



Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA

Distributed by: GH International Sealants ULC

Version No: 1.4

Safety Data Sheet according to WHMIS 2023 requirements

Initial Date: 08/14/2025

Revision Date: 08/13/2025

Print Date: 08/13/2025

S.GHS.CAN.EN

SECTION 1 Identification

Product Identifier

Product name	Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA
Synonyms	0316-GA
Proper shipping name	AEROSOLS
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	Asphalt Based Roof Cement
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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Distributed by: GH International Sealants ULC	Gardner-Gibson Inc.
Address	2540 Rena Road Mississauga, ON L4T 3C9 Canada	4161 East 7th Avenue Tampa FL United States
Telephone	+1-905-677-5522	1-813-248-2101
Fax	Not Available	Not Available
Website	www.icpgroup.com	www.icpgroup.com
Email	sds@icpgroup.com	sds@icpgroup.com

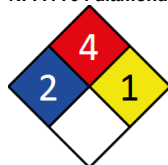
Emergency phone number

Association / Organisation	ChemTel
Emergency telephone number(s)	1-800-255-3924
Other emergency telephone number(s)	1-813-248-0585

SECTION 2 Hazard(s) identification

Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Canadian WHMIS Symbols



Classification	Aerosols, Hazard Category 1, Skin Corrosion/Irritation Category 2, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Reproductive Toxicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2
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Label elements

Hazard pictogram(s)	  
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Signal word	Danger
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Hazard statement(s)

H222+H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Physical and Health hazard(s) not otherwise classified

Not Applicable

Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe gas.
P271	Use in a well-ventilated area.
P280	Wear protective gloves and protective clothing.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/ attention.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Precautionary statement(s) Storage

P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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No further product hazard information.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1317-65-3	25-50	calcium carbonate
8052-42-4	15-25	Asphalt
108-88-3	15-20	toluene
64742-89-8	10-15	VM&P Naphtha
14807-96-6	5-10	talc
74-98-6	5-10	propane
106-97-8.	1-5	n-butane

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 First-aid measures

Description of first aid measures

Eye Contact	If aerosols come in contact with the eyes: ▶ Immediately hold the eyelids apart and flush the eye with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.
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Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA

	▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If solids or aerosol mists are deposited upon the skin: ▶ Flush skin and hair with running water (and soap if available). ▶ Remove any adhering solids with industrial skin cleansing cream. ▶ DO NOT use solvents. ▶ Seek medical attention in the event of irritation.
Inhalation	If aerosols, fumes or combustion products are inhaled: ▶ Remove to fresh air. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor.
Ingestion	Not considered a normal route of entry. ▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. ▶ Avoid giving milk or oils. ▶ Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Following acute or short term repeated exposures to toluene:

- ▶ Toluene is absorbed across the alveolar barrier, the blood/air mixture being 11.2/15.6 (at 37 degrees C.) The concentration of toluene, in expired breath, is of the order of 18 ppm following sustained exposure to 100 ppm. The tissue/blood proportion is 1/3 except in adipose where the proportion is 8/10.
- ▶ Metabolism by microsomal mono-oxygenation, results in the production of hippuric acid. This may be detected in the urine in amounts between 0.5 and 2.5 g/24 hr which represents, on average 0.8 gm/gm of creatinine. The biological half-life of hippuric acid is in the order of 1-2 hours.
- ▶ Primary threat to life from ingestion and/or inhalation is respiratory failure.
- ▶ Patients should be quickly evaluated for signs of respiratory distress (eg cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ <50 mm Hg or pCO₂ > 50 mm Hg) should be intubated.
- ▶ Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial damage has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- ▶ A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- ▶ Epinephrine (adrenaline) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- ▶ Lavage is indicated in patients who require decontamination; ensure use.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
o-Cresol in urine	0.5 mg/L	End of shift	B
Hippuric acid in urine	1.6 g/g creatinine	End of shift	B, NS
Toluene in blood	0.05 mg/L	Prior to last shift of workweek	

NS: Non-specific determinant; also observed after exposure to other material

B: Background levels occur in specimens collected from subjects NOT exposed

SECTION 5 Fire-fighting measures**Extinguishing media****SMALL FIRE:**

- ▶ Water spray, dry chemical or CO₂

LARGE FIRE:

- ▶ Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Special protective equipment and precautions for fire-fighters

Fire Fighting	FOR FIRES INVOLVING MANY GAS CYLINDERS: ▶ To stop the flow of gas, specifically trained personnel may inert the atmosphere to reduce oxygen levels thus allowing the capping of leaking container(s). ▶ Reduce the rate of flow and inject an inert gas, if possible, before completely stopping the flow to prevent flashback. ▶ DO NOT extinguish the fire until the supply is shut off otherwise an explosive re-ignition may occur. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves. ----- GENERAL ----- ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves.
Fire/Explosion Hazard	▶ Liquid and vapour are flammable. ▶ Moderate fire hazard when exposed to heat or flame. ▶ Vapour forms an explosive mixture with air. Combustion products include: carbon monoxide (CO) carbon dioxide (CO₂) other pyrolysis products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

