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MarineWeld Syringe - Part A

SECTION 1: Identification

Product identifier

Product name: MarineWeld Syringe - Part A

Product code: 50172CAN

Recommended use of the product and restriction on use

Relevant identified uses: Adhesive

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

North America

J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482 903-885-7696 info@jbweld.com

Emergency telephone number:

North America

InfoTrac 352-323-3500

SECTION 2: Hazard identification

GHS classification:

Skin sensitization, category 1 Acute toxicity (inhalation), category 4 Specific target organ toxicity - single exposure, category 3, respiratory irritation

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.





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MarineWeld Syringe - Part A

P321 Specific treatment (see supplemental first aid instructions on this label).

P302+P352 IF ON SKIN: Wash with plenty of water/soap.

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor/physician if you feel unwell.

P405 Store locked up.

P403+P233 Store in a well ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 21645-51-2	Aluminum hydroxide	10-30
CAS number: 28182-81-2	Hexamethylene diisocyanate, oligomers	60-80

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with the Canadian Hazardous Products Regulation and WHMIS 2015.

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Not determined or not available.

After inhalation:

Remove victim to fresh air and place in a position comfortable for breathing. If respiratory symptoms develop and persist or if feeling unwell: seek medical advice/attention. If breathing is difficult, administer oxygen. If breathing has stopped, trained personnel should begin rescue breathing and get emergency medical aid

After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention

After eye contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention

After ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention

Most important symptoms and effects, both acute and delayed

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MarineWeld Syringe - Part A

Acute symptoms and effects:

Symptoms related to skin sensitizing may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis

Symptoms related to respiratory irritation and inhalation may include dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time)

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Treat symptomatically

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Water spray, Foam, Carbon dioxide (CO2), Dry chemical

Unsuitable extinguishing media:

Do not use water jet

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Do not allow run-off from fire fighting to enter drains or water courses

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal

Reference to other sections:

According to Canadian Hazardous Products Regulations and WHMIS 2015

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MarineWeld Syringe - Part A

Section 8: Personal Protective Equipment

SECTION 7: Handling and storage

Precautions for safe handling:

Wear recommended personal protective equipment (see Section 8).

Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms. Do not breathe vapors/dust. Do not smoke.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Container hazardous when empty. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area.

Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Canada	Aluminum hydroxide	21645-51-2	Alberta OELs - 8-Hour TWA Exposure Limit: 10 mg/m³
	Aluminum hydroxide	21645-51-2	Alberta OELs - 8-Hour TWA Exposure Limit: 3 mg/m³ (Respirable)
	Aluminum hydroxide	21645-51-2	British Columbia OELs - 8-Hour TWA Exposure Value: 1 mg/m³ (Respirable)
	Aluminum hydroxide	21645-51-2	British Columbia OELs - 8-Hour TWA Exposure Value: 10 mg/m³ (Total Dust)
	Aluminum hydroxide	21645-51-2	British Columbia OELs - 8-Hour TWA Exposure Value: 3 mg/m³ (Respirable Fraction)
	Aluminum hydroxide	21645-51-2	Manitoba OELs - Hour Exposure Limit (TLV-TWA): 1 mg/m³ (Respirable fraction)
	Aluminum hydroxide	21645-51-2	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 1 mg/m³ (Respirabe fraction)
	Aluminum hydroxide	21645-51-2	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 10 mg/m³ (Particles (poorly soluble or insoluble) not otherwise classified, Inhalable fraction)

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MarineWeld Syringe - Part A

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Aluminum hydroxide	21645-51-2	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 3 mg/m³ (Particles (poorly soluble or insoluble) not otherwise classified, Respirable fraction)
	Aluminum hydroxide	21645-51-2	Quebec OELs - 8-Hour TWA Exposure Value: 10 mg/m³ (Total dust)
	Aluminum hydroxide	21645-51-2	Saskatchewan OELs - 8 Hour Average Contamination Limit: 10 mg/m³ (Metal dust and compounds as AI)
	Aluminum hydroxide	21645-51-2	Saskatchewan OELs - 15 minute average contamination limit: 20 mg/m³ (Metal dust and compounds as AI)
	Aluminum hydroxide	21645-51-2	Saskatchewan OELs - 8 hour average contamination limit: 3 mg/m³ (Particles (poorly soluble or insoluble) not otherwise classified, Respirable fraction)
	Aluminum hydroxide	21645-51-2	Saskatchewan OELs - 15 minute average contamination limit: 6 mg/m³ (Particles (poorly soluble or insoluble) not otherwise classified, Respirable fraction)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Recommended glove material: Butyl-rubber

