

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: 411
Product Name: Boyle Spray Adhesive
Revision Date: Oct 06, 2017
Version: 1.0
Supplier Name: Boyle Industries Pty Ltd
Address: 8 Redland Drive Mitcham 3132 Victoria, Australia
Information Phone Number: +61 3 9874 2266
Emergency Contact Numbers: 03 9874 2266 Mon – Fri. 8:30 a.m. – 4:30 p.m.
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Product/Recommended Uses:

Date Printed: Oct 06, 2017
Supersedes Date: N.A.



SECTION 2) HAZARDS IDENTIFICATION

Classification

Aspiration Hazard - Category 1
Chronic aquatic toxicity - Category 2
Flammables gases - Category 1
Skin Irritation - Category 2
Specific Target Organ Toxicity -Single Exposure (Narcotic Effects) - Category 3

Pictograms



Signal Word

Danger

Hazardous Statements - Health

H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness

Hazardous Statements - Physical

H220 - Extremely flammable gas

Hazardous Statements - Environmental

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - General

P102 - Keep out of reach of children.
P103 - Read label before use.

Precautionary Statements - Prevention

P241 - Use explosion-proof electrical, ventilating, lighting and all other equipment.
P264 - Wash hands, face and exposed skin thoroughly after handling.

- P273 - Avoid release to the environment.
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
 P271 - Use only outdoors or in a well-ventilated area.
 P233 - Keep container tightly closed.

Precautionary Statements - Response

- P312 - Call a POISON CENTER/doctor/physician if you feel unwell.
 P321 - Specific treatment- see First Aid on this label.
 P378 - Use dry chemical, foam, carbon dioxide to extinguish.
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P331 - Do NOT induce vomiting.
 P302 + P352 - IF ON SKIN: Wash with plenty of water.
 P332 + P313 - If skin irritation occurs: Get medical advice/attention.
 P362 + P364 - Take off contaminated clothing. And wash it before reuse.
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary Statements - Storage

- P405 - Store locked up.
 P403 - Store in a well-ventilated place.

Precautionary Statements - Disposal

- P501 - Dispose of contents/container in accordance with local, regional, national and international regulations.

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0068334-30-5	DIESEL FUELS	20% - 60%
0000074-98-6	PROPANE	10% - 50%
0000106-97-8	BUTANE	10% - 50%
0000067-64-1	ACETONE	0% - 10%
0064742-49-0	VM & P NAPHTHA	0% - 5%
0000110-54-3	HEXANE	0 - 0.1 %
0000071-43-2	BENZENE	0 - 0.1 %

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air, keep comfortable for breathing and keep warm. Keep at rest until fully recovered. Remove contaminated clothing and loosen remaining clothing. Call a POISON CENTER/doctor if you feel unwell. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage.

Eye Contact

Immediately call a POISON CENTER/doctor. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes or until medical aid is available. Take care not to rinse contaminated water into the unaffected eye or onto the face.

Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. Wash contaminated clothing before re-use or discard. Immediately call a POISON CENTER/doctor. For gross contamination, immediately drench with water and remove clothing. For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Ingestion

Rinse mouth. Give a glass of water to drink. Do NOT induce vomiting. If vomiting occurs naturally, give further water. Call a POISON CENTER/doctor if you feel unwell. Never give anything by mouth to an unconscious or convulsing person. IF exposed or concerned: Get medical advice/attention.

Most Important Symptoms and Effects, Both acute and Delayed

Delayed pulmonary oedema may result.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use caution when applying carbon dioxide in confined spaces. Small Fire: Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Large Fire: Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Flammable gas. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Containers may explode in fire. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapors may travel to source of ignition and flash back. On burning may emit toxic fumes. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

Special Protective Actions

Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Ventilate closed spaces before entering. All equipment used when handling the product must be grounded. Do not walk through released material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

DO NOT breathe gas, vapor or mist.
DO NOT get on skin, eyes or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Suppress gases with water spray jet. Neutralization may be required before discharging sewage into treatment plants.