SECTION 6 Accidental release measures

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Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	▶ Clean up all spills immediately. ▶ Avoid breathing vapours and contact with skin and eyes. ▶ Wear protective clothing, impervious gloves and safety glasses.
Major Spills	▶ Clear area of all unprotected personnel and move upwind. ▶ Alert Emergency Authority and advise them of the location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Remove leaking cylinders to a safe place. ▶ Fit vent pipes. Release pressure under safe, controlled conditions ▶ Burn issuing gas at vent pipes. ▶ DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve. ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

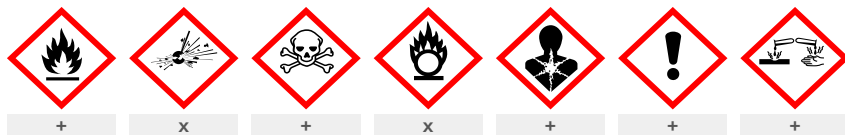
SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area.
Other information	▶ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can ▶ Store in original containers in approved flammable liquid storage area. ▶ DO NOT store in pits, depressions, basements or areas where vapours may be trapped. ▶ No smoking, naked lights, heat or ignition sources.

Conditions for safe storage, including any incompatibilities

Suitable container	▶ Aerosol dispenser. ▶ Check that containers are clearly labelled.
Storage incompatibility	Toluene: ▶ reacts violently with strong oxidisers, bromine, bromine trifluoride, chlorine, hydrochloric acid/ sulfuric acid mixture, 1,3-dichloro-5,5-dimethyl-2,4-imidazolidindione, dinitrogen tetroxide, fluorine, concentrated nitric acid, nitrogen dioxide, silver chloride, sulfur dichloride, uranium fluoride, vinyl acetate ▶ forms explosive mixtures with strong acids, strong oxidisers, silver perchlorate, tetranitromethane ▶ is incompatible with bis-toluenediazo oxide ▶ attacks some plastics, rubber and coatings ▶ may generate electrostatic charges, due to low conductivity, on flow or agitation. For alkyl aromatics: The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring. ▶ Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) - this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen ▶ Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids. ▶ Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents. ▶ Aromatics can react exothermically with bases and with diazo compounds. Propane: ▶ reacts violently with strong oxidisers, barium peroxide, chlorine dioxide, dichlorine oxide, fluorine etc. ▶ Dissolves some plastics, rubbers, and coatings ▶ may accumulate static charges which may ignite its vapours ▶ Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances



X — Must not be stored together

0 — May be stored together with specific preventions

+ — May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Continued...

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	calcium carbonate	Limestone	Not Available	Not Available	Not Available	(See Table 11)
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	calcium carbonate	Calcium carbonate	10 mg/m3	20 mg/m3	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	calcium carbonate	Limestone (calcium carbonate)	10 mg/m3	20 mg/m3	Not Available	Not Available
Canada - British Columbia Occupational Exposure Limits	calcium carbonate	Calcium carbonate (incl. Limestone, Marble)	10 mg/m3	20 mg/m3	Not Available	(N) - the 8-hour TWA listed in the Table is for the total dust. The substance also has an 8-hour TWA of 3 mg/m ³ for the respirable fraction.
Canada - Ontario Occupational Exposure Limits	calcium carbonate	Particles (Insoluble or Poorly Soluble) Not Otherwise Specified (PNOS) (Respirable fraction)	3 mg/m3	Not Available	Not Available	(R) Respirable fraction: means that size fraction of the airborne particulate deposited in the gas-exchange region of the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 4 µm at 50 per cent collection efficiency.
Canada - Ontario Occupational Exposure Limits	calcium carbonate	Particles (Insoluble or Poorly Soluble) Not Otherwise Specified (PNOS) (Inhalable fraction)	10 mg/m3	Not Available	Not Available	(I) Inhalable fraction: means that size fraction of the airborne particulate deposited anywhere in the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 100 µm at 50 per cent collection efficiency.
Canada - Alberta Occupational Exposure Limits	calcium carbonate	Calcium carbonate (Aragonite, Calcite, Marble, Vaterite)	10 mg/m3	Not Available	Not Available	3 - Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Canada - Alberta Occupational Exposure Limits	calcium carbonate	Limestone (Calcium carbonate)	10 mg/m3	Not Available	Not Available	3 - Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Canada - Alberta Occupational Exposure Limits	calcium carbonate	Marble (Calcium carbonate)	10 mg/m3	Not Available	Not Available	3 - Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Canada - Northwest Territories Occupational Exposure Limits	calcium carbonate	Calcium carbonate	10 mg/m3	20 mg/m3	Not Available	Not Available
Canada - Northwest Territories Occupational Exposure Limits	calcium carbonate	Limestone (calcium carbonate)	10 mg/m3	20 mg/m3	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	calcium carbonate	Calcium carbonate - Total dust	10 mg/m3	Not Available	Not Available	Note 1: The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1%.
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	calcium carbonate	Limestone - Total dust	10 mg/m3	Not Available	Not Available	Note 1: The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1%.
Canada - Nova Scotia Occupational Exposure LimitsCanada	calcium carbonate	Particles (Insoluble or Poorly Soluble) [NOS] Inhalable particles	10 mg/m3	Not Available	Not Available	See Appendix B current TLV/BEI Book
Canada - Nova Scotia Occupational Exposure LimitsCanada	calcium carbonate	Particles (Insoluble or Poorly Soluble) [NOS] Respirable particles	3 mg/m3	Not Available	Not Available	See Appendix B current TLV/BEI Book
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	Asphalt	Asphalt (petroleum) fumes	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety	Asphalt	Asphalt (bitumen) fume, as benzene soluble aerosol	0.5 mg/m3	1.5 mg/m3	Not Available	Not Available

