



Huntsman Corporation

is a publicly-traded global manufacturer and marketer of differentiated and specialty chemicals. Our products number in the thousands and are sold worldwide to manufacturers serving a broad and diverse range of consumer and industrial end markets.

• ~ 6,000 Associates

HUNTSMAN

- ~ 60 Locations in 25 Countries
- 2023 Revenue of USD 6 billion
- Listed on NYSE in 2005

E-GRADE® Unit Overview

Key Markets of Focus for Purified Products

Components for Semiconductor Cleans

E-GRADE® Products

- Amines Quats
- Oxides Solvents

Battery Solvents and Additives

ULTRAPURE® Carbonates

- Propylene Carbonate
- Ethylene Carbonate





E-GRADE® Unit Purification and Packaging Located in Conroe, Texas







E-GRADE® Unit





Demonstrated Investment in Quality, Reliability, and Capability





02



QUALITY

- Purification & clean-room packaging
- Implementing 5S
- Building ship-to-control capabilities



RELIABILITY

- Dedicated process lines & storage tanks
- Warehousing/drums & tote storage



CAPABILITY

- Operators with a background in R&D
- Experienced with E-GRADE® products









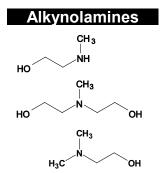


We Manufacture, Purify, and Package a **Wide Range of Products**





Amines



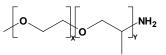
Ethanolamines

HO
$$R_2$$
 $R_1 = H \text{ or } C_2H_4OH$

Solvents

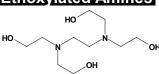
Cyclic Amines

Polyetheramines



Ethyleneamines

Ethoxylated Amines

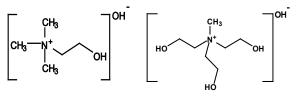


E-GRADE® APM

- E-GRADE® MDEA
- E-GRADE® MMEA
- E-GRADE® DMEA
- E-GRADE® DGA
- E-GRADE® AEP
- E-GRADE® DETA
- E-GRADE® EDA-4
- E-GRADE® HEM
- E-GRADE® APMMEA
- E-GRADE® PMDETA
- E-GRADE® Ethanolamines
- **E-GRADE®** Ethyleneamines

Quaternary amines

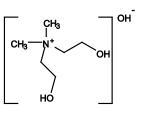
Ethoxylated methylamines



Choline

THEMAH

Solvent Based



BHEMAH

NMP alternatives

- E-GRADE® MEOX
- E-GRADE® DMEU

TMAH alternatives

- E-GRADE® THEMAH
- **E-GRADE®** Choline Hydroxide

R&D stage

E-GRADE® BHEMAH PG

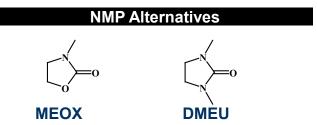
Amine Oxides

Selective oxidation & shelf stable



NMMO

- E-GRADE® NMMO
- **R&D** products



Legal Disclaimer



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Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent on the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

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