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

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MarineWeld Syringe - Part A

General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	White liquid
Odor:	Not determined or not available.
Odor threshold:	Not determined or not available.
pH-value:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.
Boiling point/range:	Not determined or not available.
Flash point:	> 260 °C
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	1.3 kg/l (25 °C)
Relative density:	Not determined or not available.
Solubilities:	Not determined or not available.
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	Not determined or not available.
Dynamic viscosity:	13,000 cps (23 °C)
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

Product will not undergo hazardous polymerization.

Conditions to avoid:

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MarineWeld Syringe - Part A

None known.

Incompatible materials:

Alcohols, Amines, strong acids, strong bases, strong oxidizing agents, water.

Hazardous decomposition products:

Carbon dioxide, Carbon monoxide, Hydrocarbons, Nitrogen oxides (NOx), Hydrogen cyanide (hydrocyanic acid), Metal oxides, Formaldehyde, Acetone.

SECTION 11: Toxicological information

Acute toxicity

Assessment:

Harmful if inhaled

Product data: No data available.

Substance data:

Name	Route	Result
Hexamethylene diisocyanate, oligomers	inhalation	LC50 - Rat: 388 mg/m³ (4 Hours)
Aluminum hydroxide	oral	LD50 Rat: >5000 mg/kg
	inhalation	LC50 (4 h): 888 - 2,300 mg/m³ air (rat)

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction

Product data: No data available. Substance data:

Name	Result
Hexamethylene diisocyanate, oligomers	May cause an allergic skin reaction.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

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MarineWeld Syringe - Part A

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment:

May cause respiratory irritation

Product data: No data available. Substance data:

Name	Result
Hexamethylene diisocyanate,	May cause respiratory irritation.
oligomers	

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

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MarineWeld Syringe - Part A

Name	Result
Aluminum hydroxide LC50 (16 days): 430 - 3,910 μg/L	
	NOEC (33 days): 71.5 - 558.1 μg/L
	EC50 (48 h): 1.5 - 2.56 mg/L

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Hexamethylene diisocyanate,	Not readily biodegradable.
oligomers	

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Hexamethylene diisocyanate,	Does not have high potential for bioaccumulation.
oligomers	

Mobility in soil

Product data: No data available. **Substance data:** No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

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MarineWeld Syringe - Part A

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

28182-81-2	Hexamethylene diisocyanate, oligomers	Listed
21645-51-2	Aluminum hydroxide	Listed

Non-domestic substances list (NDSL): None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet

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MarineWeld Syringe - Part B

SECTION 1: Identification

Product identifier

Product name: MarineWeld Syringe - Part B

Product code: 50172 B CAN

Recommended use of the product and restriction on use

Relevant identified uses: Adhesive

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: **North America**

J-B Weld Company, LLC

400 CMH Road Sulphur Springs, TX 75482 903-885-7696

info@jbweld.com

Emergency telephone number:

North America

InfoTrac 352-323-3500

SECTION 2: Hazard identification

GHS classification:

Reproductive toxicity, category 2

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H361 Suspected of damaging fertility or the unborn child.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 If exposed or concerned: Get medical advice/attention

P405 Store locked up.

P501 Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified: None





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MarineWeld Syringe - Part B

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 13463-67-7	Titanium Dioxide	5-10
CAS number: 21645-51-2	Aluminum hydroxide	10-30
CAS number: 280-57-9	1,4-Diazabicyclooctane	0.3
CAS number: 68928-76-7	Dimethylbis[(1-oxoneodecyl)oxy]stannane	0.11

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with the Canadian Hazardous Products Regulation and WHMIS 2015.

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Not determined or not available.

After inhalation:

Remove victim to fresh air and place in a position comfortable for breathing. If respiratory symptoms develop and persist or if feeling unwell: seek medical advice/attention. If breathing is difficult, administer oxygen. If breathing has stopped, trained personnel should begin rescue breathing and get emergency medical aid

After skin contact:

Take off all contaminated clothing. Rinse affected area with soap and water. Gently blot or brush away excess product. Seek immediate medical advice/attention if symptoms develop or if concerned

After eye contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention

After ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect devlopment of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death

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MarineWeld Syringe - Part B

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Treat symptomatically

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Water spray, Foam, Carbon dioxide (CO2), Dry chemical

Unsuitable extinguishing media:

Do not use water jet

Specific hazards during fire-fighting:

Do not allow run-off from fire fighting to enter drains or water courses

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Wear recommended personal protective equipment (see Section 8)

Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal

Reference to other sections:

Section 8: Personal Protective Equipment

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Do not breathe vapors/dust.