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Regulations - Contamination Limits		(inhalable fraction++)				
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	Asphalt	Coal dust: Bituminous (respirable fraction++)	0.9 mg/m3	2.7 mg/m3	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	Asphalt	Not Available	0.5 mg/m3	Not Available	Not Available	TLV® Basis: URT & eye irr; BEIp
Canada - Manitoba Occupational Exposure Limits	Asphalt	Not Available	0.9 mg/m3	Not Available	Not Available	TLV® Basis: Lung dam; pulm fibrosis
Canada - Prince Edward Island Occupational Exposure Limits	Asphalt	Asphalt (Bitumen) fumes, as benzene-soluble aerosol	0.5 mg/m3	Not Available	Not Available	TLV® Basis: URT & eye irr; BEIp
Canada - Prince Edward Island Occupational Exposure Limits	Asphalt	Coal dust - Bituminous or Lignite	0.9 mg/m3	Not Available	Not Available	TLV® Basis: Lung dam; pulm fibrosis
Canada - British Columbia Occupational Exposure Limits	Asphalt	Asphalt (Bitumen) fume, as benzene-soluble aerosol, Inhalable	0.5 mg/m3	Not Available	Not Available	IARC group 2A carcinogen - Bitumens, occupational exposure to oxidized bitumens and their emissions during road paving IARC group 2B carcinogen - Bitumens, occupational exposure to straight-run bitumens and their emissions during road paving
Canada - Ontario Occupational Exposure Limits	Asphalt	Particles (Insoluble or Poorly Soluble) Not Otherwise Specified (PNOS) (Respirable fraction)	3 mg/m3	Not Available	Not Available	(R) Respirable fraction: means that size fraction of the airborne particulate deposited in the gas-exchange region of the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 4 µm at 50 per cent collection efficiency.
Canada - Ontario Occupational Exposure Limits	Asphalt	Particles (Insoluble or Poorly Soluble) Not Otherwise Specified (PNOS) (Inhalable fraction)	10 mg/m3	Not Available	Not Available	(I) Inhalable fraction: means that size fraction of the airborne particulate deposited anywhere in the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 100 µm at 50 per cent collection efficiency.
Canada - Alberta Occupational Exposure Limits	Asphalt	Asphalt (Petroleum; Bitumen) fume	5 mg/m3	Not Available	Not Available	3 - Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Canada - Alberta Occupational Exposure Limits	Asphalt	Bitumen (Asphalt fume)	5 mg/m3	Not Available	Not Available	3 - Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Canada - Alberta Occupational Exposure Limits	Asphalt	Coal dust (Respirable particulate): Bituminous	0.9 mg/m3	Not Available	Not Available	These limits come into effect on July 1, 2010
Canada - Northwest Territories Occupational Exposure Limits	Asphalt	Asphalt (bitumen) fume, as benzene soluble aerosol (inhalable fraction)	0.5 mg/m3	1.5 mg/m3	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	Asphalt	Asphalt (petroleum) fumes	5 mg/m3	Not Available	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure LimitsCanada	Asphalt	Coal dust - Bituminous	0.9 mg/m3	Not Available	Not Available	TLV Basis: lung damage; pulmonary fibrosis
Canada - Nova Scotia Occupational Exposure LimitsCanada	Asphalt	Asphalt (Bitumen; Petroleum) - Fume	0.5 mg/m3	Not Available	Not Available	TLV Basis: Upper respiratory tract & eye irritation. Measured as benzene-soluble aerosol. BEI-P
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	toluene	Toluene (toluol) - Skin	100 ppm / 375 mg/m3	560 mg/m3 / 150 ppm	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety	toluene	Toluene (toluol)	50 ppm	60 ppm	Not Available	Skin

