

## A-Gas (Singapore) PTE LTD

Chemwatch: **41-2442** Version No: **2.1.1.1** Material Safety Data Sheet according to NOHSC and ADG requirements Chemwatch Hazard Alert Code: 3

Issue Date: 27/02/2014 Print Date: 05/03/2014 Initial Date: Not Available S.Local.AUS.EN

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### **Product Identifier**

Product name	A-Gas 95% Cyclopentane
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	CYCLOPENTANE
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

#### Relevant identified uses of the substance or mixture and uses advised against

Use according to manufacturer's directions. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.

## Details of the supplier of the safety data sheet

Relevant identified uses

Registered company name	A-Gas (Singapore) PTE LTD
Address	360 Orchard Road, #10-05 Singapore
Telephone	65 6836 0065
Fax	65 6836 6521
Website	Not Available
Email	Not Available

#### **Emergency telephone number**

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Association / Organisation	Not Available	
Emergency telephone numbers	65 6836 0065	
Other emergency telephone numbers	65 6836 0065	1

#### CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
1800 039 008	+612 9186 1132	Not Available

Once connected and if the message is not in your prefered language then please dial 01

## **SECTION 2 HAZARDS IDENTIFICATION**

## Classification of the substance or mixture

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

## CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	3		
Toxicity	2		0 = Minimum
Body Contact	2		1 = Low
Reactivity	1		3 = High
Chronic	2		4 = Extreme

Poisons Schedule		
	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Risk Phrases [1]	R66	Repeated exposure may cause skin dryness and cracking.
	R11	Highly flammable.

	R65 HARMFUL-May cause lung damage if swallowed.	
	<b>R67</b> Vapours may cause drowsiness and dizziness.	
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	
GHS Classification <sup>[1]</sup>	Flammable Liquid Category 2, STOT - SE (Narcosis) Category 3, Aspiration Hazard Category 1, Chronic Aquatic Hazard Category 3	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	

## Label elements

GHS label elements				
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SIGNAL WORD DANGER

# Hazard statement(s)

H225	Highly flammable liquid and vapour
H336	May cause drowsiness or dizziness
H304	May be fatal if swallowed and enters airways
H412	Harmful to aquatic life with long lasting effects
AUH066	Repeated exposure may cause skin dryness and cracking

#### Precautionary statement(s): Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

# Precautionary statement(s): Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use to extinguish.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

## Precautionary statement(s): Storage

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

## Precautionary statement(s): Disposal

P501

Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

# Label elements



Relevant risk statements are found in section 2

Indication(s) of danger	F, Xn
SAFETY ADVICE	
S09	Keep container in a well ventilated place.
S13	Keep away from food, drink and animal feeding stuffs.
S16	Keep away from sources of ignition. No smoking.

S23	Do not breathe gas/fumes/vapour/spray.
S29	Do not empty into drains.
S33	Take precautionary measures against static discharges.
S35	This material and its container must be disposed of in a safe way.
S36	Wear suitable protective clothing.
S37	Wear suitable gloves.
S40	To clean the floor and all objects contaminated by this material, use water and detergent.
S41	In case of fire and/or explosion, DO NOT BREATHE FUMES.
S43	In case of fire use
S46	If swallowed, seek medical advice immediately and show this container or label.
S51	Use only in well ventilated areas.
S56	Dispose of this material and its container at hazardous or special waste collection point.
S57	Use appropriate container to avoid environmental contamination.

## Other hazards

Inhalation and/or ingestion may produce health damage*.
May produce discomfort of the eyes and respiratory tract*.
Cumulative effects may result following exposure*.

# **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
287-92-3	95	cyclopentane
	NotSpec.	iso/n-pentane
	NotSpec.	iso-hexane

# SECTION 4 FIRST AID MEASURES

Description of first aid measures		
Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>	
Skin Contact	If skin or hair contact occurs: <ul> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>	
Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor.</li> </ul>	
Ingestion	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> <li>Avoid giving milk or oils.</li> <li>Avoid giving alcohol.</li> <li>If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul>	

## Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:
Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and
given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 50 mm Hg) should be intubated.

- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.