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MarineWeld Syringe - Part B

Dispose of rinse water in accordance with local and national regulations.

Container hazardous when empty.

Wear recommended personal protective equipment (see Section 8).

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Canada	1,4-Diazabicyclooctane	280-57-9	Ontario: TWA 1.0 ppm (8 hr); 4.6 mg/m³ (8 hr)
	Dimethylbis[(1-oxoneodecyl)oxy]stannane	68928-76-7	Alberta OEL: TLV TWA 0.1 mg/m³ (as Sn) 8-hr; STEL 0.2 mg/m³ (as Sn)
	Dimethylbis[(1-oxoneodecyl)oxy]stannane	68928-76-7	British Columbia OEL: TLV TWA 0.1 mg/m³ (as Sn) 8-hr; STEL 0.2 mg/m³ (as Sn)
	Dimethylbis[(1-oxoneodecyl)oxy]stannane	68928-76-7	Manitoba OEL: TLV TWA 0.1 mg/m³ (as Sn) 8-hr; STEL 0.2 mg/m³ (as Sn)
	Dimethylbis[(1-oxoneodecyl)oxy]stannane	68928-76-7	Ontario OEL: TLV TWA 0.1 mg/m³ (as Sn)
	Dimethylbis[(1-oxoneodecyl)oxy]stannane	68928-76-7	Quebec OEL: TLV TWA 0.1 mg/m³ (as Sn) 8-hr; STEL 0.2 mg/m³ (as Sn)
	Dimethylbis[(1-oxoneodecyl)oxy]stannane	68928-76-7	Saskatchewan OEL: TLV TWA 0.1 mg/m³ (as Sn) 8-hr; STEL 0.2 mg/m³ (as Sn)
	Titanium Dioxide	13463-67-7	Alberta OEL: TWA 10 mg/m³ 8-hr
	Titanium Dioxide	13463-67-7	British Columbia OEL: TWA 10 mg/m³ (Total dust) 8-hr
	Titanium Dioxide	13463-67-7	British Columbia OEL: TWA 3.0 mg/m³ (Respirable fraction) 8-hr
	Titanium Dioxide	13463-67-7	Manitoba OEL: TLV-TWA 10 mg/m ³ 8-hr
	Titanium Dioxide	13463-67-7	Ontario OEL: TWA 10 mg/m³ 8-hr
	Titanium Dioxide	13463-67-7	Quebec OEL: TWA 10 mg/m ³ 8-hr
	Titanium Dioxide	13463-67-7	Saskatchewan OEL: TWA 10 mg/m³ 8-hr
	Titanium Dioxide	13463-67-7	Saskatchewan OEL: TWA 20 mg/m³ 15-min
	Aluminum hydroxide	21645-51-2	Alberta OELs - 8-Hour TWA Exposure Limit: 10 mg/m³

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MarineWeld Syringe - Part B

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Aluminum hydroxide	21645-51-2	Alberta OELs - 8-Hour TWA Exposure Limit: 3 mg/m³ (Respirable)
	Aluminum hydroxide	21645-51-2	British Columbia OELs - 8-Hour TWA Exposure Value: 1 mg/m³ (Respirable)
	Aluminum hydroxide	21645-51-2	British Columbia OELs - 8-Hour TWA Exposure Value: 10 mg/m³ (Total Dust)
	Aluminum hydroxide	21645-51-2	British Columbia OELs - 8-Hour TWA Exposure Value: 3 mg/m³ (Respirable Fraction)
	Aluminum hydroxide	21645-51-2	Manitoba OELs - Hour Exposure Limit (TLV-TWA): 1 mg/m³ (Respirable fraction)
	Aluminum hydroxide	21645-51-2	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 1 mg/m³ (Respirabe fraction)
	Aluminum hydroxide	21645-51-2	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 10 mg/m³ (Particles (poorly soluble or insoluble) not otherwise classified, Inhalable fraction)
	Aluminum hydroxide	21645-51-2	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 3 mg/m³ (Particles (poorly soluble or insoluble) not otherwise classified, Respirable fraction)
	Aluminum hydroxide	21645-51-2	Quebec OELs - 8-Hour TWA Exposure Value: 10 mg/m³ (Total dust)
	Aluminum hydroxide	21645-51-2	Saskatchewan OELs - 8 Hour Average Contamination Limit: 10 mg/m³ (Metal dust and compounds as Al)
	Aluminum hydroxide	21645-51-2	Saskatchewan OELs - 15 minute average contamination limit: 20 mg/m³ (Metal dust and compounds as Al)
	Aluminum hydroxide	21645-51-2	Saskatchewan OELs - 8 hour average contamination limit: 3 mg/m³ (Particles (poorly soluble or insoluble) not otherwise classified, Respirable fraction)
	Aluminum hydroxide	21645-51-2	Saskatchewan OELs - 15 minute average contamination limit: 6 mg/m³ (Particles (poorly soluble or insoluble) not otherwise classified, Respirable fraction)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

