

SAFETY DATA SHEET

According to Regulation (EC) No453/2010

SDS-PAWA-0001

Version 2.0

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Section 1: IDENTIFICATION OF SUBSTANCE/ MIXTURE AND OF THE COMPANY

1.1 Product identifier

Product name : Alcogiene™ PAWA
Included product name : PAWA-2.5P, PAWA-25P, PAWA-200P

1.2 Relevant identified uses of the substance or mixture

Identified uses : Laboratory chemicals, Manufacture of substances,
Diluted to 70% for general disinfectant of non-porous
food contact surfaces of equipment.
Uses advised against : Not applicable

1.3 Details of the supplier of the safety datasheet

Company : Elite Advanced Materials Sdn Bhd
No 1, Jalan KPK 1/2, Kawasan Perindustrian Kundang,
48020 Rawang, Selangor, Malaysia
E-mail address : enquiry@eamaterials.com

1.4 Emergency telephone number

Emergency : +60 3-6034 3766 (Local business hours only)

Section 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flammable liquids	Category 2
Eye irritation	Category 2
Specific target organ systemic toxicity - single exposure	Category 3
Specific target organ toxicity - repeated exposure	Category 2

2.2 Label elements

Labeling in compliance to Regulation (EC) No. 1272/2008 [CLP/GHS]

Hazard pictograms



GHS02



GHS07

Signal word

Danger

Hazard statement

H225	Highly flammable liquid and vapour
H225	Causes serious eye irritation
H225	May cause drowsiness or dizziness

Precautionary statements

P210	Keep away from heat/ sparks/open flames/hot surfaces. – No smoking
P233	Keep container tightly closed
P261	Avoid breathing vapours
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3 Other hazards

Not data available.

Section 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Synonyms : Isopropanol
 Formula : C₃H₈O
 Molecular Weight : 60.10 g/mol
 CAS-No. : 67-63-0

Hazardous components according to Regulation (EC) No 1272/2008

Component	Identity	Classification Code	H-Code	Concentration (by wt)
2-Propanol	CAS-No.: 67-63-0	Flam. Liq. 2 Eye Irritat. 2 STOT SE 3	H225 H319 H336	≤100 %

Section 4 : FIRST AID MEASURES

4.1 Description of First Aid measures

General information

Immediate medical attention is required and move out of dangerous area. Show this safety data sheet to the doctor in attendance.

If Inhaled

Move person into fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If unconscious, place in recovery position and seek an immediate medical action.

In case of skin contact

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognized cleaner for at least 15 minutes. Watch out for any remaining product between skin and clothing, watches, shoes, etc. Consult a doctor if skin irritation persists.

If swallowed

Do not give the patient anything orally. Keep the person exposed at rest. Do not induce vomiting. Seek medical attention, showing the label.

Information for doctor

There are no particular measures are known, treat according to symptoms.

4.2 Most important symptoms and delayed symptoms and effects

Breathing difficulties. Irritant effects, respiratory paralysis, drowsiness, dizziness, unconsciousness, narcosis, narcosis, inebriation, headache, somnolence, coma.

4.3 Indication of any immediate medical attention and special treatment

No data available.

Section 5 : FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide (CO₂) to extinguish flames.

Unsuitable extinguishing media

None.

5.2 Special hazards arising from the substance or mixture

The vapour is heavier than air, spreads along the ground and distant ignition is possible. Carbon monoxide may be evolved if incomplete combustion occurs.

5.3 Advice for fire-fighters

Special protective equipments for firefighters. Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing

5.4 Further information

Use water spray to cool unopened containers.

Section 6 : ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal protective equipment is required during handling. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Do not discharge into drains or waterways.

6.3 Methods and material for containment and cleaning up

Allow residues to evaporate or soak up with an appropriate absorbent material. Dispose of contaminated material as waste according to section 13.

Section 7 : HANDLING AND STORAGE

7.1 Precaution for safe handling

Prevent contact with skin and eyes. Avoid inhalation of vapour or mist. Container must close tightly and away from sources of heat, sparks and naked flames. Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

The container must close tightly in a cool dry, well-ventilated place. Keep away from all sources of ignition, heat and direct sunlight. Avoid accumulation of electrostatic charges. Suggested to store sealed products at temperature below 45 °C. Handle and store under inert gas. Hygroscopic. Sealed products are not sensitive to humidity

7.3 Specific end use

No further relevant information available.

Section 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Component	ACGIH TLV	CAL/OSHA PEL	NIOSH REL
Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	TWA: 400ppm STEL: 500ppm	TWA: 400 ppm STEL: 500 ppm

8.2 Exposure control

Personal protection measures, such as personal protective equipment.

Never eat, drink or smoke during handling the chemical. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

Eye/ face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Hand protection

Use appropriate protective gloves that are resistant to chemical agents in accordance with standard EN347.

Gloves must be selecting as indicated by the application and term of utilization at the workstation.

The selected protective gloves have to fulfill the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact*

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact*

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: 60 min

Material tested: Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

*Source – Sigma Aldrich, 2015

Body protection

Avoid skin contact.

Wear appropriate protective clothing

After contact with the product, all parts of the body that have been soiled must be washed.