<ul> <li>Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.</li> <li>Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]</li> </ul>
Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

## **SECTION 5 FIREFIGHTING MEASURES**

# Extinguishing media

<ul> <li>Alcohol stable foam.</li> <li>Foam.</li> </ul>
Dry chemical powder.
<ul> <li>BCF (where regulations permit).</li> </ul>

## Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
Advice for firefighters	
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> </ul>
Fire/Explosion Hazard	<ul> <li>Liquid and vapour are highly flammable.</li> <li>Severe fire hazard when exposed to heat, flame and/or oxidisers.</li> <li>Vapour may travel a considerable distance to source of ignition.</li> <li>Heating may cause expansion or decomposition leading to violent rupture of containers.</li> </ul>

# SECTION 6 ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Minor Spills	<ul> <li>Remove all ignition sources.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> </ul>
Major Spills	<ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves.</li> </ul>
	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

# SECTION 7 HANDLING AND STORAGE

## Precautions for safe handling

Safe handling	<ul> <li>Containers, even those that have been emptied, may contain explosive vapours.</li> <li>Do NOT cut, drill, grind, weld or perform similar operations on or near containers.</li> <li>Contains low boiling substance:</li> <li>Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.</li> </ul>
Other information	<ul> <li>Store in original containers in approved flame-proof area.</li> <li>No smoking, naked lights, heat or ignition sources.</li> <li>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</li> </ul>

# Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Packing as supplied by manufacturer.</li> <li>Plastic containers may only be used if approved for flammable liquid.</li> <li>Check that containers are clearly labelled and free from leaks.</li> <li>For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type.</li> </ul>
Storage incompatibility	Cyclopentane: <ul> <li>reacts violently with strong oxidisers, nitrogen tetraoxide</li> <li>may generate electrostatic charges, due to low conductivity, following flow or agitation</li> <li>Avoid reaction with oxidising agents</li> </ul>

PACKAGE MATERIAL INCOMPATIBILITIES

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

## **Control parameters**

OCCUPATIONAL EXPOSURE LIMITS (OEL)

## INGREDIENT DATA

Source	Ingredient	Material n	ame	TWA		STEL	Peak	Notes
Australia Exposure Standards	cyclopentane	Cyclopenta	ane	1720 (mg/m3) / 600 (pp	m)	Not Available	Not Available	Not Available
EMERGENCY LIMITS								
Ingredient	TEEL-0		TEEL-1		TEEL-2		TEEL-3	
cyclopentane	600(ppm)		1800(ppn	n)	3840(ppn	ו)	15000(ppm)	
Ingredient	Original IDLH				Revise	ed IDLH		
A-Gas 95% Cyclopentane	Not Available			Not Av	ailable			

## Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk.
Personal protection	
Eye and face protection	<ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.</li> </ul>
Skin protection	See Hand protection below
Hand protection	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
Body protection	See Other protection below
Other protection	<ul> <li>Overalls.</li> <li>PVC Apron.</li> <li>PVC protective suit may be required if exposure severe.</li> <li>Eyewash unit.</li> </ul>
Thermal hazards	

## Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the A-Gas 95% Cyclopentane Not Available

CPI

Material

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

## **Respiratory protection**

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	Air-line*	A-2	A-PAPR-2 ^
up to 10 x ES	-	A-3	-
10+ x ES	-	Air-line**	-

\* - Continuous Flow; \*\* - Continuous-flow or positive pressure demand

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

# Information on basic physical and chemical properties

Appearance Clear colourless liquid with a characteristic odour; insoluble in water.

Liquid	Relative density (Water = 1)	0.75 @ 20C/4C
Not Available	Partition coefficient n-octanol / water	Not Available
Not Available	Auto-ignition temperature (°C)	361
Not Applicable	Decomposition temperature	Not Available
-94.4	Viscosity (cSt)	Not Available
49.3	Molecular weight (g/mol)	Not Applicable
<-7 (CC)	Taste	Not Available
Not Available	Explosive properties	Not Available
Not Available	Oxidising properties	Not Available
Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
1.5	Volatile Component (%vol)	100
318 mmHg @ 25C	Gas group	Not Available
Immiscible	pH as a solution(1%)	Not Applicable
2.42	VOC g/L	
	Liquid Not Available Not Available Not Applicable -94.4 49.3 <-7 (CC) Not Available Not Available Not Available 1.5 318 mmHg @ 25C Immiscible 2.42	LiquidRelative density (Water = 1)Not AvailablePartition coefficient n-octanol / waterNot AvailableAuto-ignition temperature (°C)Not ApplicableDecomposition temperature-94.4Uiscosity (CSI)49.3Molecular weight (g/mol)<-7 (CC)TasteNot AvailableSurface Tension (dyn/cm or mN/m)Not AvailableSurface Tension (dyn/cm or mN/m)1.5Volatile Component (%vol)318 mmHg @ 25CGas groupLinmiscibleDH as a solution(1%)2.42VOC g/L

## SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<ul> <li>Presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

# SECTION 11 TOXICOLOGICAL INFORMATION

## Information on toxicological effects

Inhaled	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation.		
Ingestion	Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result. Signs and symptoms of chemical (aspiration) pneumonitis may include coughing, gasping, choking, burning of the mouth, difficult breathing, and bluish coloured skin (cyanosis). Accidental ingestion of the material may be damaging to the health of the individual.		
Skin Contact	The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives . Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Open cuts, abraded or irritated skin should not be exposed to this material		
Eye	Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.		
Chronic	Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.		
A-Gas 95% Cyclopentane	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Not Available	Not Available	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Inhalation (Mouse) LC50: 72000 m3		
cyclopentane	Inhalation (Rat) LC50: 106000 m3		
	Oral (Mouse) LD50: 12800 mg/kg		

Oral (Rat) LD50: 11400 mg/kg

Not Available

Not Available

Not available. Refer to individual constituents.

Acute Toxicity	0	Carcinogenicity	0
Skin Irritation/Corrosion	0	Reproductivity	0
Serious Eye Damage/Irritation	0	STOT - Single Exposure	×
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	*

#### **CMR STATUS**

## **SECTION 12 ECOLOGICAL INFORMATION**

## Toxicity

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

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

## Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available
Bioaccumulative potential		
Ingredient	Bioaccumulation	
Not Available	Not Available	
Mobility in soil		
Ingredient	Mobility	
Not Available	Not Available	

## SECTION 13 DISPOSAL CONSIDERATIONS

#### Waste treatment methods

	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their
Product / Packaging disposal	area. In some areas, certain wastes must be tracked.
	A Hierarchy of Controls seems to be common - the user should investigate:

## **SECTION 14 TRANSPORT INFORMATION**

## Labels Required

	PLAMMARIE LIQUID 3
Marine Pollutant	NO
HAZCHEM	3YE

#### Land transport (ADG)

UN number	1146
Packing group	II Contraction of the second
UN proper shipping name	CYCLOPENTANE
Environmental hazard	No relevant data
Transport hazard class(es)	Class 3 Subrisk
Special precautions for user	Special provisions       limited quantity       1 L

## Air transport (ICAO-IATA / DGR)

UN number 1146

Packing group	Ш			
UN proper shipping name	Cyclopentane			
Environmental hazard	No relevant data			
Transport hazard class(es)	ICAO/IATA Class 3 ICAO / IATA Subrisk ERG Code 3H			
Special precautions for user	Special provisions         Cargo Only Packing Instructions         Cargo Only Maximum Qty / Pack         Passenger and Cargo Packing Instructions         Passenger and Cargo Maximum Qty / Pack         Passenger and Cargo Limited Quantity Packing Instructions         Passenger and Cargo Maximum Qty / Pack	364 60 L 353 5 L Y341 1 L		

## Sea transport (IMDG-Code / GGVSee)

UN number	1146
Packing group	I
UN proper shipping name	CYCLOPENTANE
Environmental hazard	No relevant data
Transport hazard class(es)	IMDG Class     3       IMDG Subrisk
Special precautions for user	EMS Number     F-E,S-D       Special provisions

## **SECTION 15 REGULATORY INFORMATION**

#### Safety, health and environmental regulations / legislation specific for the substance or mixture

cyclopentane(287-92-3) is found on the following regulatory lists	"International Maritime Dangerous Goods Requirements (IMDG Code)", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia Exposure Standards", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OSPAR National List of Candidates for Substitution – Norway", "OECD List of High Production Volume (HPV) Chemicals", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "Australia National Pollutant Inventory", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Regulations concerning the International Carriage of Dangerous Goods Nedel Regulations", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Dangerous Goods List", "Australia Hazardous Substances Information System - Consolidated Lists", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Acros Transport Information", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes"

#### **SECTION 16 OTHER INFORMATION**

#### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references

www.crientwatch.net/relefences

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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