Methods and Materials for Containment and Cleaning up

Rinse away with water. Use clean, non-sparking tools to collect absorbed material. For small spills, wipe up with absorbent (clean rag or paper towels). Wear protective equipment to prevent skin and eye contamination. For large spills: absorb with vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal. Slippery when spilled. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Collect and seal in properly labeled containers or drums for disposal. Dispose of contaminated materials according to federal, state and local regulations. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

- Remove contaminated clothing and protective equipment before entering eating areas.
- Wash hands after use.
- Do not get in eyes, on skin or on clothing.
- Do not breathe vapors, mists or aerosols.
- Use good personal hygiene practices.
- Eating, drinking and smoking in work areas is prohibited.
- All containers must be properly labelled.
- Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

- Store in dry, well-ventilated, cool areas, out of direct sunlight and away from incompatible materials and other sources of heat.
- Keep containers securely sealed when not in use, check regularly for leaks. Empty containers retain residue and may be dangerous.
- Protect containers against banging or other physical damage when storing, transferring, or using them. Eliminate all sources of ignition.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear safety glasses with side shields.

Skin Protection

Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over- boots of chemically impervious materials such as neoprene or nitrile rubber. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to AS/NZS 1715 and AS/NZS 1716 should be followed. Check with respiratory protective equipment suppliers. If risk of inhalation exists wear organic vapor/particulate respirator.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH TWA (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	WES TWA (mg/m3)	WES STEL (ppm)	WES STEL (mg/m3)	WES TWA (ppm)	WES HEALTH
ACETONE		500		250	A4	CNS impair; URT & eye irr	A4; BEI	1185	1000	2375	500	
BENZENE	1.6	2.5	8	0.5	A1	Leukemia	Skin; A1; BEI	3.2			1	Carc. 1A
BUTANE				1000		CNS impair		1900			800	
DIESEL FUELS	100 (IFV)				A3	Dermatitis	Skin: A3					
HEXANE	176			50		CNS impair; peripheral neuropathy ; eye irr	Skin, BEI	72			20	
PROPANE				See		Card sens;						

				Appendix F: Minimal Oxygen Content		CNS impair						
VM & P NAPHTHA												

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Skin designation	OSHA Carcinogen
ACETONE	1000	2400				
BENZENE	1 (a) / 25ceiling		50(a) / 10minutes.			1
BUTANE						
DIESEL FUELS						
HEXANE	500	1800				
PROPANE	1000	1800				
VM & P NAPHTHA	500	2000				

(C) - Ceiling limit, (IFV) - Inhalable fraction and vapor, A1 - Confirmed Human Carcinogen, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, card - cardiac, CNS - Central nervous system, impair - Impairment, irr - Irritation, sens - sensitization, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	10.10
Specific Gravity	0.76
% VOC	93.79%
Density VOC	9.47
% Solids By Weight	Data not available

Appearance	Transparent, white to clear, liquid.
Odor Description	Data not available
Odor Threshold	Data not available
pH	Data not available
Water Solubility	Data not available
VOC Part A & B Combined	Data not available
Flash Point Symbol	<
Flash Point	0 °C
Viscosity	Data not available
Lower Explosion Level	Data not available
Vapor Pressure	Data not available
Upper Explosion Level	Data not available
Vapor Density	Data not available
Freezing Point	Data not available
Melting Point	Data not available
Low Boiling Point	Data not available
High Boiling Point	Data not available
Auto Ignition Temp	Data not available
Decomposition Pt	Data not available
Evaporation Rate	Data not available

SECTION 10) STABILITY AND REACTIVITY

Stability

The product is stable under normal storage conditions.

Conditions to Avoid

Elevated temperatures and sources of ignition.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible materials

Oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon and nitrogen, smoke and other toxic fumes.

SECTION 11) TOXICOLOGICAL INFORMATION

Respiratory/Skin Sensitization

Material may be an irritant to mucous membranes and respiratory tract.

No Data Available

Acute Toxicity

No Data Available

Aspiration Hazard

May be fatal if swallowed and enters airways

Carcinogenicity

May cause cancer.

No Data Available

Germ Cell Mutagenicity

No Data Available

Reproductive Toxicity

No Data Available

Serious Eye Damage/Irritation

No Data Available

Skin Corrosion/Irritation

Causes skin irritation

Specific Target Organ Toxicity - Repeated Exposure

May cause damage to organs.

