

Safety Data Sheet

AS-8148 Sprayable Contact Adhesive

Issued date: 09/01/17 Revision date: 23/02/18 Revision No.: 2

1. Identification of the substance/preparation and of the company/undertaking

Product name: AS-8148 Sprayable Contact Adhesive

Product use : Solvent-based adhesive Company : Alseal Marketing Sdn Bhd

Lot 2291, Jalan Kampung Baru,

Kg. Baru Sungai Buloh, 47000, Selangor DE,

Malaysia.

Telephone : +603 - 61579698 **Fax** : +603 - 61578002

Email : info@alsealmarketing.com
Website : www.alsealmarketing.com

2. Hazard(s) identification

Substance/Mixture: Mixture

<u>Hazard classification</u>: Flam.Liq.2

Asp.Tox.1

Skin Irrit.2

Skin Sens.1

STOT SE 3

Carc.2

Repr.2

STOT RE 2

Aquatic Chronic 2

Pictogram : GHS02 Flame

GHS07 Exclamation mark

GHS08

Health hazard

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<u>Signal word</u>: Danger

Hazard statement(s):

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airway.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer via inhalation.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statement(s):

Frecautionary State	ment(o).
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 container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fumes/gas/mist/vapours/spray.

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	Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling.
P264 \	Wash hands thoroughly after handling.
P271 L	Use only outdoors or in a well-ventilated area.
P272 (Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280 \	Wear protective gloves/protective clothing/eye protection/face protection.
P281 L	Use personal protective equipment as required.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P352	IF ON SKIN: Wash with soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P331 [Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363 \	Wash contaminated clothing before reuse.
P391 (Collect spillage.
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.



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Other hazards which do not result in classification but contribute to overall hazards: None known

3. Composition/Information on ingredients

Chemical name	CAS No.	EINECS No.	%
Dichloromethane	75-09-2	200-839-9	50 - 70
Hexane	110-54-3	203-777-6	30 - 70
Gum rosin	8050-09-7	232-475-7	10 - 30

4. First-aid measures

In case of inhalation:

Remove to fresh air, keep warm and at rest. Contact physician if symptom persists.

In case of skin contact:

Remove contaminated clothing. Rinse with copious amount of water and soap. Get medical advice if skin irritation or a rash occurs. Wash clothing before reuse.

In case of eye contact:

Contact lenses should be removed. Rinse with copious amount of water immediately. Seek medical advice if eye irritation develops and persists.

In case of ingestion:

DO NOT induce vomiting. Rinse mouth thoroughly with water. Get medical attention if a symptom persists.

Personal protection equipment for first-aiders:

Pay attention to any potential hazards and use recommended personal protection equipment if potential for exposure exists.

Most important symptoms and effects, acute and delayed:

May be fatal if swallowed and enters airway. May cause skin irritation and an allergic skin reaction. May cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer via inhalation. Suspected of damaging fertility or the unborn child.

5. Fire-fighting measures

Suitable extinguishing media:

Alcohol-resistant foam, carbon dioxide, dry chemical.

Unsuitable extinguishing media:

None known.

Specific firefighting procedures:

Remove undamaged containers from fire area if it is safe to do so. Use extinguishing media that is suitable to local circumstances and surrounding environment.



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Special person protection equipment for firefighters:

NIOSH-approved self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific hazards arising from firefighting:

Exposure to combustion products may be a hazard to health.

Thermal decomposition products:

Carbon dioxide, carbon monoxide, nitrogen oxides, and other irritant gases.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedure:

Use recommended personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Measure for cleaning/collecting:

Wipe or soak with inert liquid binding material (sand, sawdust, etc.). Scrape away cured material. Dispose the spilt material according to local or national regulations. Section 13 of this safety data sheet provides information regarding certain local or national requirements.

Additional information:

Prevent spillage from entering drainage/sewer systems. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

7. Handling and storage

Handling:

Ensure good ventilation during use. Avoid contact with skin and eyes. Do not eat, drink, or smoke when using the product.

Storage:

Ensure containers and cartridges are tightly closed. Store in a dry, well-ventilated area, and protected from direct sunlight with temperature not exceeding 30 °C. Keep away from incompatibles. Refer to section 10 for incompatible materials.

8. Exposure controls/personal protection

Components	CAS No.	Form of exposure (Value type)	Control Parameter	Basis
Dichloromethane	75-09-2	8 hours TWA	50 ppm	Malaysia OSHA
Dichloromethane	75-09-2	8 hours TWA	25 ppm	US OSHA
Dichloromethane	75-09-2	8 hours TWA	350 mg/m³	UK WEL
Dichloromethane	75-09-2	8 hours TWA	174 mg/m³	Safe Work Australia
Hexane	110-54-3	8 hours TWA	176 mg/m³	Malaysia OSHA



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Hexane	110-54-3	8 hours TWA	1,800 mg/m³	US OSHA
Hexane	110-54-3	8 hours TWA	72 mg/m³	UK WEL
Hexane	110-54-3	8 hours TWA	72 mg/m³	Safe Work Australia

Engineering controls:

Product curing may form hazardous compounds. Ensure adequate ventilation and minimise workplace exposure concentrations.

Industrial hygiene:

Remove immediately all contaminated clothing. Do not inhale vapour. Wash hands and contaminated areas with water and soap before leaving the work site. Change clothing before leaving workplace and wash before reuse. Do not eat, drink, or smoke while using product.

Hand protection:

Suitable impervious protective gloves (neoprene, nitrile, etc.). Breakthrough time is not tested for this product. Change gloves often if possible.

Respiratory protection:

A NIOSH-approved respirator with filter for organic vapours is recommended where local ventilation is not adequate.

Eye/Face protection:

Protective goggles/safety glasses.

9. Physical and chemical properties

Appearance : Thixotropic paste
Odour : Characteristic odour
Odour threshold : Not determined
pH : Not applicable
Freezing/Melting point : Not determined
Boiling point range : Not determined

Flash point : <23 °C
Evaporation rate : Not applicable

Flammability : Highly flammable Explosive properties : Not classified as explosive Oxidising properties : Not classified as oxidising

Vapour pressure : Not applicable
Vapour density : Not applicable
Relative density : Approximately 0.81
Solubility in water : Not determined

N-octanol/water

partition coefficient : Not determined
Decomposition temperature : Not determined
Viscosity : 100 - 200 cPs

10. Stability and reactivity

Reactivity:

No reactive hazards known.



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Stability:

Stable under recommended handling and storage conditions.

Conditions to avoid:

Avoid sources of ignition.

Hazardous reactions:

Hazardous polymerisation will not occur.

Hazardous decomposition products:

None known.

Incompatible materials:

Strong oxidising agents, acids, and sources of ignition.

11. Toxicology information

No specific oral, inhalation or dermal toxicology data is known for this product. Any toxicological data included in this section is based on the data associated with the components.

Acute oral toxicity, LD₅₀ (rat):

Not classified based on available information and/or concentration of components.

Dichloromethane	>2,000 mg/kg
Hexane	15,720 mg/kg
Gum rosin	>2,800 mg/kg

Acute dermal toxicity, LD₅₀ (rabbit):

Not classified based on available information and/or concentration of components.

Dichloromethane	>2,000 mg/kg
Hexane	>2,000 mg/kg
Gum rosin	>2,000 mg/kg

Acute inhalation toxicity, LC₅₀ (4 hours, rat):

Not classified based on available information and/or concentration of components.

Dichloromethane	>86 mg/L
Hexane	17,600 mg/m³

Serious eye damage/eye irritation:

Not classified based on available information and/or concentration of components.

Dichloromethane	Not eye irritant.



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Hexane	Not eye irritant.
Gum rosin	Not eye irritant.

Skin corrosion/skin irritation:

Classified as a skin irritant.

Dichloromethane	Not skin irritant.
Hexane	Causes skin irritation.
Gum rosin	Not skin irritant.

Respiratory/Skin sensitisation:

Not classified as respiratory sensitiser, but may cause an allergic skin reaction.

Dichloromethane	Not sensitising on skin.
Hexane	Not sensitising on skin.
Gum rosin	Causes skin sensitisation.

Germ cell mutagenicity:

Not classified based on available information and/or concentration of components.

Dichloromethane	Negative genotoxicity in vivo.
Hexane	Negative genotoxicity <i>in vitro</i> . Negative genotoxicity <i>in vivo</i> .
Gum rosin	Negative genotoxicity in vitro.

Carcinogenicity:

Suspected of causing cancer via inhalation.

Dichloromethane	Clear evidence of carcinogenicity on mice.
Hexane	Negative carcinogenicity. NOAEL: >5,000 ppm

Reproductive toxicity:

Suspected of damaging fertility or the unborn child.

Dichloromethane	No effect on fertility and foetal development.
Hexane	Maternal toxicity, LOAEC: 5,000 ppm Development toxicity, LOAEC: 200 ppm

<u>Specific target organ toxicity – single exposure</u>: Classified as having narcotic effects.



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Hexane	May cause drowsiness and dizziness.
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Specific target organ toxicity – repeated exposure:

Classified as specific target organ toxicant.