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Regulations - Contamination Limits						
Canada - Manitoba Occupational Exposure Limits	toluene	Not Available	20 ppm	Not Available	Not Available	TLV® Basis: Visual impair; female repro; pregnancy loss; BEI
Canada - Prince Edward Island Occupational Exposure Limits	toluene	Toluene	20 ppm	Not Available	Not Available	TLV® Basis: Visual impair; female repro; pregnancy loss; BEI
Canada - British Columbia Occupational Exposure Limits	toluene	Toluene	20 ppm	Not Available	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits	toluene	Toluol (Toluene)	50 ppm / 188 mg/m3	Not Available	Not Available	1 - substance may be readily absorbed through intact skin
Canada - Alberta Occupational Exposure Limits	toluene	Toluene (Toluol)	50 ppm / 188 mg/m3	Not Available	Not Available	1 - substance may be readily absorbed through intact skin
Canada - Northwest Territories Occupational Exposure Limits	toluene	Toluene (toluol)	50 ppm	60 ppm	Not Available	Skin
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	toluene	Toluene	20 ppm	Not Available	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure LimitsCanada	toluene	Toluene	20 ppm	Not Available	Not Available	TLV Basis: Visual impairment; female reproductive system; pregnancy loss. The BEI is based on previous TLV-TWA
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	VM&P Naphtha	Oil mist, mineral	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	VM&P Naphtha	Oil mist, mineral	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	VM&P Naphtha	Not Available	Not Available	Not Available	Not Available	TLV® Basis: URT irr
Canada - Manitoba Occupational Exposure Limits	VM&P Naphtha	Not Available	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
Canada - Prince Edward Island Occupational Exposure Limits	VM&P Naphtha	Mineral oil, excluding metal working fluids - Poorly and mildly refined	Not Available	Not Available	Not Available	TLV® Basis: URT irr
Canada - Prince Edward Island Occupational Exposure Limits	VM&P Naphtha	Mineral oil, excluding metal working fluids - Pure, highly and severely refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
Canada - British Columbia Occupational Exposure Limits	VM&P Naphtha	Oil mist - mineral, severely refined	1 mg/m3	Not Available	Not Available	Not Available
Canada - British Columbia Occupational Exposure Limits	VM&P Naphtha	Oil mist - mineral, mildly refined	0.2 mg/m3	Not Available	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits	VM&P Naphtha	Oil mist, mineral	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Northwest Territories Occupational Exposure Limits	VM&P Naphtha	Oil mist, mineral	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	VM&P Naphtha	Mineral oil (mist): Pure, highly and ultra-refined - inhalable dust	5 mg/m3	Not Available	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	VM&P Naphtha	Mineral oil (mist): Little or unrefined	Not Available	Not Available	Not Available	C2: carcinogenic effect suspected in humans EM: A substance to which exposure must be reduced to a minimum RP: A substance which may not be recirculated
Canada - Nova Scotia Occupational Exposure LimitsCanada	VM&P Naphtha	Oil mist - mineral	5 mg/m3	10 mg/m3	Not Available	TLV Basis: lung. As sampled by method that does not collect vapor.
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	talc	Talc, (respirable fraction++)	2 mg/m3	Not Available	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	talc	Not Available	2 mg/m3	Not Available	Not Available	TLV® Basis: Pulm fibrosis; pulm func
Canada - Manitoba Occupational Exposure Limits	talc	Not Available	Not Available	Not Available	Not Available	TLV® Basis: Use Asbestos TLV®
Canada - Prince Edward Island Occupational Exposure Limits	talc	Talc - Containing no asbestos fibers	2 mg/m3	Not Available	Not Available	TLV® Basis: Pulm fibrosis; pulm func
Canada - Prince Edward Island Occupational Exposure Limits	talc	Talc - Containing asbestos fibers	Not Available	Not Available	Not Available	TLV® Basis: Use Asbestos TLV®
Canada - British Columbia	talc	Talc - Containing	0.1 f/cc	Not Available	Not Available	(K) - should not exceed 2 mg/m3

