

0015547

Print Date: 10/09/2006

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# MATERIAL SAFETY DATA SHEET

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** 

CYASORB THT® 7001 EF Light Stabilizer

Chemical Family:

Mixture

Molecular Formula:

Mixture Mixture

Molecular Weight:

CYTEC INDUSTRIES INC., FIVE GARRET MOUNTAIN PLAZA, WEST PATERSON, NEW JERSEY 07424, USA For Product Information call 1-800/652-6013. Outside the USA and Canada call 1-973/357-3193. 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

Substituted amine oligomer

30 - 60

Not established

Not established

Formaldehyde

< 0.01

2 ppm (STEL)

0.3 ppm (Ceiling)

IARC 1 NTP

50-00-0

0.75 ppm (TWA) 0.5 ppm (Action Level)

**OSHA** 

ACGIH A2

# 3. HAZARDS IDENTIFICATION

# **EMERGENCY OVERVIEW**

#### APPEARANCE AND ODOR:

Color:

Odor:

light yellow

Appearance:

pellets, granular solid or powder

slight fatty

# STATEMENTS OF HAZARD:

WARNING!

CAUSES EYE IRRITATION

MAY FORM EXPLOSIVE DUST-AIR MIXTURES

## POTENTIAL HEALTH EFFECTS

The estimated acute oral (rat) LD50, acute dermal (rabbit) LD50 and 4-hour inhalation (rat) LC50 values for this material are > 800 mg/kg, > 2,000 mg/kg and > 4.7 mg/L, respectively. Direct contact with this material can cause moderate eye irritation. Refer to Section 11 for toxicology information on the regulated components of this product.

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#### 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.

Eve 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

Suitable Extinguishing Media:

Use water spray or fog, carbon dioxide or dry chemical.

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:

Dust may be explosive if mixed with air in critical proportions and in the presence of a source of ignition.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. Refer to Section 8 (Exposure Controls/Personal Protection) for appropriate personal protective equipment.

Methods For Cleaning Up:

Sweep up into containers for disposal. Flush spill area with water.

**Environmental Precautions:** 

Use appropriate containment to avoid environmental contamination.

#### 7. HANDLING AND STORAGE

#### **HANDLING**

**Precautionary Measures:** Avoid contact with eyes. Contains finely divided material. Dust suspended in air may ignite with static discharge, sparks or flame. Equipment, including venting systems, should be grounded. Provide adequate ventilation in areas of use to remove dust. Wash thoroughly after handling.

Special Handling Statements: Maintain good housekeeping to control dust accumulations. Handling of material should be in accordance with standards for venting of deflagrations (e.g. NFPA-68). If handled with flammable or combustible materials the explosion hazard may increase. This material has a minimum ignition energy of 10-25 mJ.

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STORAGE

None

Storage Temperature: Store at <40 °C 104 °F

Reason: Integrity.

#### 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.

140 - 203 °F

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Color:

light yellow

Appearance:

pellets, granular solid or powder

Odor:

slight fatty

**Boiling Point:** 

Not applicable

Melting Point:

60 - 95 °C

Vapor Pressure:

Negligible Not available

Specific Gravity/Density:

Vapor Density:

Not applicable

Percent Volatile (% by wt.):

< 0.5

:Ha

Not applicable

Saturation In Air (% By Vol.):

Not applicable

**Evaporation Rate:** 

Not applicable

Solubility In Water: Volatile Organic Content: Negligible <5 gm/L

Flash Point:

Not applicable

Flammable Limits (% By Vol):

Not applicable

Autoignition Temperature:

Not available

Decomposition Temperature:

599 °F 315 °C

Partition coefficient (n-

Not available

octanol/water):

Odor Threshold:

Not available

#### 10. STABILITY AND REACTIVITY

Stability:

Stable

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**Conditions To Avoid:** 

None known

Polymerization:

Will not occur

Conditions To Avoid:

None known

Materials To Avoid:

Strong oxidizing agents, acids, acid halides, certain halogens.

