

SECTION 1: Identification of the hazardous chemical and of the supplier

1.1. Product identifier

Name : AS-2100 cPVC Cement

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Adhesives

1.4. Supplier's details

Manufacturer

Alseal Marketing Sdn. Bhd.
No.86, Jalan Industri 3/3,
Rawang Integrated Industrial Park,
48000 Rawang, Selangor, Malaysia.
T +603-60942088 - F +603-60992930
info@alsealmarketing.com

1.5. Emergency phone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to Industry Code of Practice on chemicals classification and hazard communication (2014)

Flam. Liq. 2	H225
Eye Irrit. 2	H319
Carc. 2	H351
STOT SE 3	H336
STOT SE 3	H335
Aquatic Chronic 3	H412

2.2. Label elements

Labelling according to Industry Code of Practice on chemicals classification and hazard communication (2014)

Hazard pictograms (GHS MY) :



Signal word (GHS MY) :

Danger

Contains :

acetone; propan-2-one; propanone; butanone; ethyl methyl ketone; tetrahydrofuran

Hazard statements (GHS MY) :

H225 - Highly flammable liquid and vapour.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H351 - Suspected of causing cancer.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (GHS MY) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.

2.3. Other hazards not contributing to the classification

No additional information available

SECTION 3: Composition and information of the ingredients of the hazardous chemical

3.1. Substances

Not applicable

3.2. Mixtures

AS-2100 cPVC Cement

Safety Data Sheet

According to ICOP 2014

Name	Product identifier	%	Classification according to Industry Code of Practice on chemicals classification and hazard communication (2014)
cyclohexanone	(CAS-No.) 108-94-1	30 – 50	Flam. Liq. 3, H226 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Acute Tox. 4 (Inhalation), H332 Acute Tox. Not classified (Inhalation:dust,mist)
tetrahydrofuran	(CAS-No.) 109-99-9	10 – 30	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335
butanone; ethyl methyl ketone	(CAS-No.) 78-93-3	10 – 30	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Eye Irrit. 2, H319 STOT SE 3, H336
acetone; propan-2-one; propanone	(CAS-No.) 67-64-1	1 – 10	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Acute Tox. Not classified (Inhalation:dust,mist) Eye Irrit. 2, H319 STOT SE 3, H336
zinc oxide	(CAS-No.) 1314-13-2	1 – 10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after eye contact	: Eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
EAC code	: •3YE

AS-2100 cPVC Cement

Safety Data Sheet

According to ICOP 2014

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

zinc oxide (1314-13-2)	
Malaysia - Occupational Exposure Limits	
Local name	Zink oksida # Zinc oxide
PEL TWA (mg/m ³)	5 mg/m ³ Wasap # Fume 10 mg/m ³ Habuk # Dust
USA - ACGIH - Occupational Exposure Limits	
Local name	Zinc oxide
ACGIH TWA (mg/m ³)	2 mg/m ³ (R - Respirable particulate matter)
ACGIH STEL (mg/m ³)	10 mg/m ³ (R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Metal fume fever
Regulatory reference	ACGIH 2020
cyclohexanone (108-94-1)	
Malaysia - Occupational Exposure Limits	
Local name	Siklohexanon # Cyclohexanone
PEL TWA (mg/m ³)	100 mg/m ³
PEL TWA (ppm)	25 ppm
Remark (MY)	(kulit # skin)
USA - ACGIH - Occupational Exposure Limits	
Local name	Cyclohexanone
ACGIH TWA (ppm)	20 ppm
ACGIH STEL (ppm)	50 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2020
USA - ACGIH - Biological Exposure Indices	
Local name	CYCLOHEXANONE

AS-2100 cPVC Cement

Safety Data Sheet

According to ICOP 2014

cyclohexanone (108-94-1)	
Biological Exposure Indices (BEI)	8 mg/l Parameter: Cyclohexanol (with hydrolysis) - Medium: urine - Sampling time: End of shift - Notations: Ns, Sq 80 mg/l Parameter: 1,2-Cyclohexanediol (with hydrolysis) - Medium: urine - Sampling time: End of shift at end of workweek - Notations: Ns, Sq
Regulatory reference	ACGIH 2020
tetrahydrofuran (109-99-9)	
Malaysia - Occupational Exposure Limits	
Local name	Tetrahidrofuran # Tetrahydrofuran
PEL TWA (mg/m ³)	590 mg/m ³
PEL TWA (ppm)	200 ppm
USA - ACGIH - Occupational Exposure Limits	
Local name	Tetrahydrofuran
ACGIH TWA (ppm)	50 ppm
ACGIH STEL (ppm)	100 ppm
Remark (ACGIH)	TLV® Basis: URT irr; CNS impair; kidney dam. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2020
USA - ACGIH - Biological Exposure Indices	
Local name	TETRAHYDROFURAN
Biological Exposure Indices (BEI)	2 mg/l Parameter: Tetrahydrofuran - Medium: urine - Sampling time: End of shift
Regulatory reference	ACGIH 2020
butanone; ethyl methyl ketone (78-93-3)	
Malaysia - Occupational Exposure Limits	
Local name	Metil etil keton (MEK) (2-Butanon) # Methyl ethyl ketone (MEK) (2-Butanone)
PEL TWA (mg/m ³)	590 mg/m ³
PEL TWA (ppm)	200 ppm
USA - ACGIH - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
ACGIH TWA (ppm)	200 ppm
ACGIH STEL (ppm)	300 ppm
Remark (ACGIH)	TLV® Basis: URT irr; CNS & PNS impair. Notations: BEI
Regulatory reference	ACGIH 2020
USA - ACGIH - Biological Exposure Indices	
Local name	METHYL ETHYL KETONE
Biological Exposure Indices (BEI)	2 mg/l Parameter: Methyl ethyl ketone - Medium: urine - Sampling time: End of shift - Notations: Ns
Regulatory reference	ACGIH 2020
acetone; propan-2-one; propanone (67-64-1)	
Malaysia - Occupational Exposure Limits	
Local name	Aseton # Acetone
PEL TWA (mg/m ³)	1187 mg/m ³
PEL TWA (ppm)	500 ppm
USA - ACGIH - Occupational Exposure Limits	
Local name	Acetone
ACGIH TWA (ppm)	250 ppm
ACGIH STEL (ppm)	500 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2020
USA - ACGIH - Biological Exposure Indices	
Local name	ACETONE
Biological Exposure Indices (BEI)	25 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift - Notations: Ns
Regulatory reference	ACGIH 2020

