

ETHANOX® 4703 Antioxidant

Material Safety Data Sheet

Revision Date 15-Aug-2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name ETHANOX® 4703 Antioxidant
Chemical Name 2,6-Di-tert-butyl-alpha-dimethylamino-p-cresol
CAS-No 88-27-7
Formula C17H29ON
Recommended use Antioxidant

Manufacturer SI Group®
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 Schenectady, New York 12301 UNITED STATES
 e-mail: sds.info@siigroup.com

NFPA	HMIS
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Health	1	1
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Emergency Telephone Numbers 1-800-424-9300 (within the US)
 +1 703-741-5970 (International)

Flammability	0	0
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Physical Hazards	1	1
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For Non-Emergency +1 (518) 887-2400

2. HAZARDS IDENTIFICATION

Warning

Emergency Overview

Harmful if swallowed
 Irritating to eyes
 May present a dust explosion hazard.

Potential Health Effects

Eyes	Irritating to eyes.
Skin	Not expected to be an irritant
Inhalation	Not hazardous by inhalation
Ingestion	Harmful if swallowed

See Section 11 for additional Toxicological information.

Occupational Exposure Limit See Section 8

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
2,6-Di-tert-butyl-alpha-dimethylamino-p-cresol	88-27-7	99.79

4. FIRST AID MEASURES

Eye Contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact	After contact with skin, wash immediately with plenty of water.
Inhalation	Move to fresh air.
Ingestion	If swallowed, give two glasses of water. Seek medical advice.

5. FIRE-FIGHTING MEASURES

Combustion/explosion hazards	Compounds containing phenolic groups are known to have severe dust explosivity rating. Explosion hazard can be reduced by good housekeeping, prevention of the escape of dust from process equipment and prevention of accumulation of dust on overhead, horizontal surfaces.
Suitable Extinguishing Media	Carbon dioxide, dry chemicals, foam, water spray (fog).
Hazardous Combustion Products	Oxides of carbon.
Protective Equipment and Precautions for Firefighters	Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ventilate the area. Avoid dust formation.
Environmental Precautions	Prevent further leakage or spillage if safe to do so.
Methods for Clean-up	Sweep up and shovel into suitable containers for disposal. Due to the potential for a dust explosion, if the material is to be incinerated, it should be dissolved in a suitable solvent and incinerated as a solution.

7. HANDLING AND STORAGE

Handling	This product may present a dust explosion hazard. Employ bonding, grounding, venting and explosion relief provisions in accord with accepted engineering practices in process operations capable of generating dust and/or static electricity. Explosion hazard can be reduced by good housekeeping, prevention of the escape of dust from process equipment and prevention of accumulation of dust on overhead, horizontal surfaces. In addition, a continuing effort should be made to control ignition sources.
Dust Explosion Properties	Compounds containing phenolic groups are known to have severe dust explosivity ratings. Employ bonding, grounding, venting and explosion relief provisions in accord with accepted engineering practices in process operations capable of generating dust and/or static electricity. Explosion hazard can be reduced by good housekeeping, prevention of the escape of dust from process equipment and prevention of accumulation of dust on overhead, horizontal surfaces. In addition, a continuing effort should be made to control ignition sources. Emptying the contents of a non-conductive package into an atmosphere where flammable vapors are present could cause a fire or an explosion unless the level of oxygen present is maintained at a low enough level to limit flammability or explosivity.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls	Ensure adequate ventilation, especially in confined areas.
Personal Protective Equipment	
Eye/face Protection	Chemical goggles. Face-shield.
Skin Protection	If skin contact or contamination of clothing is likely, protective clothing should be worn.
Hand protection	Gloves resistant to chemical permeation.
Respiratory Protection	Approved dust respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash point	No data	Flammable limits (LEL, UEL)	No data available
Form	Powder.	Vapor pressure	0.05 mmHg(20°C)
Color	Light yellow	Density	No data
Odor	Amine-like.	Vapor density	No data available
pH	No data available	Water Solubility	No data available
Boiling Point	No data available	Melting/freezing point	94 °C
Molecular Weight	No data available	Viscosity, dynamic	No data available
Viscosity, kinematic	No data available	Partition Coefficient (log Kow)	No data available
Flammability (solid, gas)	No data available	Oxidizing Properties	No data available
Explosive Properties	No data available		