**Hazardous Decomposition** 

Products:

Carbon monoxide Carbon dioxide ammonia

oxides of nitrogen hydrogen cyanide

#### 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:

Substituted amine oligomer has an acute oral LD50 (rat) of greater than 500 mg/kg. The acute dermal (rat) LD50 is greater than 2000 mg/kg. The acute 4-hour inhalation (rat) LC50 value is estimated to be >2.5 mg/liter based on test data on a similiar material. Direct contact with this material caused moderate eye and no skin irritation when tested in laboratory animals. No skin sensitization was seen when tested in guinea pigs. This material was negative in the Ames mutagenicity assay with and without metabolic activation.

Formaldehyde has oral (rat) and dermal (rabbit) LD50 values of 100 mg/kg and 270 mg/kg, respectively. The LC50 following a 4-hour inhalation exposure to rats is 250-478 ppm (0.31-0.59 mg/l). Irritation of the nose and throat has been observed in people exposed to formaldehyde vapor levels in excess of 1 ppm. Normal breathing may be seriously impaired at levels above 10 ppm and serious lung damage can occur at levels exceeding 50 ppm. Formaldehyde has been reported to cause pulmonary hypersensitivity in some individuals who were exposed to concentrations known to cause irritation; however, no pulmonary sensitization has been demonstrated in laboratory animal studies. Formaldehyde solutions can cause severe eye and moderate skin irritation. Repeated skin exposure to solutions of 2% or more formaldehyde has caused allergic skin reactions. Formaldehyde was found to be weakly mutagenic in a number of in vitro genotoxicity tests and positive in certain in vivo screening tests for mutagenicity. Formaldehyde did not cause birth defects in rats inhaling concentrations up to 10 ppm. However, a study using higher levels did show a slight but statistically significant reduction in male fetal body weight. Lifetime inhalation of formaldehyde vapor at concentrations above 5 ppm for 6 hours per day, caused nasal tumors in laboratory animals. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 (known) human carcinogen based on epidemiological evidence linking formaldehyde exposure to the occurrence of nasopharyngeal cancer, a rare type of cancer. IARC also found limited evidence of cancer of the nasal cavity and paranasal sinuses and insufficient evidence for an association between formaldehyde and leukemia. Inhalation caused liver and kidney damage in laboratory animal tests.

California Proposition 65 Warning (applicable in California only) - This product contains (a) chemical(s) known to the State of California to cause cancer.

#### 12. ECOLOGICAL INFORMATION

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. This material is not readily biodegradable.

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

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#### 12. ECOLOGICAL INFORMATION

#### 13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the 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. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company 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: Environmentally hazardous substance, solid, n.o.s.

Hazard Class: 9 Packing Group: III UN/ID Number: UN3077

Miscellaneous Transport Label Required:

Marine Pollutant

Technical Name (N.O.S.):

Contains substituted amine oligomer

Hazardous Substances: Not applicable

Comments:

Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to

non-bulk packagings transported by motor vehicles, rail cars or aircraft.

#### **TRANSPORT CANADA**

Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.

Hazard Class: 9 Packing Group: III UN Number: UN3077

Transport Label Required:

Miscellaneous Marine Pollutant

Technical Name (N.O.S.):

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#### ICAO / IATA

Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.

Hazard Class: 9 Packing Group: III UN Number: 3077

Transport Label Required:

Miscellaneous

Packing Instructions/Maximum Net Quantity Per Package:

Passenger Aircraft: 911; No Limit Cargo Aircraft: 911; No Limit

Technical Name (N.O.S.):

Contains substituted amine oligomer

Comments:

Special Provision A97 states that substances classified as UN3077 or UN3082 by the regulations of other modes of transport may also be transported by air under these entries. This classification does NOT apply if the regulations of the other modes of transport allow the substances to be shipped as "Non-Dangerous Goods"

because of package size or transport mode.

#### IMO

Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.

Hazard Class: 9 UN Number: 3077 Packing Group: III

Transport Label Required:

Miscellaneous Marine Pollutant

Technical Name (N.O.S.):

Contains substituted amine oligomer

# 15. REGULATORY INFORMATION

#### INVENTORY INFORMATION

**United States (USA):** All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**European Union (EU):** All components of this product are included on the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

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

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#### 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 7

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