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Occupational Exposure Limits		asbestos fibres				respirable particulate.
Canada - British Columbia Occupational Exposure Limits	talc	Talc - Containing no asbestos fibres, Respirable	2 mg/m3	Not Available	Not Available	(E) - the value is for particulate matter containing no asbestos and less than 1% crystalline silica.
Canada - Ontario Occupational Exposure Limits	talc	Talc, containing no asbestos (Respirable fraction)	2 mg/m3	Not Available	Not Available	(R) Respirable fraction: means that size fraction of the airborne particulate deposited in the gas-exchange region of the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 4 µm at 50 per cent collection efficiency. (E) The value is for particulate matter containing no asbestos and < 1 per cent crystalline silica.
Canada - Ontario Occupational Exposure Limits	talc	Talc, containing no asbestos	2 f/cc	Not Available	Not Available	(K) Should not exceed 2 mg/m3respirable particulate mass.
Canada - Alberta Occupational Exposure Limits	talc	Soapstone: Total (no asbestos and less than 1% crystalline silica)	6 mg/m3	Not Available	Not Available	3 - Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Canada - Alberta Occupational Exposure Limits	talc	Soapstone: Respirable	3 mg/m3	Not Available	Not Available	3 - Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Canada - Alberta Occupational Exposure Limits	talc	Talc: Respirable particulate containing no asbestos fibres	2 mg/m3	Not Available	Not Available	Not Available
Canada - Northwest Territories Occupational Exposure Limits	talc	Talc, (respirable fraction)	2 mg/m3	Not Available	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	talc	Talc, fibrous (note 4)	1 f/cc	Not Available	Not Available	C1: carcinogenic effect detected in humans EM: A substance to which exposure must be reduced to a minimum Note 4: Permissible exposure values in number of respirable fibres per cm3
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	talc	Talc, non fibrous - Respirable dust	2 mg/m3	Not Available	Not Available	Note 1: The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1%.
Canada - Nova Scotia Occupational Exposure LimitsCanada	talc	Talc - Containing asbestos fibers	Not Available	Not Available	2 mg/m3	Use asbestos TLV, not to exceed stated ceiling. TLV Basis/Critical Effect(s): asbestosis; cancer
Canada - Nova Scotia Occupational Exposure LimitsCanada	talc	Soapstone	3 mg/m3	Not Available	Not Available	TLV Basis: lower respiratory tract irritation. Particulate matter containing no asbestos and < 1% crystalline silica.
Canada - Nova Scotia Occupational Exposure LimitsCanada	talc	Talc - Containing no asbestos fibers	2 mg/m3	Not Available	Not Available	TLV Basis: lower respiratory tract irritation
Canada - Nova Scotia Occupational Exposure LimitsCanada	talc	Soapstone	6 mg/m3	Not Available	Not Available	TLV Basis: lower respiratory tract irritation. Particulate matter containing no asbestos and < 1% crystalline silica.
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	propane	Propane	Not Available	Not Available	Not Available	(See Table 12)
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	propane	Propane	Not Available	Not Available	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	propane	Not Available	Not Available	Not Available	Not Available	TLV® Basis: Asphyxia; See Appendix F: Minimal Oxygen Content
Canada - Prince Edward Island Occupational Exposure Limits	propane	* Propane	Not Available	Not Available	Not Available	TLV® Basis: Asphyxia; See Appendix F: Minimal Oxygen Content
Canada - British Columbia Occupational Exposure Limits	propane	Aliphatic hydrocarbon gases [C1-C4]	1000 ppm	Not Available	Not Available	Not Available
Canada - Alberta Occupational	propane	Propane	1000 ppm	Not Available	Not Available	Not Available

Continued...

Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Exposure Limits						
Canada - Northwest Territories Occupational Exposure Limits	propane	Aliphatic hydrocarbon gases, Alkane [C1-C4]	1000 ppm	1250 ppm	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	propane	Propane	1000 ppm / 1800 mg/m3	Not Available	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure LimitsCanada	propane	Propane	1000 ppm	Not Available	Not Available	TLV Basis: cardiac sensitization; central nervous system impairment
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	n-butane	Butane	600 ppm / 1,400 mg/m3	1,600 mg/m3 / 750 ppm	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	n-butane	Aliphatic hydrocarbon gases, Alkane [C1-C4]	1000 ppm	1250 ppm	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	n-butane	Butane, All isomers	Not Available	Not Available	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	n-butane	Not Available	Not Available	1000 ppm	Not Available	TLV® Basis: CNS impair
Canada - Prince Edward Island Occupational Exposure Limits	n-butane	* Butane, all isomers	Not Available	1000 ppm	Not Available	TLV® Basis: CNS impair
Canada - British Columbia Occupational Exposure Limits	n-butane	n-Butane	600 ppm	750 ppm	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits	n-butane	Butane	1000 ppm	Not Available	Not Available	Not Available
Canada - Northwest Territories Occupational Exposure Limits	n-butane	Aliphatic hydrocarbon gases, Alkane [C1-C4]	1000 ppm	1250 ppm	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	n-butane	Butane	800 ppm / 1900 mg/m3	Not Available	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure LimitsCanada	n-butane	Butane - All isomers	1000 ppm	Not Available	Not Available	See Aliphatic hydrocarbon gases
Canada - Nova Scotia Occupational Exposure LimitsCanada	n-butane	Butane	1000 ppm	Not Available	Not Available	See Aliphatic hydrocarbon gases
Canada - Nova Scotia Occupational Exposure LimitsCanada	n-butane	Aliphatic hydrocarbon gases - Alkane [C1-C4]	1000 ppm	Not Available	Not Available	TLV Basis: Cardiac sensitization; CNS impairment
Ingredient	Original IDLH			Revised IDLH		
calcium carbonate	Not Available			Not Available		
Asphalt	Not Available			Not Available		
toluene	500 ppm			Not Available		
VM&P Naphtha	2,500 mg/m3			Not Available		
talc	1,000 mg/m3			Not Available		
propane	Not Available			Not Available		
n-butane	Not Available			Not Available		

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk.
Individual protection measures, such as personal protective equipment	   
Eye and face protection	▶ Close fitting gas tight goggles ▶ No special equipment for minor exposure i.e. when handling small quantities. ▶ OTHERWISE: For potentially moderate or heavy exposures: ▶ Safety glasses with side shields. ▶ NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them. ▶ Safety glasses with side shields. ▶ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.
Skin protection	See Hand protection below
Hands/feet protection	▶ Wear general protective gloves, eg. light weight rubber gloves. ▶ No special equipment needed when handling small quantities.

