PRODUCT IN FOCUS

EXSYN®
ESSENTIAL CHEMISTRY

Oleylamine

INTRODUCTION

Oleylamine is a long-chain (C18) primary fatty amine derived from natural fatty acids, typically sourced from vegetable oils. It is produced from oleic acid through conversion of the carboxylic acid group (–COOH) into an amine group (–NH_2). With its optimal balance of hydrophobic chain length and reactive amine functionality it serves as a versatile and dependable building block for high-performance formulations. It offers excellent surface-active properties, broad compatibility with organic systems, and effective corrosion inhibition performance, making it suitable for a wide range of industrial and specialty applications.

Manufacture

Oleylamine is manufactured from naturally derived C18 unsaturated fatty acids (oleic acid) obtained from vegetable oils. Oleic acid is reacted with ammonia at elevated temperatures to produce oleamide. The resulting oleamide is then selectively hydrogenated using a suitable catalyst—typically Ni, Co, or Cu-based—under high hydrogen pressure to yield oleyl amine.

Synonyms	(Z)-Octadec- 9-Enylamine; C16-18-(even numbered, saturated and unsaturated)-alkylamines saturated and unsaturated)-alkylamines
CAS no.	1213789-63-9
EINECS no.	627-034-4
Molecular formula	-
Molecular weight	267.501
Structure	

Applications

With its excellent surface activity and chemical versatility, it is widely used across specialty chemical, industrial, and advanced material applications.

- **Chemical Synthesis**
  It serves as a versatile intermediate used in the manufacture of amides, quaternary ammonium compounds, and specialty amine derivatives.
- **Surfactants and Emulsifiers**
  It is used in the formulation of products such as emulsifiable concentrates, where it helps in the dispersion and stabilization of oil-based systems.
- **Polymer Industry**
  It is used in the synthesis of polymers and copolymers, contributing to the modification of polymer properties and the development of specific materials.
- **Catalyst and Stabilizer**
  Its unique properties make it suitable for certain catalytic and stabilizing applications.
- **Nanomaterials Synthesis**
  Functions as a stabilizing and capping agent in nanoparticle synthesis.
- **Mineral Flotation Agents**
  Supports selective separation processes.
- **Coatings & Inks**
  Improves wetting, dispersion, and surface modification
- **Lubricant & Fuel Additives**
  Improves performance and stability.

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SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Colourless to pale yellow liquid
Color	APHA	Max 80.0
Moisture Content (By KF)	%	Max 0.3
Total Amine Value	mgKOH/g	200 - 215
Iodine Value	gI2/100g	Min 80.0
Secondary Amine	%	Max 0.5
Primary Amine	%	Min 99.0

STORAGE & PRECAUTION
Store at ambient conditions

PACKING
165 kg GI drum

REACH Status
Registered

ExSyn offers Oleylamine on commercial scales and welcomes enquiries. No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.

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