

ITW AAMTech Australia

Chemwatch: 5231-20

Version No: 3.1.1.1 Safety Data Sheet according to WHS and ADG requirements Chemwatch Hazard Alert Code: 2

Issue Date: 24/11/2016 Print Date: 25/11/2016 S.GHS.AUS.EN

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

Product Identifier

Product name	ain-X Bathroom Mirror Anti-Fog	
Synonyms	Product Code: 630034 (355ml)	
Proper shipping name	ALCOHOLS, N.O.S. (contains isopropanol)	
Other means of identification	Not Available	

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

Relevant identified uses Interior glass antifog treatment.

Details of the supplier of the safety data sheet

Registered company name	ITW AAMTech Australia
Address	1-9 Nina Link, Dandenong South VIC 3175 Australia
Telephone	1800 177 989
Fax	1800 308 556
Website	www.aamtech.com.au
Email	info@aamtech.com.au

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	1800 039 008
Other emergency telephone numbers	0800 2436 2255

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable	
Classification ^[1]	Flammable Liquid Category 3, Eye Irritation Category 2A	
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



SIGNAL WORD	WARNING		
Hazard statement(s)	Hazard statement(s)		
H226	Flammable liquid and vapour.		
H319	Causes serious eye irritation.		

Precautionary statement(s) Prevention

P101	f medical advice is needed, have product container or label at hand.	
P102	Keep out of reach of children.	
P103	Read label before use.	
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.	

Precautionary statement(s) Response

P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.	

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
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Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
67-63-0	7-13	isopropanol
34590-94-8	3-7	dipropylene glycol monomethyl ether
7732-18-5	>60	water

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course.
Fire/Explosion Hazard	 Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2) other pyrolysis products typical of burning organic material.
HAZCHEM	•3Y

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of overexposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other information	 Store in original containers in approved flame-proof area. No smoking, naked lights, heat or ignition sources. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container	 Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Avoid contamination with strong oxidising agents as ignition may result

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	isopropanol	Isopropyl alcohol	983 mg/m3 / 400 ppm	1230 mg/m3 / 500 ppm	Not Available	Not Available
Australia Exposure Standards	dipropylene glycol monomethyl ether	(2-Methoxymethylethoxy) propanol	308 mg/m3 / 50 ppm	Not Available	Not Available	Sk

EMERGENCY LIMITS

Ingredient	Material name	TEEL-2	TEEL-3		
isopropanol	Isopropyl alcohol	400 ppm	12000 ppm		
dipropylene glycol monomethyl ether	Dipropylene glycol methyl ether	150 ppm	510 ppm		
Ingredient	Original IDLH	Revised IDLH	Revised IDLH		
isopropanol	12,000 ppm	2,000 [LEL] ppm			
dipropylene glycol monomethyl ether	Unknown mg/m3 / Unknown ppm	600 ppm			
water	Not Available	Not Available			

Exposure controls

Appropriate engineering controls	General exhaust is adequate under normal operating conditions.
Personal protection	
Eye and face protection	 No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: Safety glasses with side shields. 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.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	 Overalls. P.V.C. apron. Barrier cream.
Thermal hazards	Not Available

Respiratory protection

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear colourless liquid with alcohol odour; mixes with water.				
Physical state	Liquid	Relative density (Water = 1)	0.99		
Odour	Not Available	Partition coefficient n-octanol / water	Not Available		
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available		
pH (as supplied)	6.0	Decomposition temperature	Not Available		
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available		
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable		
Flash point (°C)	35 Setaflash CC	Taste	Not Available		
Evaporation rate	Not Available	Explosive properties	Not Available		
Flammability	Flammable.	Oxidising properties	Not Available		
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available		
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available		
Vapour pressure (kPa)	Not Available	Gas group	Not Available		
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available		
Vapour density (Air = 1)	Not Available	VOC g/L	15%		

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
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	Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.				
Ingestion	Ingestion may result in nausea, abdominal irritation, pa	Ingestion may result in nausea, abdominal irritation, pain and vomiting			
Skin Contact	There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing skin condition				
Eye	This material can cause eye irritation and damage in some persons.				
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.				
Rain-X Bathroom	ΤΟΧΙΟΙΤΥ	IRRITATION			
Mirror Anti-Fog	Not Available	Not Available			
isopropanol	тохісіту	IRRITATION			
	Dermal (rabbit) LD50: 12792 mg/kg ^[1]	Eye (rabbit): 10 mg - moderate			

	Inhalation (rat) LC50: 72.6 mg/L/4hr ^[2]	Eye (rabbit): 100 mg - SEVERE	
	Oral (rat) LD50: 5000 mg/kg ^[2]	Eye (rabbit): 100mg/24hr-moderate	
		Skin (rabbit): 500 mg - mild	
	тохісіту	IRRITATION	
	dermal (rat) LD50: >19000 mg/kg ^[1]	Eye (human): 8 mg - mild	
dipropylene glycol monomethyl ether	Oral (rat) LD50: 5130 mg/kg ^[1]	Eye (rabbit): 500 mg/24hr - mild	
monometryrether		Skin (rabbit): 238 mg - mild	
		Skin (rabbit): 500 mg (open)-mild	
	тохісіту	IRRITATION	
water	Oral (rat) LD50: >90000 mg/kg ^[2] Not Available		
Legend:	 Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances 		