Continued...

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	▶ OTHERWISE: ▶ For potentially moderate exposures: ▶ Wear general protective gloves, eg. light weight rubber gloves. ▶ For potentially heavy exposures: ▶ Wear chemical protective gloves, eg. PVC.
Body protection	See Other protection below
Other protection	▶ The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton. ▶ Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost. No special equipment needed when handling small quantities. OTHERWISE: ▶ Overalls. ▶ Skin cleansing cream.

Respiratory protection

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- ▶ Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- ▶ The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used
- ▶ Generally not applicable.

Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	AX-AUS / Class 1	-
up to 50	1000	-	AX-AUS / Class 1
up to 50	5000	Airline *	-
up to 100	5000	-	AX-2
up to 100	10000	-	AX-3
100+		-	Airline**

** - Continuous-flow or positive pressure demand.

A(All classes) = Organic vapours, B AUS or B1 = Acid gases, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 deg C)

SECTION 9 Physical and chemical properties**Information on basic physical and chemical properties**

Appearance	Not Available		
Physical state	Compressed Gas	Relative density (Water = 1)	0.77-0.85
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	-44	Molecular weight (g/mol)	Not Available
Flash point (°C)	-19	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	7	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.1	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7		
Chemical stability	▶ Elevated temperatures. ▶ Presence of open flame. ▶ Product is considered stable.		

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Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

a) Acute Toxicity	Based on available data, the classification criteria are not met.
b) Skin Irritation/Corrosion	There is sufficient evidence to classify this material as skin corrosive or irritating.
c) Serious Eye Damage/Irritation	Based on available data, the classification criteria are not met.
d) Respiratory or Skin sensitisation	Based on available data, the classification criteria are not met.
e) Mutagenicity	Based on available data, the classification criteria are not met.
f) Carcinogenicity	Based on available data, the classification criteria are not met.
g) Reproductivity	There is sufficient evidence to classify this material as toxic to reproductivity
h) STOT - Single Exposure	There is sufficient evidence to classify this material as toxic to specific organs through single exposure
i) STOT - Repeated Exposure	There is sufficient evidence to classify this material as toxic to specific organs through repeated exposure
j) Aspiration Hazard	Based on available data, the classification criteria are not met.

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. The vapour is discomfoting WARNING: Intentional misuse by concentrating/inhaling contents may be lethal. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics. Whole body symptoms of poisoning include light-headedness, nervousness, apprehension, a feeling of well-being, confusion, dizziness, drowsiness, ringing in the ears, blurred or double vision, vomiting and sensations of heat, cold or numbness, twitching, tremors, convulsions, unconsciousness, depression of breathing, and arrest. Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation. The paraffin gases are practically not harmful at low doses. Higher doses may produce reversible brain and nerve depression and irritation.
Ingestion	At sufficiently high doses the material may be hepatotoxic (i.e. poisonous to the liver). Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. Spray mist may produce discomfort Toxic effects may result from skin absorption
Eye	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn). Not considered to be a risk because of the extreme volatility of the gas.
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Ample evidence exists that this material directly causes reduced fertility Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Main route of exposure to the gas in the workplace is by inhalation. Intentional abuse (glue sniffing) or occupational exposure to toluene can result in chronic habituation. Chronic abuse has caused inco-ordination, tremors of the extremeties (due to widespread cerebrum withering), headache, abnormal speech, temporary memory loss, convulsions, coma, drowsiness, reduced colour perception, blindness, nystagmus (rapid, involuntary eye movements), hearing loss leading to deafness and mild dementia. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA	TOXICITY	IRRITATION
	Not Available	Not Available
calcium carbonate	TOXICITY	IRRITATION
	Oral (Rat) LD50: 6450 mg/kg ^[2]	Not Available
Asphalt	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]

