

ETHANOX® 330 Antioxidant

Revision Date: 05-Apr-2011

Revision Number: 2

Former Date: 22-Feb-2010

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name	ETHANOX® 330 Antioxidant
REACH - Registration number	N/A - Deadline : 31.05.2013
General function	Antioxidant
Company	ALBEMARLE EUROPE SPRL Rue du Bosquet 9 B-1348 LOUVAIN-LA-NEUVE (SUD) BELGIUM Tel: +32-10-48.17.11 Fax H&E Dpt: +32-10-48.17.39
'Competent Body for SDS'	Health, Safety & Environment - Louvain-la-Neuve (Belgique) ALBEMARLE Europe SPRL e-mail : HSE.LLN@albemarle.com
Emergency telephone number	+32.(0)70.233.201 (CARECHEM 24)
National Anti-Poison Center	UK: +44 844 892 0111 (National Poisons Information Service)

2. HAZARDS IDENTIFICATION

Most Important Hazards

Human Effects	Not expected to be acutely toxic. Not expected to be an irritant.
Environmental Effects	May cause long-term adverse effects in the aquatic environment.
Other Effects	-

Classification

67/548/EEC-1999/45/EC (DSD - DPD)

Not regulated under the criteria of Directive 67/548/EC.

EC Regulation 1272/2008 (CLP)

Chronic aquatic toxicity	Category 4 ; H413
---------------------------------	-------------------

EU Labelling

EC Regulation 1272/2008 (CLP)

Signal Word	None
Hazard Statements	H413 - May cause long lasting harmful effects to aquatic life
Precautionary Statements	P273 - Avoid release to the environment P501 - Dispose of contents/container to an approved waste disposal plant
Other Effects	-

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family	Alkylated phenol.
Chemical Name	1,3,5-Trimethyl-2,4,6-tris (3,5-di-tert-butyl-4-hydroxy-benzyl)benzene.
Formula	C54H78O3

Component	CAS-No	EC No.	REACH No.	Index No.	Weight %	C&L-DSD	C&L-CLP	Haz.st
1,3,5-Trimethyl-2,4,6-tris (3,5-di-tert-butyl-4-hydroxy-benzyl)benzene	1709-70-2	216-971-0		-	100	-	Aquatic Chronic 4	H413

4. FIRST AID MEASURES

Immediate Medical Assistance Required	No
----------------------------------------------	----

Skin Contact	After contact with skin, wash immediately with plenty of water.
Eye contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Inhalation	Move to fresh air.
Ingestion	Give 500 ml water to drink. Do not induce vomiting.
Emergency Equipment	Ensure that eyewash stations and safety showers are close to the workstation location.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Carbon dioxide, dry chemicals, foam, water spray (mist).
Unsuitable Extinguishing Media	None
Exposure Hazards	Do not breathe smoke and vapour.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation
Environmental Precautions	Contain any spill with dikes or absorbents to prevent migration and entry into sewers or streams. May require excavation of contaminated soil.
Methods for Clean-up	Sweep up and shovel into suitable containers for disposal.

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. Local exhaust is needed at source of dust. Mechanical ventilation is recommended.
Dust Explosion Properties	Compounds containing phenolic groups are known to have severe dust explosivity rating.
Storage	Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters	
Exposure limits	no data available

Exposure controls

Personal Protective Equipment:

Skin Protection	Wear protective gloves/clothing.
Eye Protection	Goggles. Face-shield.
Hand protection	Wear suitable gloves resistant to chemical penetration.
Respiratory Protection	Approved dust, fume and organic respirator when working in irritating fumes from decomposition.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Powder.
Color	White.
Odor	Odourless.
Boiling Point	Not applicable
Density	No data available
Melting/freezing point	244°C
Vapor pressure	<133 Pa(20°C)
Water Solubility	Insoluble.
Flammability (solid, gas)	No data available
Flash point	Not applicable.
pH	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available
Partition Coefficient (log Pow)	No data available
Evaporation Rate	No data available
Vapor density	No data available
Other information	No data available

10. STABILITY AND REACTIVITY

Stability	Compounds containing phenolic groups are known to have severe dust explosivity rating. 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.
Materials to avoid	Avoid strong reducing agents. Strong oxidizing agents.
Conditions to Avoid	Keep away from heat. Avoid dust formation.
Hazardous decomposition products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral:	>2000 mg/kg (rat)
LD50 Dermal:	>15000 mg/kg (rabbit)

Irritation	Not irritating.
Sensitization	No information available
Chronic Toxicity	No information available
Mutagenic Effects	No information available
Other Toxicological Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity	No information available
Persistence/Degradability	No information available
Bioaccumulative Potential	No information available
Mobility in Environmental Media	No information available
Other information	May cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods	Dispose in a safe manner in accordance with local/national regulations.
-------------------------------	-------------------------------------------------------------------------

14. TRANSPORT INFORMATION

REGULATED

SEA	no
ROAD/RAIL	no
AIR	no

SEA

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

14. TRANSPORT INFORMATION

ROAD/RAIL

ADR/RID Class	Not regulated
Packing Group	Not regulated
UN-No	Not regulated
Hazard Identification No	Not regulated
ADR/RID-Labeling/ Marking	Not regulated
Proper Shipping Name	Not regulated
Transport Description	Not regulated

AIR

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

Uncleaned empty packagings/transport equipments

ROAD/RAIL (ADR/RID)
SEA (IMO/IMDG)

15. REGULATORY INFORMATION

EU Labelling

EC Regulation 1272/2008 (CLP)

SEE SECTION 2.

Replaces 67/548/EC as from December 1st 2010.

67/548/EEC-1999/45/EC (DSD - DPD)

Not regulated under the criteria of Directive 67/548/EC.

REACH (According to Regulation (EC) N°1907/2006)

Substance has been pre-registered.

REACH - Registration number N/A - Deadline : 31.05.2013

Other information

Germany : WGK = 1

International Inventories	TSCA	DSL	NDSL	AICS	EINECS	ELINCS	ENCS	KECL	PICCS	CHINA	NZIoC
ETHANOX® 330 Antioxidant	X	X	-	X	X	-	X	X	X	X	X

(X) Complies (-) Does not Comply

16. OTHER INFORMATION

Text of R phrases mentioned in Section 3

None.

Hazard Statements

H413 - May cause long lasting harmful effects to aquatic life

ETHANOX is a registered trade mark of ALBEMARLE CORPORATION.

Prepared By

Health & Environment - EMA of ALBEMARLE EUROPE SPRL
FOR ADDITIONAL NON-EMERGENCY MSDS INFORMATION, CONTACT :
Health & Environment
Parc Scientifique Einstein
Rue du Bosquet, 9
B-1348 Louvain-la-Neuve (Sud)
Belgium
Phone No. : +32-10-48.17.38

Revision Date:

05-Apr-2011

Revision Summary

REACH - CLP.

Although the information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof, ALBEMARLE EUROPE SPRL makes no representation as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving the same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will ALBEMARLE EUROPE SPRL be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature, are made hereunder with respect to information or the product to which the information refers.

End of Safety Data Sheet