10. STABILITY AND REACTIVITY

Stability	Stable. This product may present a dust explosion hazard. Employ bonding, grounding, venting and explosion relief provisions in accord with accepted engineering practices in process operations capable of generating dust and/or static electricity. Explosion hazard can be reduced by good housekeeping, prevention of the escape of dust from process equipment and prevention of accumulation of dust on overhead, horizontal surfaces. In addition, a continuing effort should be made to control ignition sources. Compounds containing phenolic groups are known to have severe dust explosivity ratings. Employ bonding, grounding, venting and explosion relief provisions in accord with accepted engineering practices in process operations capable of generating dust/and/or static electricity.
Conditions to Avoid	Avoid extremely high heat. Avoid dust formation.
Materials to avoid	Avoid strong oxidizing agents. Avoid strong reducing agents.
Hazardous decomposition products	Oxides of carbon and nitrogen.
Hazardous Polymerization	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Eye contact	Irritant
Skin contact	Not irritating
Ingestion	Harmful if swallowed
Inhalation	Not irritating

Acute toxicity

Rat Oral LD50 :	1030 mg/kg
Rat Dermal LD50 :	>4000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose in a safe manner in accordance with local/national regulations. Due to the potential for a dust explosion, if the material is to be incinerated, it should be dissolved in a suitable solvent and incinerated as a solution.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name NOT REGULATED FOR TRANSPORTATION

IMDG/IMO

IMO Class Not Regulated
 Packing Group Not Regulated
 UN-No Not Regulated
 IMO Labelling and Marking Not regulated
 Proper Shipping Name Not Regulated
 EmS Not Regulated
 Marpol - Annex II Not regulated
 Marpol - Annex III Not regulated
 Transport Description Not Regulated

IATA/ICAO

IATA/ICAO Class Not Regulated
 Packing Group Not Regulated
 UN-No Not Regulated
 IATA/ICAO Labelling not regulated
 Passenger Aircraft Not regulated
 Cargo aircraft only Not regulated
 Proper shipping name Not Regulated
 Transport Description Not regulated

15. REGULATORY INFORMATION

International Inventories	TSCA	DSL	NDSL	AICS	ENECS	ELINCS	ENCS	KECL	PICCS	CHINA	NZIoC
ETHANOX® 4703 Antioxidant	X	X	-	X	X	-	X	X	X	X	X

(X) Complies (-) Does not Comply

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Chronic Health Hazard No
 Acute Health Hazard Yes
 Fire Hazard No
 Sudden Release of Pressure Hazard No
 Reactive Hazard Yes

Reportable and Threshold Planning Quantities

No ingredients have RQs or TPQs under SARA or CERCLA

State Regulations

No components subject to "Right-To-Know" legislation in the following States; California, Massachusetts, New Jersey, and Pennsylvania.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazards

D2B Toxic materials

16. OTHER INFORMATION

The health and safety information is that available to SI Group as of the date published and SI Group makes no representation of the information's completeness or accuracy. Any data provided is based on either: reference sources, testing performed on a representative sample(s), or professional judgment. The physical data should not be construed as either representing specifications or a guaranteed analysis. This material has been classified in accordance with the hazard criteria of the Controlled Products Regulation and the MSDS contains information required by Controlled Products Regulation. SI Group provides its MSDS in several languages using English as the primary language. While SI Group uses reasonable efforts to provide accurate translations, SI Group assumes no liability, or responsibility, for errors, omissions or ambiguities in any translations. SI Group expects those persons who receive this MSDS to exercise their independent professional judgment, or consult with a competent health/safety professional, to determine how to utilize this material safely. This includes, but is not exclusive to, the material's appropriateness for a specific use, the type of personal protection equipment necessary, and the use of engineering controls. In no event is SI Group liable for any damages whatsoever arising out of your use of this material based upon information obtained from this MSDS including: direct, indirect, incidental, consequential or punitive claims or damages..