



Safety Data Sheet in accordance with Regulation (EU) No. 453/2010

ASTRO-CLEAN E

1. Identification of the Substance/ Mixture and of the Company/ Undertaking

Product Name: ASTRO-CLEAN E

Preparation Date: June 4, 2015

Revision Date:

Recommended Use: Industrial cleaner/degreaser

Supplier: MONROE FLUID TECHNOLOGY

36 Draffin Road,
Hilton, NY 14468

Phone: 800-828-6351 585-392-3434

EMERGENCY NUMBERS: CHEMTREC (800) 424-9300 Monroe Fluid Technology (800) 828-6351

2. Hazards Identification

GHS Classification:

Skin Sensitizer: Category 1
H317 – May cause an allergic skin reaction.

GHS Labeling:

Symbols:



Signal Word: Warning

Precautionary Statements:

P261: Avoid breathing dust/fume/gas/mist/vapors/spray
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/ protective clothing/ eye protection
P302 + P352: If on skin, wash with soap and water
P333 + P313: If skin irritation occurs, seek medical attention immediately
P363: Wash contaminated clothing before reuse
P501: Dispose of contents/ container to an approved waste disposal plant

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]: Skin Sensitizer – Category 1

Other Hazards Not Classified: No significant hazards

3. Composition/Information on Ingredients

Mixture: Water and additives.



Safety Data Sheet in accordance with Regulation (EU) No. 453/2010

ASTRO-CLEAN E

| Chemical Name | CAS Number | Concentration, Wt. % |
|--|------------|----------------------|
| Citrus terpenes | 94266-47-4 | Trade secret |
| 4- (2-Nitrobutyl) Morpholine | 2224-44-4 | Trade secret |
| Tetrasodium Ethylenediaminetetraacetate | 64-02-8 | Trade secret |
| Sodium Tripolyphosphate | 7758-29-4 | Trade secret |
| Triethanolamine | 102-71-6 | Trade secret |

4. First Aid

Inhalation: If inhaled, move to fresh air. If victim has stopped breathing give artificial respiration, preferably, mouth to mouth. Contact a physician immediately.

Eyes: Flush with large amounts of cold water for at least 15 minutes. Do not let victim rub eyes. If irritation develops, contact a physician immediately.

Ingestion: Do not induce vomiting. Contact a physician immediately.

Skin: Wash affected area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use. Contact a physician if irritation develops

5. Fire-fighting Measures

Suitable extinguishing media: Carbon dioxide, Dry chemical, Alcohol foam

Specific hazards: None

Specific protective equipment and precautions for fire fighters: Isolate fire area and deny unnecessary entry. Use dry chemical, alcohol foam or carbon dioxide. Water may be ineffective but should be used to keep fire exposed containers cool. If a spill or a leak has not ignited, use water spray to disperse the vapors. Water spray may be used only to keep fire exposed containers cool, protect personnel attempting to stop leak and disperse vapors.

Unusual Fire and Explosion Hazards: None

Flammability Properties:

Flash point: None

Method Used: TCC

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation.

Environmental Precautions: Do not allow spilled material to enter sewers or streams. If material is released, indicate that there is a risk of slipping in the area. If spills are likely to enter any drain, waterway or groundwater, contact the appropriate governmental agency.



Safety Data Sheet in accordance with Regulation (EU) No. 453/2010

ASTRO-CLEAN E

Methods and materials for containment: Add dry material to absorb (if large spill, dike to contain). Using recommended protective equipment, pick up bulk of spill and containerize for recovery or disposal. Flush area with water to remove residues.

7. Handling and Storage

Precautions for safe handling: Read label for instructions in use of product. Prevent small spills and leakage to avoid slip hazard. Avoid contact with skin, eyes and clothing. Do not wear contact lenses when handling this product. Keep out of the reach of children. Wash thoroughly after handling. Material can accumulate static charges which may cause an electrical spark (ignition source).