Dichloromethane	Exposure by oral on rats for 104 weeks. NOAEL: 6 mg/kg bw/day
	Exposure by inhalation on rats for 2 years. NOAEC: 200 ppm
Hexane	Exposure by oral on rats for 90 days. NOAEL: 568 mg/kg bw
	May cause damage to the nervous system via inhalation. NOAEC: <500 ppm

Aspiration toxicity:

Classified as aspiration hazard.

Hexane	Classified as an aspiration hazard.
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Likely route of administration:

Inhalation, skin contact, and ingestion.

12. Ecological information

Individual components of this mixture have been independently tested by the raw material suppliers and any known results have been presented below. The results for the individual components may not be representative of the ecological toxicity of this finished product. This finished product has not been tested to determine individual toxicological/ecological limits.

Ecology toxicity:

Toxic to aquatic life with long lasting effects.

Dichloromethane Toxicity to fish Toxicity to crustacean Toxicity to algae or other aquatic plants	Exposure for 96 hours, LC50: 193 mg/L Exposure for 48 hours, EC50: 27 mg/L
Hexane Toxicity to fish Toxicity to crustacean Toxicity to algae or other aquatic plants	Exposure for 96 hours, LC ₅₀ : >1,000 mg/L Exposure for 48 hours, EC ₅₀ : >3.5 mg/L Exposure for 10 days, EC ₅₀ : 2.66%
Gum rosin Toxicity to fish Toxicity to crustacean Toxicity to algae or other aquatic plants	- Exposure for 48 hours, EC ₅₀ : 911 mg/L Exposure for 72 hours, EL ₅₀ : >1,000 mg/L

Persistence and degradability:

Not likely to be persistent based on available information and/or concentration of components.



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Hexane	Readily biodegradable. Exposure for 28 days, 98% biodegradation.
Gum rosin	Readily biodegradable. Exposure for 10 days, 60% biodegradation.

Bioaccumulative potential:

No bioaccumulation potential based on available information and/or concentration of components.

Dichloromethane	BCF: 0.9 - 7.9
Hexane	BCF: 500

Mobility in soil:

No data available.

13. Disposal information

Waste treatment/disposal methods - unused products

Disposal of waste to be in accordance with the Environmental Quality (Scheduled Wastes) Regulations and other guidelines issuance by DOE and/or local authorities.

Waste treatment/disposal methods - contaminated packaging

Dispose of as unused product. Empty container should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

Road transport (UNRTDG):

UN number : UN1133

Proper shipping name: ADHESIVES containing flammable liquid

Technical name : Not applicable

Hazard class : 3 Classification code : F1 Packing group : II

Marine transport (IMDG):

UN number : UN1133

Proper shipping name: ADHESIVES containing flammable liquid

Technical name : Not applicable

Hazard class : 3 EmS : F-E, S-D Packing group : II

Marine pollutant : Not marine pollutant

Air transport (IATA):.

UN number : UN1133

Proper shipping name: ADHESIVES containing flammable liquid

Technical name: Not applicable

Hazard class : 3 Packing group : II

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15. Regulatory information

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

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2010 (Malaysia)

Occupational Safety and Health (Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (Malaysia)

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (European Union)

Occupational Safety and Health Administration (OSHA) (2006) Air Contaminants. 29 CFR 1910.1000 (United States of America)

Work Health and Safety Act 2011 (Australia)

EH40/2005 Workplace exposure limits (United Kingdom)

Chemical inventory status:

Australia AICS

Canada DSL

China IECSC

Japan ENCS

Korea KECI

Philippines PICCS

United States TCSA

: All ingredients listed or exempt.

16. Other information

Definitions:

TWA : Time-weighted average.
STEL : Short-term exposure level.

OSHA : Occupational Safe and Health Act

WEL: Workplace exposure limits

LD₅₀ : The minimum dose required for lethal effects in 50% of a given population of test specimens.

ppm : part per millionbw : body weight

BCF: Bioconcentration factor

NOAEL : No-observed-adverse-effect-level : Lowest-observed-adverse-effect level

NIOSH : National Institute for Occupational Safety and Health.

UNRTDG: United Nations Recommendations on the Transport of Dangerous Goods

IMDG : International Maritime Dangerous Goods
 IATA : International Air Transport Association
 AICS : Australian Inventory of Chemical Substances

DSL: Domestic Substance List

ENCS : Existing and New Chemical Substances.KECI : Korea Existing Chemicals Inventory.ECSN : Existing Chemical Substance Nomination.

TSCA : Toxic Substances Control Act

All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The details contained herein are based on our present state of knowledge and experience in characterising our product with regard to any possible



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safety requirement at the date of its publication. We do, however, pass them on without any warranty or property assurances.