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	Oral (Rat) LD50: >5000 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]
toluene	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 12124 mg/kg ^[2]	Eye (Human): 300ppm
	Inhalation (Rat) LC50: >13350 ppm4h ^[2]	Eye (Rodent - rabbit): 0.1mL
	Oral (Rat) LD50: 636 mg/kg ^[2]	Eye (Rodent - rabbit): 0.1mL - Severe
		Eye (Rodent - rabbit): 100mg/30S - Mild
		Eye (Rodent - rabbit): 2mg/24H - Severe
		Eye (Rodent - rabbit): 870ug - Mild
		Eye: adverse effect observed (irritating) ^[1]
		Skin (Mammal - pig): 250uL/24H - Mild
		Skin (Rodent - rabbit): 20mg/24H - Moderate
		Skin (Rodent - rabbit): 435mg - Mild
		Skin (Rodent - rabbit): 500mg - Moderate
		Skin: adverse effect observed (irritating) ^[1]
		Skin: no adverse effect observed (not irritating) ^[1]
VM&P Naphtha	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >1900 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Inhalation (Rat) LC50: >4.42 mg/L4h ^[1]	Skin: adverse effect observed (irritating) ^[1]
	Oral (Rat) LD50: >4500 mg/kg ^[1]	
talc	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Inhalation (Rat) LC50: >2.1 mg/l4h ^[1]	Skin (Human): 300ug/3D (intermittent) - Mild
	Oral (Rat) LD50: >5000 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) ^[1]
propane	TOXICITY	IRRITATION
	Inhalation (Rat) LC50: 364726.819 ppm4h ^[2]	Not Available
n-butane	TOXICITY	IRRITATION
	Inhalation (Rat) LC50: 658000 mg/m3/4h ^[2]	Not Available

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA	Data demonstrate that during inhalation exposure, aromatic hydrocarbons undergo substantial partitioning into adipose tissues. Following cessation of exposure, the level of aromatic hydrocarbons in body fats rapidly declines. Thus, the aromatic hydrocarbons are unlikely to bioaccumulate in the body.
calcium carbonate	No evidence of carcinogenic properties. No evidence of mutagenic or teratogenic effects. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Asphalt	WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.
TOLUENE	For toluene: Acute toxicity: Humans exposed to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous system depression, and in large doses has a narcotic effect. 60mL has caused death.
VM&P Naphtha	Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins. The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with fats in the diet.
talc	The overuse of talc in nursing infants has resulted in respiratory damage causing fluid in the lungs and lung inflammation which may lead to death within hours of inhalation. Long-term exposure can also cause a variety of respiratory symptoms. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.
Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA & calcium carbonate & Asphalt & talc	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant.
calcium carbonate & TOLUENE	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

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Asphalt & VM&P Naphtha & talc & PROPANE	No significant acute toxicological data identified in literature search.			
Acute Toxicity	✗	Carcinogenicity	✗	
Skin Irritation/Corrosion	✓	Reproductivity	✓	
Serious Eye Damage/Irritation	✗	STOT - Single Exposure	✓	
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✓	
Mutagenicity	✗	Aspiration Hazard	✗	

Legend: ✗ – Data either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
calcium carbonate	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
Asphalt	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
toluene	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	3.78mg/L	5
	EC50	72h	Algae or other aquatic plants	12.5mg/L	4
	EC50	96h	Algae or other aquatic plants	>376.71mg/L	4
	NOEC(ECx)	168h	Crustacea	0.74mg/l	2
	LC50	96h	Fish	5-35mg/l	4
VM&P Naphtha	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	6.5mg/l	1
	LC50	96h	Fish	>100000mg/L	4
	EC50	96h	Algae or other aquatic plants	64mg/l	2
	NOEC(ECx)	72h	Algae or other aquatic plants	<0.1mg/l	1
talc	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	96h	Algae or other aquatic plants	7202.7mg/l	2
	NOEC(ECx)	720h	Algae or other aquatic plants	918.089mg/l	2
	LC50	96h	Fish	89581.016mg/l	2
propane	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
n-butane	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50(ECx)	96h	Algae or other aquatic plants	7.71mg/l	2
	EC50	96h	Algae or other aquatic plants	7.71mg/l	2
	LC50	96h	Fish	24.11mg/l	2
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are 'semi-volatile substances' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization.

Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

For Propane: Koc 460. log

Kow 2.36.

Henry's Law constant of 7.07x10⁻¹ atm-cu m/mole, derived from its vapour pressure, 7150 mm Hg, and water solubility, 62.4 mg/L.

For Toluene:

log Kow : 2.1-3;

log Koc : 1.12-2.85;

Koc : 37-260;

log Kom : 1.39-2.89;

Continued...

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Half-life (hr) air : 2.4-104;
Half-life (hr) H2O surface water : 5.55-528;
Half-life (hr) H2O ground : 168-2628;
Half-life (hr) soil : <48-240;
Henry's Pa m3 /mol : 518-694;
Henry's atm m3 /mol : 5.94;
E-03BOD 5 0.86-2.12, 5%COD - 0.7-2.52,21-27%;
ThOD - 3.13 ; BCF - 1.67-380;
log BCF - 0.22-3.28.