ISOPROPANOL	Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans.							
DIPROPYLENE GLYCOL MONOMETHYL ETHER	Evidence of carcinogenicity may be inadequate or limited in animal testing. Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. for propylene glycol ethers (PGEs): Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA); tripropylene glycol methyl ether (TPM). Testing of a wide variety of propylene glycol ethers Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on reproductive organs, the developing embryo and fetus, blood (haemolytic effects), or thymus, are not seen with the commercial-grade propylene glycol ethers. In the ethylene series, metabolism of the terminal hydroxyl group produces an alkoxyacetic acid. The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.							
WATER	No significant acute toxicological data identified in literature search.							
ISOPROPANOL & DIPROPYLENE GLYCOL MONOMETHYL ETHER	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.							
Acute Toxicity	0	Carcinogenicity	0					
Skin Irritation/Corrosion	0	Reproductivity	0					
Serious Eye Damage/Irritation	*	STOT - Single Exposure	0					
Respiratory or Skin sensitisation	0	STOT - Repeated						
Mutagenicity	\odot	Aspiration Hazard	0					
mutagemeity	~	Legend: X – Data ava ✓ – Data requ	ilable but does not fill the criteria for classification uired to make classification available					

🚫 – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity					
Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source

isopropanol	LC50	96	Fish	183.844mg/L	3
isopropanol	EC50	48	Crustacea	12500mg/L	5
isopropanol	EC50	96	Algae or other aquatic plants	993.232mg/L	3
isopropanol	EC50	384	Crustacea	42.389mg/L	3
isopropanol	NOEC	5760	Fish	0.02mg/L	4
dipropylene glycol monomethyl ether	LC50	96	Fish	1307.253mg/L	3
dipropylene glycol monomethyl ether	EC50	48	Crustacea	1930mg/L	2
dipropylene glycol monomethyl ether	EC50	72	Algae or other aquatic plants	>969mg/L	2
dipropylene glycol monomethyl ether	EC50	384	Crustacea	297.071mg/L	3
dipropylene glycol monomethyl ether	NOEC	72	Algae or other aquatic plants	969mg/L	2
Legend:	3. EPIWIN Suite V	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor			

Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
dipropylene glycol monomethyl ether	нідн	HIGH
water	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
isopropanol	LOW (LogKOW = 0.05)
dipropylene glycol monomethyl ether	LOW (BCF = 100)
water	LOW (LogKOW = -1.38)

Mobility in soil

Ingredient	Mobility
isopropanol	HIGH (KOC = 1.06)
dipropylene glycol monomethyl ether	LOW (KOC = 10)
water	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging	 Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal.
disposal	▶ Bury residue in an authorised landfill.
	Recycle containers if possible, or dispose of in an authorised landfill.
	 Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	•3Y

Land transport (ADG)

1 4 7			
UN number	1987		
UN proper shipping name	ALCOHOLS, N.O.S. (contains isopropanol)		
Transport hazard class(es)	Class 3 Subrisk Not Applicable		
Packing group	Ш		
Environmental hazard	Not Applicable		
Special precautions for user	Special provisions223 274Limited quantity5 L		

Air transport (ICAO-IATA / DGR)

UN number	1987		
UN proper shipping name	Alcohols, n.o.s. * (contains isopropanol)		
Transport hazard class(es)	ICAO/IATA Class3ICAO / IATA SubriskNot ApplicableERG Code3L		
Packing group	Ш		
Environmental hazard	Not Applicable		
	Special provisions Cargo Only Packing Instructions	A3A180 366	
	Cargo Only Maximum Qty / Pack	220 L	
Special precautions for user	Passenger and Cargo Packing Instructions	355	
	Passenger and Cargo Maximum Qty / Pack	60 L	
	Passenger and Cargo Limited Quantity Packing Instructions	Y344	
	Passenger and Cargo Limited Maximum Qty / Pack	10 L	

Sea transport (IMDG-Code / GGVSee)

UN number	1987		
UN proper shipping name	ALCOHOLS, N.O.S. (contains isopropanol)		
Transport hazard class(es)	IMDG Class 3 IMDG Subrisk Not Applicable		
Packing group	III		
Environmental hazard	Not Applicable		
Special precautions for user	EMS NumberF-E, S-DSpecial provisions223 274Limited Quantities5 L		

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

ISOPROPANOL(67-63-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards	Australia Inventory of Chemical Substances (AICS)	
Australia Hazardous Substances Information System - Consolidated Lists	International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	

DIPROPYLENE GLYCOL MONOMETHYL ETHER(34590-94-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards	Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists	

WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (water; dipropylene glycol monomethyl ether; isopropanol)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (water)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
dipropylene glycol monomethyl ether	34590-94-8, 12002-25-4, 112388-78-0, 104512-57-4, 83730-60-3, 112-28-7, 13429-07-7, 20324-32-7, 13588-28-8, 55956-21-3

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

The 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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