

SAFETY DATA SHEET

1. Identification

GHS product identifier	AE-7A
MSDS Number	AE421
Version #	05
Issue date	06-01-2011
CAS #	68002-97-1
Product use	Intermediate for manufacture of detergents.
Recommended Restrictions	Not available.
Synonym(s)	Ethoxylated C10-16 Alcohol
Manufacturer	P&G Chemicals Asia 238-A Thompson Road #21-01/10 Novena Square Tower A Singapore 307684 (65) 6824 5728 (day phone) PGChemMSDS.IM@pg.com CHEMTREC: +1-703-527-3887 Quality or Service Issues: 1-800-477-8899 or +1-513-626-6882

2. Hazards identification


GHS classification

Physical hazards

Explosives	Classification not possible
Flammable gases	Not applicable
Flammable aerosols	Not applicable
Oxidizing gases	Not applicable
Gases under pressure	Not applicable
Flammable liquids	Not classified
Flammable solids	Not applicable
Self-reactive substances and mixtures	Classification not possible
Pyrophoric liquids	Classification not possible
Pyrophoric solids	Not applicable
Self-heating substances and mixtures	Classification not possible
Substances and mixtures which, in contact with water, emit flammable gases	Classification not possible

Health hazards

Oxidizing liquids	Classification not possible
Oxidizing solids	Not applicable
Organic peroxides	Classification not possible
Corrosive to metals	Classification not possible
Acute toxicity, oral	Not classified
Acute toxicity, dermal	Classification not possible
Acute toxicity, inhalation	Not applicable
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Category 1
Sensitization, respiratory	Classification not possible
Sensitization, skin	Classification not possible

	Germ cell mutagenicity	Classification not possible
	Carcinogenicity	Classification not possible
	Reproductive toxicity	Classification not possible
	Specific target organ toxicity, single exposure	Classification not possible
	Specific target organ toxicity, repeated exposure	Classification not possible
	Aspiration hazard	Classification not possible
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Classification not possible
	Hazardous to the ozone layer	Not classified
GHS label elements		
Signal word	Danger	
		
Hazard statement	Causes serious eye damage. Very toxic to aquatic life.	
Precautionary statement		
Prevention	Wear eye/face protection. Avoid release to the environment. Not applicable.	
Response	Collect spillage. IF exposed or concerned: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.	
Storage	Store in accordance with local/regional/national/international regulation.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	

3. Composition/information on ingredients

Components	CAS #	Percent
ALCOHOLS, C10-16, ETHOXYLATED	68002-97-1	100
Additional components	CAS #	Percent
ETHYLENE OXIDE	75-21-8	<= 0.00001

4. First aid measures

First aid procedures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin	Rinse skin with water/shower. Get medical attention if irritation develops or persists. Call a POISON CENTER or doctor/physician if you feel unwell.
Eye	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists. Call a physician or poison control center immediately.
Ingestion	Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Not applicable.
General advice	In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Specific hazards arising from the chemical	Not available.
Protective equipment and precautions for firefighters	In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out. Water runoff can cause environmental damage.

6. Accidental release measures

Personal precautions	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Collect spillage. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.
Methods for cleaning up	<p>Large Spills: Prevent product from entering drains. Do not allow material to contaminate ground water system. Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water.</p> <p>Never return spills in original containers for re-use.</p>

7. Handling and storage

Handling	Do not get this material in contact with eyes. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains. Use care in handling/storage.
Storage	Keep container tightly closed. Keep out of the reach of children. Use care in handling/storage. Nitrogen blanket recommended for large tanks (capacity 1000 m ³ or higher). Storage temperatures: 50 °C maximum. Unsuitable containers: copper, zinc, aluminum, copper alloy, zinc alloy, aluminum alloy.

8. Exposure controls / personal protection

Control parameters

US. ACGIH Threshold Limit Values

Additional components	Type	Value
ETHYLENE OXIDE (75-21-8)	TWA	1.0000 ppm

Recommended monitoring procedures	Not available.
Personal protective equipment	
General	Eye wash fountain is recommended.
Eye/face protection	Wear eye/face protection. Wear chemical protective equipment that is specifically recommended by the manufacturer.
Skin protection	Wear suitable protective clothing. Wear protective gloves. No special protective equipment required.
Respiratory protection	No personal respiratory protective equipment normally required.
Hand protection	Not normally needed.

9. Physical and chemical properties

Appearance

Liquid.

Physical state	Liquid.
Color	Hazy.