Conditions for safe storage: Store in closed containers in a cool, dry well ventilated area not exposed to sunlight. Maintain closure of bungs. Do not reuse container. Avoid container damage while storing. Do not allow material to be stored below 0°C. Do not allow material to freeze. Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, bronze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause injury or death. Do not attempt to refill containers since residue is difficult to remove. Empty drums should be completely drained, properly bunged and returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner in accordance with governmental regulations.

8. Exposure Controls/Personal Protection

Control parameters:

Exposure Guidelines: Triethanolamine ACGIH TLV: 5 mg/m³ Base oil: (Mist) OSHA PEL: 5 mg/m³

Appropriate engineering controls: Proper protection and controls is dependent upon the potential exposure conditions. No special requirements are needed under ordinary conditions where adequate ventilation is available.

Individual protective measures:

Respiratory protection: General room ventilation should be satisfactory. Exhaust ventilation may be necessary if misting is generated.

Eye protection: Safety glasses with shields or chemical goggles are required. Contact lenses should not be worn if the product could be splashed into the eyes.

Hand protection: Rubber gloves are required for single, short duration exposures and for prolonged or repeated exposures.

Body protection: For single, short duration and for prolonged or repeated exposures to the skin, wear impervious, protective clothing including rubber safety shoes to avoid skin contact.

9. Physical and Chemical Properties

Appearance: Orange clear liquid

Odor: Orange odor

Odor Threshold: Not determined

pH : @ 5% in water: 9.2 +/- 0.3

Melting point/freezing point: 0°C

Initial boiling point and boiling range: >105°C



Safety Data Sheet in accordance with Regulation (EU) No. 453/2010

ASTRO-CLEAN E

Flash Point (COC): 355°F

Evaporation Rate: N/D

Flammability (Solid, Gas): N/D

Upper/lower flammability or explosive limits: UEL: N/D LEL: N/D

Vapor pressure: <20 mm Hg @ 20°C

Vapor density: 1

Relative density: 1.02 +/-0.01

Partition coefficient n-octanol/water: N/A

Autoignition Temperature: No data available

Decomposition Temperature: N/A

Viscosity: N/D

10. Stability and Reactivity

Chemical stability: Stable at normal conditions

Possibility of hazardous reactions: Not expected and hazardous polymerization will not occur

Conditions to avoid: Excessive Heat.

Incompatible Materials: None known.

Hazardous decomposition products: Oxides of carbon, nitrogen, chlorine and phosphorus.

11. Toxicological Information

Inhalation: Inhalation of vapors or mist can be irritating to respiratory passages

Skin: Prolonged contact can cause irritation

Eyes: Contact can cause irritation

Oral: None known

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

12. Ecological Information

Persistence and degradability: Data is not available.

13. Disposal Considerations

Disposal methods: P501: Dispose of contents/ container to an approved waste disposal plant

Dispose of in accordance with federal, state and local regulations

Precaution for disposal: All recovered material should be packaged, labeled, transported and disposed or reclaimed in conformance with Good Engineering Practices. Comply with all applicable governmental regulations. Avoid landfilling of liquids. Reclaim where possible.



Safety Data Sheet in accordance with Regulation (EU) No. 453/2010

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14. Transport Information

US DOT: Not regulated by the US DOT

RID/ADR: Not regulated by RID/ADR

IMO: Not regulated by IMO

IATA: Not regulated by IATA

15. Regulatory Information

US TSCA: In compliance with the inventory

Canada DSL: In compliance with the inventory

Cal. Prop. 65 This product does not intentionally contain any chemicals known by the State of California to cause cancer and/or birth defects. Moreover, we do not routinely analyze its products for impurities which may be such chemicals.

SARA Section 313 This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

VOC Content (EPA Method 24) : <25 g/l concentrate; <2.5 g/l at maximum recommended dilution of 10%.

16. Other Information

Special Precautions to be Taken in Handling and Storage:

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. Use as directed.

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