No Data Available

Specific Target Organ Toxicity - Single Exposure

May cause drowsiness or dizziness

0000110-54-3 **HEXANE**

LC50 (male rat): 38500 ppm (4-hour exposure); cited as 77000 ppm (271040 mg/m3) (1-hour exposure) (15)
LC50 (rat): 48000 ppm (4-hour exposure) (16)
LC50 (rat): 73680 ppm (260480 mg/m3) (4-hour exposure) (n-hexane and isomers) (1,3)
LD50 (oral, 14-day old rat): 15840 mg/kg (3)
LD50 (oral, young rat): 32340 mg/kg (3)
LD50 (oral, adult rat): 28700 mg/kg (3,16)

0000067-64-1 **ACETONE**

LC50 (male rat): 30000 ppm (4-hour exposure); cited as 71000 mg/m3 (4-hour exposure) (29)
LC50 (male mouse): 18600 ppm (4-hour exposure); cited as 44000 mg/m3 (4-hour exposure) (29)
LD50 (oral, female rat): 5800 mg/kg (24)
LD50 (oral, mature rat): 6700 mg/kg (cited as 8.5 mL/kg) (31)
LD50 (oral, newborn rat): 1750 mg/kg (cited as 2.2 mL/kg) (31)
LD50 (oral, mouse): 3000 mg/kg (32,unconfirmed)
LD50 (dermal, rabbit): Greater than 16000 mg/kg cited as 20 mL/kg) (30)

0000071-43-2 **BENZENE**

LC50 (rat): 13,700 ppm (4 hour exposure) (26); 9,980 ppm (7 hour exposure) (13,200 ppm - equivalent 4 hour exposure) (18)
LD50 (oral, rat): 930 mg/kg (19); 5,600 mg/kg (2); 11.4 ml/kg (10,032 mg/kg) (21)
LD50 (oral, mouse): 4,700 mg/kg (11; unconfirmed)
LD50 (skin, rabbit and guinea pig): Greater than 9,400 mg/kg (20)

0000106-97-8 **BUTANE**

LC50 (mouse): 202000 ppm (481000 mg/m3) (4-hour exposure); cited as 680 mg/L (2-hour exposure) (9)
LC50 (rat): 276000 ppm (658000 mg/m3) (4-hour exposure); cited as 658 mg/L (4- hour exposure) (9)

Potential Health Effects - Miscellaneous

0000067-64-1 **ACETONE**

The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Toxic to aquatic life with long lasting effects

Persistence and Degradability

No data available.

0000067-64-1 ACETONE

91% readily biodegradable, Method: OECD Test Guideline 301B

Bio-accumulative Potential

No data available.

0000067-64-1 ACETONE

Does not bioaccumulate

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

If possible material and its container should be recycled.

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous

waste. Waste management should be in full compliance with national, state and local laws.

SECTION 14) TRANSPORT INFORMATION

ADG Information

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail".

UN number: 1950

Proper shipping name: AEROSOLS

Hazard class: 2.1

Packaging group: None

Hazchem Code: 2YE

IMDG Information

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea

This material is classified as a marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN number: 1950

Proper shipping name: AEROSOLS

Hazard class: 2.1

Packaging group: None

Hazchem Code: 2YE

IATA Information

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN number: 1950

Proper shipping name: AEROSOLS

Hazard class: 2.1

Packaging group: None

Hazchem Code: 2YE

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0068334-30-5	DIESEL FUELS	20% - 60%	DSL,VOC,TSCA
0000074-98-6	PROPANE	10% - 50%	DSL,VOC,TSCA
0000106-97-8	BUTANE	10% - 50%	DSL,VOC,TSCA
0000067-64-1	ACETONE	0% - 10%	DSL,TSCA
0064742-49-0	VM & P NAPHTHA	0% - 5%	DSL,VOC,TSCA
0000110-54-3	HEXANE	0 - 0.1 %	DSL,VOC,TSCA
0000071-43-2	BENZENE	0 - 0.1 %	DSL,VOC,IARCCarcinogen,TSCA

SECTION 16) OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ADG- Australian Dangerous Goods Code; CAS- Chemical Abstract Service; DSL- Domestic Substances List; LC- Lethal Concentration; LD- Lethal Dose; OSHA- Occupational Safety and Health Administration; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; VOC- Volatile Organic Compounds; WES- Workplace Exposure Standards

Version 1.0:

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