Body protection

Avoid skin contact.

Wear appropriate protective clothing

After contact with the product, all parts of the body that have been soiled must be washed.

Respiratory protection

Avoid breathing vapours

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they should wear an appropriate, approved, respiratory protection device.

Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Ordor	: Alcohol-like
Ordor threshold	: Not determined
pH-value	: Not determined
Melting point/Range	: -89.5 °C
Boiling point/Range	: 82.5 °C
Flashpoint	: 11.7 °C [closed cup]
Evaporation rate	: 3.0
Flammability limit-LEL	: 2 % (V)
Flammability limit-UEL	: 12 % (V)
Vapour pressure	: 43.2 hPA at 20 °C
Vapor density (air=1)	: 2.1
Density	: 0.786 g/cm ³
Bulk density	: Not determined
Solubility(ies)	: Not determined
Water solubility	: Completely soluble

Partition coefficient: n-octanol/water	: log Pow: 0.05
Auto-ignition temperature	: 425 °C
Decomposition temperature	: Not determined
Viscosity	: 24cPa 25°C
Explosive properties	: Not determined
Oxidising properties	: Not determined

9.2 Other information

No applicable

Section 10 : STABILITY AND REACTIVITY

10.1 Reactivity

Vapours may form explosive mixture with air Formation of peroxides possible

10.2 Chemical stability

Sensitive to light and air

10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with:
Alkali metals, Alkaline earth metals, chromium (VI) oxide

Exothermic reaction with : Oxidising agents, nitric acid, aldehydes, amines,
fuming sulfuric acid, iron, aluminium, chlorine,
phosphorus trichloride, strong acids

Risk of explosion with : Chlorates, phosgene, organic nitro compounds,
hydrogen peroxide, nitrogen oxides, perchlorates

10.4 Conditions to avoid

Accumulation of electrostatic charges, heating, heat, flames and hot surfaces

10.5 Incompatible materials

Oxidising agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Peroxides

Section 11: TOXICOLOGY INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral	- 5840 mg/kg	(Rat)
LD50 Dermal	- 16.4 mL/kg	(Rabbit)
LC50 Inhalation	- 10000 ppm/4h	(Rat)

Skin corrosion/irritation

Skin	- Rabbit
Remarks	: Not irritating to skin.

Serious eye damage/eye irritation

Eyes	- Rabbit
Remarks	: Causes serious eye irritation.

Respiratory or skin sensitisation

Remarks: Not expected to be a sensitiser.

Germ cell mutagenicity

Remarks : Not mutagenic.

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol)

Reproductive toxicity

Remarks : Does not impair fertility. Not a developmental toxicant.

Specific target organ toxicity - single exposure

Remarks : May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Additional Information

Remarks : Exposure may enhance the toxicity of other materials, Classifications by other authorities under varying regulatory frameworks may exist.

Section 12 : ECOLOGY INFORMATION

12.1 Ecotoxicity

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 9640 mg/l - 96 h
Toxicity to dophnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 13299 mg/l - 48 h
Toxicity to algae	IC50 - Desmodesmus subspicatus (green algae) - 1000 mg/l - 72 h

12.2 Persistence and degradability

Biodegradability	Result: 95 % - 21 d - Readily biodegradable ThOD: 2400 mg/g BOD5: 49% COD/ThBOD: 96 %
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12.3 Bioaccumulative potential

Partition coefficient : n-octanol/water
Log Pow : 0.05

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment:

PBT : Not applicable
vPvB : Not applicable

12.6 Other adverse effects

No data available.

Section 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment method

Product

Waste material must be disposed according to national and local regulations. Keep the chemicals in its specific waste container according to the waste classification.

According to Quality Environment Regulation (Scheduled Waste) 2005, waste need to be sent to designated premise for recycle, treatment or disposal. Offer surplus and non - recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14 : TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1219	IMDG: 1219	IATA-DGR: 1219
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14.2 UN proper shipping name

ADR/RID:	ISOPROPANOL
IMDG:	ISOPROPANOL
IATA-DGR:	ISOPROPANOL

14.3 Transport hazard class (es)

ADR/RID: 3	IMDG: 3	IATA-DGR: 3
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14.4 Packaging group

ADR/RID: II	IMDG: II	IATA-DGR: II
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14.5 Environmental hazards

ADR/RID: no	IMDG Marine pollutant: no	IATA-DGR: no
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14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available.

14.7 Special precautions for user

No data available.

Section 15 : REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Section 16 : OTHER INFORMATION

This information is based on present level of our knowledge, however, this shall not constitute a guarantee product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
R11	Highly flammable
R36	Irritating to eyes
R67	Vapours may cause drowsiness and dizziness

Abbreviations:

ADR	: European agreement concerning the international carriage of dangerous goods by road.
IMDG	: International Maritime Dangerous Goods.
IATA	: International Air Transport Association
ICAO	: International Civil Aviation Organization
RID	: Regulations concerning the International Carriage of Dangerous goods by rail.

Notice to reader

The information contained in this Safety Data Sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the products and should not be construed as any guarantee of technical performance or suitability for particular application.

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