

### SECTION 1: Identification

#### 1.1. GHS Product identifier

Product form : Mixture  
Product name : AS-1226 Shoe Adhesive  
UN-No. (ADR) : 1133  
Product group : Trade product

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Adhesives  
Recommended use : Adhesives

#### 1.4. Supplier's details

##### Manufacturer

Alseal Marketing Sdn. Bhd.  
Lot 53, Jalan Industri 2/2, Rawang Integrated Industrial Park,  
48000 Rawang, Selangor, Malaysia.  
T +603-60942088 - F +603-60992930

#### 1.5. Emergency phone number

No additional information available

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS



Flammable liquids, Category 2	H225	On basis of test data
Serious eye damage/eye irritation, Category 2	H319	Calculation method
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	Calculation method

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : Highly flammable liquid and vapour, May cause drowsiness or dizziness, Causes serious eye irritation.

#### 2.2. GHS Label elements, including precautionary statements

##### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) :  

Signal word (GHS UN) : Danger

Hazardous ingredients : butanone; ethyl methyl ketone; acetone; propan-2-one; propanone; methyl acetate

Hazard statements (GHS UN) : H225 - Highly flammable liquid and vapour  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS UN) : P101 - If medical advice is needed, have product container or label at hand.  
P102 - Keep out of reach of children.  
P103 - Read carefully and follow all instructions.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.

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P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.

### 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
acetone; propan-2-one; propanone	CAS-No.: 67-64-1	30 – 50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
butanone; ethyl methyl ketone	CAS-No.: 78-93-3	10 – 30	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
cyclohexanone	CAS-No.: 108-94-1	1 – 10	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332
methyl acetate	CAS-No.: 79-20-9	1 – 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H-statements: see section 16

## SECTION 4: First-aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
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/effects, acute and delayed

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

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

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

### 5.2. Specific hazards arising from the chemical

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

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### 5.3. Special protective actions for fire-fighters

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

## 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 materials 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.

Other information : Dispose of materials or solid residues at an authorized site.

## 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. 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

#### butanone; ethyl methyl ketone (78-93-3)

#### EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Butanone
IOELV TWA (mg/m <sup>3</sup> )	600 mg/m <sup>3</sup>
IOELV STEL (mg/m <sup>3</sup> )	900 mg/m <sup>3</sup>
IOELV STEL (ppm)	300 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

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<b>butanone; ethyl methyl ketone (78-93-3)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
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 2021
<b>USA - ACGIH - Biological Exposure Indices</b>	
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 2021
<b>acetone; propan-2-one; propanone (67-64-1)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Acetone
IOELV TWA (mg/m³)	1210 mg/m³
IOELV TWA (ppm)	500 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>USA - ACGIH - Occupational Exposure Limits</b>	
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 2021
<b>USA - ACGIH - Biological Exposure Indices</b>	
Local name	ACETONE
Biological Exposure Indices (BEI)	25 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift - Notations: Ns
Regulatory reference	ACGIH 2021
<b>cyclohexanone (108-94-1)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Cyclohexanone
IOELV TWA (mg/m³)	40.8 mg/m³
IOELV STEL (mg/m³)	81.6 mg/m³
IOELV STEL (ppm)	20 ppm
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Cyclohexanone
ACGIH TWA (ppm)	20 ppm
ACGIH STEL (ppm)	50 ppm

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cyclohexanone (108-94-1)	
Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2021
USA - ACGIH - Biological Exposure Indices	
Local name	CYCLOHEXANONE
Biological Exposure Indices (BEI)	80 mg/l Parameter: 1,2-Cyclohexanediol (with hydrolysis) - Medium: urine - Sampling time: End of shift at end of workweek - Notations: Ns, Sq 8 mg/l Parameter: Cyclohexanol (with hydrolysis) - Medium: urine - Sampling time: End of shift - Notations: Ns, Sq
Regulatory reference	ACGIH 2021
methyl acetate (79-20-9)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Methyl acetate
ACGIH TWA (ppm)	200 ppm
ACGIH STEL (ppm)	250 ppm
Remark (ACGIH)	TLV® Basis: Headache; dizziness; nausea; eye dam (degeneration of ganglion cells in the retina)
Regulatory reference	ACGIH 2021

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

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)



### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state : Liquid  
Colour : Colourless.  
Odour : Sweet-smelling.  
Odour threshold : Not available  
Melting point : Not applicable  
Freezing point : Not available  
Boiling point : > 56 °C  
Flammability : Highly flammable liquid and vapour.  
Lower explosion limit : Not available

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Upper explosion limit	: Not available
Flash point	: < 23 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic (calculated value) (40 °C)	: > 40 mm <sup>2</sup> /s
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: ≈ 0.86
Relative vapour density at 20°C	: Not available
Solubility	: Not available
Viscosity, dynamic	: 2000 – 3000 cP
Particle size	: Not applicable

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Highly flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. 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

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

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<b>cyclohexanone (108-94-1)</b>	
LD50 oral rat	≈ 2650 mg/kg
LD50 dermal rabbit	≈ 3160 mg/kg
LC50 Inhalation - Rat	> 6.2 mg/l/4h
<b>methyl acetate (79-20-9)</b>	
LD50 oral rat	≈ 6482 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 49.2 mg/l
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.
<b>butanone; ethyl methyl ketone (78-93-3)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>acetone; propan-2-one; propanone (67-64-1)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>methyl acetate (79-20-9)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
<b>AS-1226 Shoe Adhesive</b>	
Viscosity, kinematic	> 40 mm <sup>2</sup> /s

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### 12.2. Persistence and degradability

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Persistence and degradability	No additional information available
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### 12.3. Bioaccumulative potential

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Bioaccumulative potential	No additional information available
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### 12.4. Mobility in soil

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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 considerations

### 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: Transport information

In accordance with UN RTDG / IMDG / IATA

UN RTDG	IMDG	IATA
<b>14.1. UN number</b>		
1133	1133	1133
<b>14.2. UN Proper Shipping Name</b>		
ADHESIVES (containing flammable liquid)	ADHESIVES (containing flammable liquid)	Adhesives (containing flammable liquid)
<b>Transport document description</b>		
UN 1133 ADHESIVES (containing flammable liquid), 3, II	UN 1133 ADHESIVES (containing flammable liquid), 3, II	UN 1133 Adhesives (containing flammable liquid), 3, II
<b>14.3. Transport hazard class(es)</b>		
3	3	3
		
<b>14.4. Packing group</b>		
II	II	II
<b>14.5. Environmental hazards</b>		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
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



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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 IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

## SECTION 16: Other information

Issue date	: 9/28/2021
Revision date	: 3/25/2022
Supersedes	: 9/28/2021

Abbreviations and acronyms	: CAS-No. - Chemical Abstract Service number ATE - Acute Toxicity Estimate EC50 - Median effective concentration EC-No. - European Community number IATA - International Air Transport Association IMDG - International Maritime Dangerous Goods LC50 - Median lethal concentration LD50 - Median lethal dose LOAEL - Lowest Observed Adverse Effect Level N.O.S. - Not Otherwise Specified NOAEC - No-Observed Adverse Effect Concentration NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration OEL - Occupational Exposure Limit SDS - Safety Data Sheet
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### Full text of H-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Flam. Liq. 3	Flammable liquids, Category 3

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Full text of H-statements:	
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness

Safety Data Sheet (SDS), UN

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.