

### SECTION 1: Identification

#### 1.1. GHS Product identifier

Product form : Mixture  
Product name : AS-5400 Bituminous Underseal  
UN-No. (ADR) : 1294  
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 : Sealants  
Recommended use : Sealants

#### 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	Calculation method
Skin corrosion/irritation, Category 2	H315	Calculation method
Reproductive toxicity, Category 2	H361	Calculation method
Specific target organ toxicity – Repeated exposure, Category 2	H373	Calculation method
Aspiration hazard	Not classified	Calculation method
Hazardous to the aquatic environment – Acute Hazard, Category 2	H401	Calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412	Calculation method

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : Suspected of damaging fertility or the unborn child, May cause damage to organs through prolonged or repeated exposure, Causes skin irritation, Toxic to aquatic life, Harmful to aquatic life with long lasting effects.

#### 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 : toluene

Hazard statements (GHS UN) : H225 - Highly flammable liquid and vapour  
H315 - Causes skin irritation  
H361 - Suspected of damaging fertility or the unborn child  
H373 - May cause damage to organs through prolonged or repeated exposure

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Precautionary statements (GHS UN)	H401 - Toxic to aquatic life H412 - Harmful to aquatic life with long lasting effects : P203 - Obtain, read and follow all safety instructions before use. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground and bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools.
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### 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
MINERAL SPIRIT	CAS-No.: 64742-82-1	10 – 30	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
toluene	CAS-No.: 108-88-3	10 – 30	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
rosin; colophony	CAS-No.: 8050-09-7	0.1 – 1	Skin Sens. 1, H317

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	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
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 after skin contact	: Irritation.
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### 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.
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Unsuitable extinguishing media : Water spray.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 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. Do not breathe 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

For containment : Collect spillage.  
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 : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.  
Hygiene measures : Wash contaminated clothing before reuse. 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

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

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

toluene (108-88-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Toluene
IOELV TWA (mg/m <sup>3</sup> )	192 mg/m <sup>3</sup>
IOELV STEL (mg/m <sup>3</sup> )	384 mg/m <sup>3</sup>
IOELV STEL (ppm)	100 ppm

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toluene (108-88-3)	
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
USA - ACGIH - Occupational Exposure Limits	
Local name	Toluene
ACGIH TWA (ppm)	20 ppm
Remark (ACGIH)	TLV® Basis: CNS, visual & hearing impair; female repro system eff; pregnancy loss. Notations: OTO; A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2021
USA - ACGIH - Biological Exposure Indices	
Local name	TOLUENE
Biological Exposure Indices (BEI)	0.3 mg/g creatinine Parameter: o-Cresol (with hydrolysis) - Medium: urine - Sampling time: End of shift - Notations: B 0.03 mg/l Parameter: Toluene - Medium: urine - Sampling time: End of shift 0.02 mg/l Parameter: Toluene - Medium: blood - Sampling time: Prior to last shift of workweek
Regulatory reference	ACGIH 2021
MINERAL SPIRIT (64742-82-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	White spirit Type 1
IOELV TWA (ppm)	20 ppm
IOELV STEL (mg/m <sup>3</sup> )	290 mg/m <sup>3</sup>
IOELV STEL (ppm)	50 ppm
Notes	Skin. (Year of adoption 2007)
Regulatory reference	SCOEL Recommendations

### 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 inadequate ventilation] wear respiratory protection.

#### Personal protective equipment symbol(s)



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

No additional information available

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### SECTION 9: Physical and chemical properties

#### 9.1. Basic physical and chemical properties

Physical state	: Liquid
Colour	: Black.
Odour	: aromatic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
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	: ≈ 1.09
Relative vapour density at 20°C	: Not available
Solubility	: Not available
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.

#### 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).

#### 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

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Acute toxicity (inhalation) : Not classified

### toluene (108-88-3)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 Inhalation - Rat	> 20 mg/l/4h

### MINERAL SPIRIT (64742-82-1)

LD50 oral rat	> 5000 mg/kg
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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified

### toluene (108-88-3)

STOT-single exposure	May cause drowsiness or dizziness.
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STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

### toluene (108-88-3)

STOT-repeated exposure	May cause damage to organs (central nervous system) through prolonged or repeated exposure (Inhalation).
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Aspiration hazard : Not classified.

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Viscosity, kinematic	> 40 mm <sup>2</sup> /s
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Toxic to aquatic life.
Classification procedure (Hazardous to the aquatic environment, short-term (acute))	: Calculation method
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.
Classification procedure (Hazardous to the aquatic environment, long-term (chronic))	: Calculation method

### 12.2. Persistence and degradability

#### AS-5400 Bituminous Underseal

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

#### AS-5400 Bituminous Underseal

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.

## SECTION 14: Transport information

In accordance with UN RTDG / IMDG / IATA

UN RTDG	IMDG	IATA
<b>14.1. UN number</b>		
1294	1294	1294
<b>14.2. UN Proper Shipping Name</b>		
TOLUENE	TOLUENE	Toluene
<b>Transport document description</b>		
UN 1294 TOLUENE, 3, II	UN 1294 TOLUENE, 3, II (7°C c.c.)	UN 1294 Toluene, 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) : 1L  
Excepted quantities (UN RTDG) : E2  
Packing instruction (UN RTDG) : P001, IBC02  
Portable tank and bulk container special instructions (UN RTDG) : T4  
Portable tank and bulk container special provisions (UN RTDG) : TP1

#### IMDG

Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP1  
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

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EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS  
Stowage category (IMDG) : B  
Flash point (IMDG) : 7°C c.c.  
Properties and observations (IMDG) : Colourless liquid with a benzene-like odour. Flashpoint: 7°C c.c. Explosive limits: 1.27% to 7% Immiscible with water.

### 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  
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 : 10/21/2021  
Revision date : 8/2/2022  
Supersedes : 10/21/2021

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

Full text of H-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation



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Full text of H-statements:	
H317	May cause an allergic skin reaction
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

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.