



AS-4032 Artificial Grass Adhesive

Safety Data Sheet

according to ICOP 2014,2019

Issue date: 05.01.2022 Revision date: 24.02.2022 Supersedes: 05.01.2022 Version: 1.1

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

1.1. Product identifier

Name : AS-4032 Artificial Grass Adhesive

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Sealants

1.4. Supplier 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
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 (2019)

Not classified

2.2. Label elements

Labelling according to Industry Code of Practice on chemicals classification and hazard communication (2019)

No labelling applicable

2.3. Other hazards that do not result in 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

Name	Product identifier	%	Classification according to Industry Code of Practice on chemicals classification and hazard communication (2019)
TRIMETHOXYVINYLSILANE	CAS-No.: 2768-02-7	0,1 – 1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317

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Name	Product identifier	%	Classification according to Industry Code of Practice on chemicals classification and hazard communication (2019)
N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE	CAS-No.: 1760-24-3	0,1 – 1	Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335
DIBUTYLBIS(PENTANE-2,4-DIONATO-O,O')TIN	CAS-No.: 22673-19-4	0,1 – 1	Skin Corr. 1A, H314 Repr. 1A, H360 STOT RE 1, H372 Aquatic Chronic 4, H413

SECTION 4: First-aid measures

4.1. Description of necessary first aid measures

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.
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

No additional information available

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

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
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5.2. Physicochemical hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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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.
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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.
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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".
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up	: Mechanically recover the product.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
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

Storage conditions	: Store in a well-ventilated place. Keep cool.
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SECTION 8: Exposure controls and personal protection

8.1. Control parameters

No additional information available

Exposure limit values for the other components

No additional information available

8.1.1 Biological monitoring

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
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8.3. Individual protection measures, such as 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):



Environmental exposure controls	: Avoid release to the environment.
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SECTION 9: Physical and chemical properties

Physical state	: Solid
Appearance	: Paste.
Colour	: Green
Odour	: odourless

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Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: Non flammable.
Explosive limits	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: $\approx 1,64$
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	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
VOC content	: $\approx 18,59$ g/l

SECTION 10: Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport
Chemical stability	: Stable under normal conditions
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use
Conditions to avoid	: None under recommended storage and handling conditions (see section 7)
Incompatible materials	: No additional information available
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

N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE (1760-24-3)

LD50 oral rat	2295 mg/kg
LD50 dermal	2000 mg/kg

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory sensitization	: Not classified
Skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE (1760-24-3)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure	: Not classified
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DIBUTYLBIS(PENTANE-2,4-DIONATO-O,O')TIN (22673-19-4)

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Aspiration hazard	: Not classified
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Viscosity, kinematic

Not applicable

SECTION 12: Ecological information

12.1. Ecotoxicity

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

12.3. Bioaccumulative potential

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Bioaccumulative potential

No additional information available

12.4. Mobility in soil

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Mobility in soil

No additional information available

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.

SECTION 14: Transportation information

In accordance with IMDG / IATA / UN RTDG

14.1. UN number

UN-No.(UN RTDG) : Not applicable

UN-No. (IMDG) : Not regulated

UN-No. (IATA) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (UN RTDG) : Not applicable

Proper Shipping Name (IMDG) : Not regulated

Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

UN RTDG

Transport hazard class(es) (UN RTDG) : Not applicable

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IMDG

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

14.4. Packing Group, if applicable

Packing group (UN RTDG) : Not applicable
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available

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

Not applicable

14.7. Special precautions for user

UN RTDG

Not applicable

IMDG

Not regulated

IATA

Not regulated

14.8. Hazchem or Emergency Action Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental regulations specific for the hazardous chemical in question

AS-4032 Artificial Grass Adhesive		
Regulation		Component/ Mixture
Environmental Quality (Chlorofluorocarbons Prohibition) Order 1993	Not applicable	AS-4032 Artificial Grass Adhesive
Environmental Quality (Industrial Effluent) Regulations 2009		AS-4032 Artificial Grass Adhesive
Environmental Quality (Scheduled Wastes) Regulations 2007		AS-4032 Artificial Grass Adhesive
Control of Industrial Major Accident Hazards Regulations 1996		AS-4032 Artificial Grass Adhesive
Prohibition of Use of Substance Order 1999		AS-4032 Artificial Grass Adhesive
Use and Standards of Exposure of Chemical Hazardous to Health Regulations 2000	Chemicals requiring medical surveillance	AS-4032 Artificial Grass Adhesive
Chemical Weapons Convention Act	Not applicable	AS-4032 Artificial Grass Adhesive
Corrosive and Explosive Substances and Offensive Weapons Act		AS-4032 Artificial Grass Adhesive
Dangerous Drugs Act		AS-4032 Artificial Grass Adhesive
Pesticides Act		AS-4032 Artificial Grass Adhesive

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Petroleum (Safety Measures) Act		AS-4032 Artificial Grass Adhesive
Poisons Act 1952		AS-4032 Artificial Grass Adhesive
Poisons (Psychotropic Substances) Regulations 1989		AS-4032 Artificial Grass Adhesive

15.2. International agreements

No additional information available

SECTION 16: Other information

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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

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Eye Dam. 1	Serious eye damage or eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 1A	Reproductive toxicity, Category 1A
Skin Corr. 1A	Skin corrosion or irritation, Category 1A
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

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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.