Atmospheric Fate: The majority of toluene evaporates to the atmosphere from the water and soil. The main degradation pathway for toluene in the atmosphere is reaction with photochemically produced hydroxyl radicals.
DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
toluene	LOW (Half-life = 28 days)	LOW (Half-life = 4.33 days)
propane	LOW	LOW
n-butane	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
toluene	LOW (BCF = 90)
propane	LOW (LogKOW = 2.36)
n-butane	LOW (LogKOW = 2.89)

Mobility in soil

Ingredient	Mobility
toluene	LOW (Log KOC = 268)
propane	LOW (Log KOC = 23.74)
n-butane	LOW (Log KOC = 43.79)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	▶ Consult State Land Waste Management Authority for disposal. ▶ Discharge contents of damaged aerosol cans at an approved site. ▶ Allow small quantities to evaporate.
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SECTION 14 Transport information

Labels Required

	
Marine Pollutant	NO

Land transport (TDG)

14.1. UN number or ID number	1950	
14.2. UN proper shipping name	AEROSOLS	
14.3. Transport hazard class(es)	Class	2.1
	Subsidiary Hazard	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions	80, 107
	Explosive Limit and Limited Quantity Index	1 L
	ERAP Index	Not Applicable

Air transport (ICAO-IATA / DGR)

14.1. UN number	1950	
14.2. UN proper shipping name	Aerosols, flammable (engine starting fluid); Aerosols, flammable	
14.3. Transport hazard class(es)	ICAO/IATA Class	2.1
	ICAO / IATA Subsidiary Hazard	Not Applicable
	ERG Code	10L

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14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions	A145 A167 A802; A1 A145 A167 A802
	Cargo Only Packing Instructions	203
	Cargo Only Maximum Qty / Pack	150 kg
	Passenger and Cargo Packing Instructions	203; Forbidden
	Passenger and Cargo Maximum Qty / Pack	75 kg; Forbidden
	Passenger and Cargo Limited Quantity Packing Instructions	Y203; Forbidden
	Passenger and Cargo Limited Maximum Qty / Pack	30 kg G; Forbidden

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1950	
14.2. UN proper shipping name	AEROSOLS	
14.3. Transport hazard class(es)	IMDG Class	2.1
	IMDG Subsidiary Hazard	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	EMS Number	F-D , S-U
	Special provisions	63 190 277 327 344 381 959
	Limited Quantities	1000 ml

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
calcium carbonate	Not Available
Asphalt	Not Available
toluene	Not Available
VM&P Naphtha	Not Available
talc	Not Available
propane	Not Available
n-butane	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
calcium carbonate	Not Available
Asphalt	Not Available
toluene	Not Available
VM&P Naphtha	Not Available
talc	Not Available
propane	Not Available
n-butane	Not Available

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations.

calcium carbonate is found on the following regulatory lists

- Canada Non-Domestic Substances List (NDSL)
- Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS
- International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

Asphalt is found on the following regulatory lists

- Canada Categorization decisions for all DSL substances
- Canada Domestic Substances List (DSL)
- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans
- International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

toluene is found on the following regulatory lists

Canada Categorization decisions for all DSL substances
Canada Domestic Substances List (DSL)
Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS
Chemical Footprint Project - Chemicals of High Concern List
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

VM&P Naphtha is found on the following regulatory lists

Canada Categorization decisions for all DSL substances
Canada Domestic Substances List (DSL)
Chemical Footprint Project - Chemicals of High Concern List
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

talc is found on the following regulatory lists

Canada Categorization decisions for all DSL substances
Canada Domestic Substances List (DSL)
Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS
Chemical Footprint Project - Chemicals of High Concern List
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2A: Probably carcinogenic to humans
International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

propane is found on the following regulatory lists

Canada Categorization decisions for all DSL substances
Canada Domestic Substances List (DSL)
Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS

n-butane is found on the following regulatory lists

Canada Categorization decisions for all DSL substances
Canada Domestic Substances List (DSL)
Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS
Chemical Footprint Project - Chemicals of High Concern List

Additional Regulatory Information

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	No (calcium carbonate)
Canada - NDSL	No (Asphalt; toluene; VM&P Naphtha; talc; propane; n-butane)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (calcium carbonate; talc)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	All chemical substances in this product have been designated as TSCA Inventory 'Active'
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	08/13/2025
Initial Date	08/14/2025

CONTACT POINT

PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES

SDS Version Summary

Version	Date of Update	Sections Updated
0.4	08/13/2025	Hazards identification - Classification, Composition / information on ingredients - Ingredients

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

Definitions and abbreviations

▸ PC - TWA: Permissible Concentration-Time Weighted Average

Gardner® Leak Stopper® Rubber Flexx Sealant (Black) - 0316-GA

- PC - STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer
- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL: Short Term Exposure Limit
- TEEL: Temporary Emergency Exposure Limit,
- IDLH: Immediately Dangerous to Life or Health Concentrations
- ES: Exposure Standard
- OSF: Odour Safety Factor
- NOAEL: No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code

- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European INventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act
- TCSI: Taiwan Chemical Substance Inventory
- INSQ: Inventario Nacional de Sustancias Químicas
- NCI: National Chemical Inventory
- FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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