

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CYASTAT[®] SP Antistatic Agent

Synonyms: Stearamidopropyldimethyl-hydroxyethylammonium-dihydrogen phosphate

Chemical Family: Quaternary Ammonium Compound

Molecular Formula: C₂₅H₅₃O₆N₂P

Molecular Weight: 510

Dayton-Granger 3299 S.W. 9th Avenue Ft. Lauderdale, FL 33315 U.S.A

For Product Information call 954-463-3451. EMERGENCY PHONE: For emergency involving spill, leak, fire, exposure or accident call CHEMTREC: 1-800/424-9300. Outside the USA and Canada call 1-703/527-3887.

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2. COMPOSITION/INFORMATION ON INGREDIENTS

OSHA REGULATED COMPONENTS

Component / CAS No. % (w/w) OSHA (PEL): ACGIH (TLV) Carcinogen

Isopropanol

67-63-0

15-40 400 ppm 200 ppm (TWA)

400 ppm (STEL)

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE AND ODOR:

Color: clear to light yellow

Appearance: liquid

Odor: isopropyl alcohol

STATEMENTS OF HAZARD:

POTENTIAL HEALTH EFFECTS

EFFECTS OF EXPOSURE:

Acute oral (rat) and dermal (rabbit) LD₅₀ values are estimated to be 3.3 g/kg and greater than 5.0 g/kg,

respectively. The 4-hour LC₅₀ (rat) value is estimated to be greater than 2,500 ppm.

Direct contact with this material can cause moderate eye irritation. Overexposure to vapor may cause

respiratory tract irritation and central nervous system depression. Refer to Section 11 for toxicology information

on the regulated components of this product.

FLAMMABLE LIQUID AND VAPOR

CAUSES EYE IRRITATION

WARNING!

4. FIRST AID MEASURES

Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Skin Contact:

Wash immediately with plenty of water and soap.

Eye Contact:

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing.

See MSDS Section 8 (Exposure Controls/Personal Protection).

Special Hazards:

Keep containers cool by spraying with water if exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Where exposure level is known, wear approved respirator suitable for level of exposure. Where exposure level is not known, wear approved, positive pressure, self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

Methods For Cleaning Up:

Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

Environmental Precautions:

Avoid release to the environment.

7. HANDLING AND STORAGE

HANDLING

Precautionary Measures: Keep away from heat, sparks and flame. Avoid contact with eyes.

Keep container closed.

Use with adequate ventilation. Wash thoroughly after handling.

Handling Statements: None

STORAGE

Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material's flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed.

In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a

widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8 °C. Class II Combustible Liquids, 37.8 °C < Flashpoint <60 °C. Class IIIa Combustible Liquids, 60 °C < Flashpoint < 93 °C. Class IIIb Combustible Liquids, Flashpoint > 93 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

Respiratory Protection:

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

Eye Protection:

Wear eye/face protection such as chemical splash proof goggles or face shield. Eyewash equipment and safety shower should be provided in areas of potential exposure.

Skin Protection:

Avoid skin contact. Wear impermeable gloves and suitable protective clothing.

Additional Advice:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use.

Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: clear to light yellow

Appearance: liquid

Odor: isopropyl alcohol

Boiling Point: 80 °C 176 °F Not applicable

Melting Point: Not available

Vapor Pressure: Not available

Specific Gravity: 0.94

Vapor Density: Not available

Percent Volatile (% by wt.): 65

pH: 6 - 8

Saturation In Air (% By Vol.): Not available

Evaporation Rate: Not available

Solubility In Water: Appreciable

Volatile Organic Content: ~200 - 300 gm/L

Flash Point: 14 °C 58 °F Closed Cup

Flammable Limits (% By Vol): Not available

Autoignition Temperature: Not available

Decomposition Temperature: 250 °C 482 °F

**Partition coefficient (noctanol/
water):**

Not available

Odor Threshold: See Section 2 for exposure limits.

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: None known

Polymerization: Will not occur

Conditions To Avoid: None known

Materials To Avoid: Strong oxidizing agents.

Hazardous Decomposition

Products:

carbon monoxide

carbon dioxide

ammonia

oxides of nitrogen

oxides of phosphorus

11. TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under Section 3. HAZARDS IDENTIFICATION.

Toxicological information on the regulated components of this product is as follows:

12. ECOLOGICAL INFORMATION

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The ecological assessment for this material is based on an evaluation of its components.

13. DISPOSAL CONSIDERATIONS

Isopropanol has acute oral (rat) and dermal (rabbit) LD50 values of 5.0 g/kg and 12.8 g/kg, respectively. The 4-hour inhalation LC50 (rat) for isopropanol is >16,000 ppm (40.86 mg/L). Acute overexposure to isopropanol vapor may cause mild irritation of the eyes and respiratory tract. Chronic overexposure to isopropanol vapors may cause central nervous system depression, headaches, dizziness, nausea, and staggered gait. Liquid isopropanol may cause moderate to severe eye irritation. In laboratory animals studies, isopropanol has produced fetotoxic effects at levels that were maternally toxic and developmental effects at levels that were maternally non-toxic, and inhalation exposures that produced reduced fetal weight at non-maternally toxic levels. The information on RCRA waste classification and disposal methodology provided below applies only to the Cytec product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this MSDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics. There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see

Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 2 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. Cytec encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. Cytec recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. Cytec has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT

Proper Shipping Name: Flammable liquid, n.o.s.

Hazard Class: 3

Packing Group: II

UN/ID Number: UN1993

Transport Label Required: Flammable Liquid

Technical Name (N.O.S.): Contains isopropanol

Hazardous Substances:

Not applicable

TRANSPORT CANADA

Proper Shipping Name: Flammable liquid, n.o.s.

Hazard Class: 3

Packing Group: II

UN Number: 1993

Transport Label Required: Flammable Liquid

Technical Name (N.O.S.): Contains isopropanol

ICAO / IATA

Proper Shipping Name: Flammable liquid, n.o.s.

Hazard Class: 3

Packing Group: II

UN Number: 1993

Transport Label Required: Flammable Liquid

Packing Instructions/Maximum Net Quantity Per Package:

Passenger Aircraft: 305; 5L

Cargo Aircraft: 307; 60L

Technical Name (N.O.S.): Contains isopropanol

IMO

Proper Shipping Name: Flammable liquid, n.o.s.

Hazard Class: 3

UN Number: 1993

Packing Group: II

Transport Label Required: Flammable Liquid

Technical Name (N.O.S.): Contains isopropanol

15. REGULATORY INFORMATION

INVENTORY INFORMATION

United States (USA): This product is manufactured in compliance with all provisions of the Toxic Substances

Control Act, 15 U. S. C. 2601 et. seq.

Canada: This product contains components not on the Domestic Substances List. These components are on the Non-Domestic Substances List.

European Union (EU): All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) in compliance with Council Directive 67/548/EEC and its amendments.

Australia: All components of this product are included in the Australian Inventory of Chemical Substances (AICS).

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

Korea: All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

Philippines: All components of this product are NOT included on the Philippine (PICCS) inventory.

OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of

CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40

CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

This product does not contain any components regulated under these sections of the EPA

PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

- Acute
- Fire

16. OTHER INFORMATION

NFPA Hazard Rating (National Fire Protection Association)

Health: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

Fire: 3 - Liquids and solids that can be ignited under almost all ambient temperature conditions.

Reactivity: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

Reasons For Issue: Revised Section 2

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