Exposure limit values for the other components

No additional information available

AS-2100 cPVC Cement

Safety Data Sheet

According to ICOP 2014

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state	: Liquid
Appearance	: No data available
Colour	: orange brown
Odour	: Characteristic
Odour threshold	: No data available
pH	: Not applicable
Melting point, Freezing point	: Melting point: Not applicable
Boiling point	: > 56 °C
Flash point	: < 23 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Explosive limits	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Relative density: ≈ 0.97
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: > 40 mm ² /s
Viscosity, dynamic	: 1400 – 2000 cP

SECTION 10: Stability and reactivity

Reactivity	: Highly flammable liquid and vapour.
Chemical stability	: Stable under normal conditions
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use
Conditions to avoid	: Avoid contact with hot surfaces, Heat, No flames, no sparks. Eliminate all sources of ignition
Incompatible materials	: No data available

AS-2100 cPVC Cement

Safety Data Sheet

According to ICOP 2014

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

cyclohexanone (108-94-1)	
LD50 oral rat	≈ 2650 mg/kg
LD50 dermal rabbit	≈ 3160 mg/kg
LC50 Inhalation - Rat	> 6.2 mg/l/4h

butanone; ethyl methyl ketone (78-93-3)	
LD50 oral rat	≈ 2193 mg/kg

acetone; propan-2-one; propanone (67-64-1)	
LD50 oral rat	≈ 5800 mg/kg
LD50 dermal rabbit	> 7400 mg/kg
LC50 Inhalation - Rat	≈ 76 mg/l/4h

Skin corrosion/irritation : Not classified
pH: Not applicable
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.
Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness. May cause respiratory irritation.

tetrahydrofuran (109-99-9)	
STOT-single exposure	May cause respiratory irritation.

butanone; ethyl methyl ketone (78-93-3)	
STOT-single exposure	May cause drowsiness or dizziness.

acetone; propan-2-one; propanone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

AS-2100 cPVC Cement	
Viscosity, kinematic	> 40 mm ² /s

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

AS-2100 cPVC Cement	
Persistence and degradability	No additional information available

12.3. Bioaccumulative potential

AS-2100 cPVC Cement	
Bioaccumulative potential	No additional information available

AS-2100 cPVC Cement

Safety Data Sheet

According to ICOP 2014

12.4. Mobility in soil

AS-2100 cPVC Cement

Mobility in soil	No additional information available
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12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal information

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transportation information

14.1. UN number

UN-No.(UN RTDG) : 1133
UN-No. (IMDG) : 1133
UN-No. (IATA) : 1133

14.2. Proper Shipping Name

Proper Shipping Name (UN RTDG) : ADHESIVES (containing flammable liquid)
Proper Shipping Name (IMDG) : ADHESIVES (containing flammable liquid)
Proper Shipping Name (IATA) : Adhesives (containing flammable liquid)

14.3. Transport hazard class(es)

UN RTDG

Transport hazard class(es) (UN RTDG) : 3
Danger labels (UN RTDG) : 3



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3



14.4. Packing group

Packing group (UN RTDG) : II
Packing group (IMDG) : II
Packing group (IATA) : II

AS-2100 cPVC Cement

Safety Data Sheet

According to ICOP 2014

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

- UN RTDG

Limited quantities (UN RTDG)	: 5L
Excepted quantities (UN RTDG)	: E2
Packing instruction (UN RTDG)	: P001, IBC02
Special packing provisions (UN RTDG)	: PP1
Portable tank and bulk container special instructions (UN RTDG)	: T4
Portable tank and bulk container special provisions (UN RTDG)	: TP1, TP8

- IMDG

Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP8
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	: B
Properties and observations (IMDG)	: Adhesives are solutions of gums, resins, etc., usually volatile due to the solvents. Miscibility with water depends upon their composition.

- IATA

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3
ERG code (IATA)	: 3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

14.8. Hazchem or Emergency Action Code

EAC code : •3YE.

SECTION 15: Regulatory information

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

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Version	: 1.0
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Full text of H-statements:

AS-2100 cPVC Cement

Safety Data Sheet

According to ICOP 2014

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. Not classified (Dermal)	Acute toxicity (dermal) Not classified
Acute Tox. Not classified (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Not classified
Acute Tox. Not classified (Oral)	Acute toxicity (oral) Not classified
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet (SDS), Malaysia

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.