethylamine.

Synonym(s)	N-Ethyldiisopropylamine
CAS no.	7087-68-5
EINECS no.	230-392-0
Molecular formula	C ₈ H ₁₉ N
Molecular weight	129.24
Structure	

APPLICATIONS

DIPEA is valued for its strong basicity, low nucleophilicity, and compatibility with a wide range of organic reactions.

- ✔ **Pharmaceutical Industry:** Used as an acid scavenger and catalyst in the synthesis of active pharmaceutical ingredients (APIs), peptides, and intermediates.
- ✔ **Peptide Synthesis:** Commonly employed as a base during coupling reactions in peptide manufacturing.
- ✔ **Agrochemicals:** Utilized in the production of herbicides, pesticides, and crop protection chemicals.
- ✔ **Fine Chemicals:** Serves as a reagent in organic synthesis, especially in acylation, alkylation, and condensation reactions.
- ✔ **Polymer and Specialty Chemicals:** Used in the preparation of specialty polymers, resins, and chemical intermediates.

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SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Clear, colorless to pale yellow liquid
Water (by KF)	% w/w	Max 0.20
Purity (by GC)	% w/w	Min 99.55
Other impurities (by GC)	% w/w	Max 0.45

PACKING

150 kg UN approved drum.

STORAGE

Store in original container. Keep container tightly closed in a dry and well-ventilated place.
Store in a cool and shaded area. Keep under inert gas.

REACH status

Registered for EU & UK.

ExSyn offers DIPEA on commercial scales and welcomes enquiries. Our exceptional quality and service will make ExSyn your supplier of choice! If you need additional information or SDS, please contact us.