According to Canadian Hazardous Products Regulations and WHMIS 2015

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MarineWeld Syringe - Part B

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	White liquid
Odor:	Not determined or not available.
Odor threshold:	Not determined or not available.
pH-value:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.
Boiling point/range:	Not determined or not available.
Flash point:	203° C
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	Not determined or not available.
Relative density:	1.3
Solubilities:	Not determined or not available.
Partition coefficient (n-octanol/water):	Not determined or not available.

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Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	Not determined or not available.
Dynamic viscosity:	8,000 cps (23 °C)
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

No decomposition if stored and applied as directed.

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reactions:

Product will not undergo hazardous polymerization.

Conditions to avoid:

Extreme temperatures, exposure to moisture.

Incompatible materials:

Isocyanates, Phosphorus compounds, Strong acids, Strong bases, Strong oxidizing agents.

Hazardous decomposition products:

Carbon dioxide, carbon monoxide, aluminum oxides, Hydrocarbons, nitrogen oxides (NOx), formaldehyde, halogenated hydrocarbons.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Aluminum hydroxide oral LD50 Rat: >5000 mg/kg		LD50 Rat: >5000 mg/kg
	inhalation	LC50 (4 h): 888 - 2,300 mg/m³ air (rat)
Dimethylbis[(1- oxoneodecyl)oxy]stannane	oral	LD50 - Rat - 1,470 mg/kg
1,4-Diazabicyclooctane	oral	LD50 - Rat - 1,700 mg/kg

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. Substance data:

Name	Result
1,4-Diazabicyclooctane	Irritating to the skin.

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Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. Substance data:

Name	Result	
1,4-Diazabicyclooctane	Corrosive effect on the eyes.	

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Species	Result	
Titanium Dioxide	Not applicable.	Airborne, unbound particles of respirable size are known to	
		cause cancer.	

International Agency for Research on Cancer (IARC):

Name	Classification
Titanium Dioxide	Group 2B

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Reproductive toxicity

Assessment:

Suspected of damaging fertility or the unborn child

Product data:No data available.

Substance data:

Name	Result
Dimethylbis[(1-	Suspected of damaging fertility or the unborn child.
oxoneodecyl)oxy]stannane	

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

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Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. Substance data:

Name	Result	
Dimethylbis[(1-	Causes damage to organs through prolonged or repeated exposure.	
oxoneodecyl)oxy]stannane		

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Aluminum hydroxide	LC50 (16 days): 430 - 3,910 μg/L
	NOEC (33 days): 71.5 - 558.1 μg/L
	EC50 (48 h): 1.5 - 2.56 mg/L
Dimethylbis[(1-	EC50 - Daphnia magna - 39 mg/L - (48 H)
oxoneodecyl)oxy]stannane	LC50 - Pseudokirchneriella subcapitata - 7.6 mg/L - (72 H)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. **Substance data:** No data available.

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Dimethylbis[(1-oxoneodecyl)oxy]stannane	Not readily biodegradable.
1,4-Diazabicyclooctane	Not readily biodegradable.

Bioaccumulative potential

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Product data: No data available. **Substance data:** No data available.

Mobility in soil

Product data: No data available. **Substance data:** No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

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Canada regulations

Domestic substances list (DSL):

13463-67-7	Titanium Dioxide	Listed
21645-51-2	Aluminum hydroxide	Listed
68928-76-7	Dimethylbis[(1-oxoneodecyl)oxy]stannane	Listed
280-57-9	1,4-Diazabicyclooctane	Listed

Non-domestic substances list (NDSL): None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet