



36 Draffin Road, Hilton, NY 14468 Phone: 800-828-6351 585-392-3434 Fax: 585-392-2691
EMERGENCY NUMBERS: CHEMTREC (800) 424-9300 Monroe Fluid Technology (800) 828-6351
Website: <http://www.monroefluid.com>

Material Safety Data Sheet

Product Name: **ASTRO-CLEAN E** Effective Date: 05/06/11 Date Printed: 05/09/11 Page: 1

HMIS Rating:

Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: B

1) INGREDIENTS: (% wt., unless otherwise noted)

CHEMICAL NAME	CAS #	%
Alkanolamine	102-71-6	1-5

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not "Hazardous" per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

2) PHYSICAL DATA:

Boiling Point: 215° F.
Vapor Pressure: 20 @ 20° C.
Vapor Density: 1
Solubility In Water: Complete
pH @ 5%: 9.2 ± 0.3
Sp. Gravity: @ 70° F. 1.02 ± 0.01
Appearance: Orange clear liquid
Odor: Orange odor

3) FIRE AND EXPLOSION HAZARD DATA:

Flash Point: None
Method Used: TCC

FLAMMABLE LIMITS:

LFL: None
UFL: None

EXTINGUISHING MEDIA: Water fog, carbon dioxide or chemical foam

FIRE & EXPLOSION HAZARDS: Intense heat may cause unopened drums to rupture. Cool fire-exposed containers with water.

FIRE-FIGHTING EQUIPMENT: Use NIOSH-approved self-contained breathing apparatus.

4) REACTIVITY DATA:

STABILITY: (conditions to avoid) Stable under normal conditions

INCOMPATIBILITY: (specific materials to avoid) Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: None known

HAZARDOUS POLYMERIZATION: Will not occur



36 Draffin Road, Hilton, NY 14468 Phone: 800-828-6351 585-392-3434 Fax: 585-392-2691
EMERGENCY NUMBERS: CHEMTREC (800) 424-9300 Monroe Fluid Technology (800) 828-6351
Website: <http://www.monroefluid.com>

Material Safety Data Sheet

Product Name: **ASTRO-CLEAN E** Effective Date: 05/06/11 Date Printed: 05/09/11 Page: 2

5) ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Use wet/dry vacuum, squeegee or mop to pick up material. Flush residue down drain, mop dry.

DISPOSAL METHOD: Skim off floating oils. Split out emulsified oils. Dispose of remaining liquids in accordance with federal, state, and local regulations.

6) HEALTH HAZARD DATA:

EYE: This product can cause severe eye irritation and may cause damage.

SKIN CONTACT: Contact with skin may cause irritation or may aggravate existing conditions.

SKIN ABSORPTION: Prolonged or repeated exposure can cause drying, defatting and dermatitis

INGESTION: May cause irritation to mucous membranes. May cause nausea, vomiting and headaches.

INHALATION: In confined areas may produce slight dizziness. May cause respiratory tract irritation.

SYSTEMIC (other target organ) EFFECTS: None known

TERATOLOGY (birth defects): None known

REPRODUCTIVE EFFECTS: None known

MUTAGENICITY (effects on genetic material): None known

CARCINOGENICITY: IARC: NO NTP: NO OSHA: NO

7) FIRST AID:

EYES: Flush immediately with water for 15 minutes. Contact a physician.

SKIN: Wash with soap and water.

INGESTION: Give milk or water. Contact a physician.

INHALATION: Remove to fresh air. If symptoms persist, consult a physician.

NOTE TO PHYSICIAN: Treatment of overexposure should be directed toward the control of symptoms and the clinical condition.

8) HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE: Alkanolamine: ACGIH TLV: 5 mg/m³

VENTILATION: Not normally required

RESPIRATORY PROTECTION: None normally required

SKIN PROTECTION: Protective rubber gloves

EYE PROTECTION: Safety glasses or goggles



36 Draffin Road, Hilton, NY 14468 Phone: 800-828-6351 585-392-3434 Fax: 585-392-2691
EMERGENCY NUMBERS: CHEMTREC (800) 424-9300 Monroe Fluid Technology (800) 828-6351
Website: <http://www.monroefluid.com>

Material Safety Data Sheet

Product Name: **ASTRO-CLEAN E** Effective Date: 05/06/11 Date Printed: 05/09/11 Page: 3

9) ADDITIONAL INFORMATION:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Product contains Amines. Sodium Nitrite or other nitrosating agents should not be added to this product. This step will prevent the formation of nitrosamines which are known to be animal carcinogens. Normal precautions common to good manufacturing practices should be followed in handling and storing. Store away from food. Wash hands before eating, drinking, or smoking and after handling. Store indoors in cool dry areas. Use as directed. Launder contaminated clothing before reuse.

REGULATORY INFORMATION: (Not meant to be all-inclusive--selected regulations represented).

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The components of this product are listed on the TSCA inventory.

This product contains the toxic chemical or chemicals listed below, which are subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act of 1986 ("SARA") and the requirements of 40 CFR part 372. None

This notice must not be detached from the foregoing MSDS. If the MSDS is copied for any reason, including distribution, this notice must also be copied and accompany all redistributed MSDS'. Failure to do so may subject you to penalties under law.

This product contains the following ingredient(s) which are regulated under the Clean Air Act Section 112 hazardous air pollutants and is subject to all reporting requirements of CERCLA (Superfund). None

10) TRANSPORTATION INFORMATION:

PROPER SHIPPING NAME: Non-regulated

DOT HAZARD CLASS: Non-regulated