Form	Liquid.
Odor	Characteristic.
Odor threshold	Not available.
pH	6 - 7.5
Melting point/Freezing point	Not available.
Boiling point	>= 500 °F (>= 260 °C)
Flash point	>= 400 °F (>= 204.4 °C) Pensky-Martens Closed Cup
Evaporation rate	<= 0.1 BuAc
Flammability (Train fire)	Not available.
Flammability limits in air, lower, % by volume	Not available.
Flammability limits in air, upper, % by volume	Not available.
Vapor pressure	<= 0.01 mm Hg at 20 C
Vapor density	>= 1
Relative density	Not available.
Solubility (H2O)	0 %
Octanol/H2O coeff	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Density	0.96 g/cm ³ at 50 C

10. Stability and reactivity

Chemical stability	No hazards to be especially mentioned.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air.
Materials to avoid	Strong oxidizing substances. Strong acids. Strong bases.
Hazardous decomposition products	Peroxides. Peracids. Burning releases carbon monoxide - carbon dioxide.

11. Toxicological information

Toxicological data

Product	Test Results
ALCOHOLS, C10-16, ETHOXYLATED (68002-97-1)	Acute Oral LD50 Rat: 1000 - 2000 mg/kg Based on compositionally similar material
Additional components	Test Results
ETHYLENE OXIDE (75-21-8)	Acute Inhalation LC50 Dog: 1.8 mg/l 4.00 Hours Acute Inhalation LC50 Guinea pig: 1.5 mg/l 4.00 Hours Acute Inhalation LC50 Mouse: 1.505 mg/l 4.00 Hours Acute Inhalation LC50 Rat: 0.9 mg/l 1.00 Hours Acute Oral LD50 Guinea pig: 270 mg/kg Acute Oral LD50 Mouse: 280 mg/kg Acute Oral LD50 Rat: 72 mg/kg Acute Other LD50 Mouse: 175 mg/kg Acute Other LD50 Rat: 100 mg/kg
Routes of exposure	Eye contact.
Acute effects	Harmful if swallowed.
Carcinogenicity	
ACGIH Carcinogens	
ETHYLENE OXIDE (CAS 75-21-8)	A2 Suspected human carcinogen.

Skin corrosion/irritation	Not available.
Serious eye damage/eye irritation	Risk of serious damage to eyes.
Other information	Not available.

12. Ecological information

Ecotoxicological data

Additional components

Test Results

ETHYLENE OXIDE (75-21-8)

LC50 Fathead minnow (Pimephales promelas): 73 - 96 mg/l
96.00 hours

Ecotoxicity	Components of this product are hazardous to aquatic life.
Environmental effects	Harmful to aquatic life.
Persistence / degradability	Not established.
Bioaccumulation	Not established.
Aquatic toxicity	Very toxic to aquatic organisms.
Mobility	Not established.
Other adverse effects	Not established.

13. Disposal considerations

Disposal methods	Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.
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14. Transport information

ADR

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alcohol (C12-C16) poly (7-19) ethoxylates)
Hazard class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions	IMDG Regulated Marine Pollutant.
Labels required	9
Hazard ID	90
Item	M6
Transport Category	3

IATA

UN number	3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Alcohol (C12-C16) poly (7-19) ethoxylates)
Hazard class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions	IMDG Regulated Marine Pollutant.
ERG code	9L

IMDG

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alcohol (C12-C16) poly (7-19) ethoxylates)
Hazard class	9
Subsidiary hazard class	•
Packing group	III
EmS No.	F-A, S-F

Environmental hazards**Marine pollutant**
Special precautionsYes
IMDG Regulated Marine Pollutant.**RID****Proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alcohol (C12-C16) poly (7-19) ethoxylates)

Hazard class

9

UN number

3082

Packing group

III

Marine pollutant

Yes

Labels required

9

Item

M6

Transport Category

3



ADR



IATA



IMDG



RID

15. Regulatory information**Inventory status****Country(s) or region****Inventory name****On inventory (yes/no)***

Australia

Australian Inventory of Chemical Substances (AICS)

Yes

Canada

Domestic Substances List (DSL)

Yes

China

Inventory of Existing Chemical Substances in China (IECSC)

Yes

Europe

European Inventory of Existing Commercial Chemical Substances (EINECS)

No

Europe

European List of Notified Chemical Substances (ELINCS)

No

Japan

Inventory of Existing and New Chemical Substances (ENCS)

Yes

Korea

Existing Chemicals List (ECL)

Yes

New Zealand

New Zealand Inventory

Yes

Philippines

Philippine Inventory of Chemicals and Chemical Substances (PICCS)

Yes

Switzerland

Switzerland FOPH

No

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

Disclaimer

The submission of the MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied are for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific product designated herein, and does not relate to use in combination with any other material of any other process. Procter & Gamble assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the controlled product.

Revision date

06-01-2011

SDS sections updated

Product and Company Identification: Synonyms