

Safety Data Sheet

Titebond Heavy Duty Construction Adhesive

Section 1. Identification

GHS product identifier	:	Titebond Heavy Duty Construction Adhesive
Physical state	:	Liquid.
CAS #	:	mixture
Address	:	Franklin International 2020 Bruck Street Columbus Ohio 43207
Contact person	:	Franklin Technical Services
Telephone	:	(800) 877-4583
e-mail address of person responsible for this SDS	:	SDS@FranklinInternational.com
Chemtrec (24 Hour)	:	(800) 424 - 9300
Chemtrec International	:	+1 703-741-5970
Reference number	:	3195
Product code	:	5261INT
Date of revision	:	2/7/2022
Safety Data Sheets are available online at	:	www.FranklinInternational.com
Supplier's information		
Supplier's details	:	PCL Adhesives 1/15 Trugood Drive, East Tamaki, Auckland, New Zealand 09 271 3556
National Poisons Centre emergency telephone number (with hours of operation)	:	0800 764 766 24 hrs

Section 2. Hazards identification

HSNO Classification	:	3.1 - FLAMMABLE LIQUIDS - Category B 6.3 - SKIN IRRITATION - Category A 6.4 - EYE IRRITATION - Category A (Irritant) 6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Fertility) (inhalation) - Category B 6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Unborn child) (inhalation) - Category B 6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE) (peripheral nervous system) (inhalation) - Category A 6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE) (liver) (inhalation) - Category B
----------------------------	---	---

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

Section 2. Hazards identification

GHS label elements

Signal word	: Danger
Hazard statements	<ul style="list-style-type: none"> : Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Suspected of damaging fertility or the unborn child if inhaled. Causes damage to organs through prolonged or repeated exposure if inhaled. (peripheral nervous system) May cause damage to organs through prolonged or repeated exposure if inhaled. (liver)
Precautionary statements	
Prevention	<ul style="list-style-type: none"> : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Keep out of reach of children. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. If medical advice is needed: Have product container or label at hand.
Response	<ul style="list-style-type: none"> : IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Take off contaminated clothing and wash before reuse. Rinse skin with water [or shower]. Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention.
Storage	<ul style="list-style-type: none"> : Store locked up. Store in cool/well-ventilated place.
Disposal	<ul style="list-style-type: none"> : Dispose of contents and container in accordance with all local, regional, national and international regulations.
Symbol	: <div style="display: flex; justify-content: space-around; align-items: center;">    </div>

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

Ingredient name	% (w/w)	CAS number
acetone	10 - 25	67-64-1
n-hexane	10 - 25	110-54-3
toluene	5 - 10	108-88-3
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	0.1 - 0.5	119-47-1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. Defatting to the skin.

Eye contact : Causes serious eye irritation.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : No specific data.

Skin : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Eyes : Adverse symptoms may include the following:
pain or irritation
watering
redness

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

Specific treatments : Not available.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Hazchem code** : Not available.
- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or

Section 7. Handling and storage

an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities : Store between the following temperatures: -17 to 40°C (1.4 to 104°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
acetone	NZ HSWA 2015 (New Zealand, 11/2019). WES-TWA: 500 ppm 8 hours. WES-TWA: 1185 mg/m ³ 8 hours. WES-STEL: 2375 mg/m ³ 15 minutes. WES-STEL: 1000 ppm 15 minutes.
n-hexane	NZ HSWA 2015 (New Zealand, 11/2019). WES-TWA: 20 ppm 8 hours. WES-TWA: 72 mg/m ³ 8 hours.
toluene	NZ HSWA 2015 (New Zealand, 11/2019). Absorbed through skin. WES-TWA: 50 ppm 8 hours. WES-TWA: 188 mg/m ³ 8 hours.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 8. Exposure controls/personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Eye protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid. [Paste.]
Color	: Beige.
Odor	: Solvent. [Strong]
Odor threshold	: Not available.
pH	: Not applicable.
Melting point	: Not available.
Boiling point	: 56°C (132.8°F)
Flash point	: Closed cup: -17.7°C (0.14°F) [Setaflash.]
Flammability (solid, gas)	: Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Lower and upper explosive (flammable) limits	: Lower: 1.2% Upper: 12.8%
VOC (less water, less exempt solvents)	: 281 g/l
Volatility	: 35.17% (w/w)
Relative density	: 1.07365
Solubility	: Insoluble in the following materials: cold water.
Auto-ignition temperature	: 252°C (485.6°F)

Section 10. Stability and reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on the likely routes of exposure

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. Defatting to the skin.

Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Delayed and immediate effects and also chronic effects from short and long term exposure

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
acetone	LD50 Oral	Rat	5800 mg/kg	-
n-hexane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LD50 Dermal	Rabbit	>3295 mg/kg	-
toluene	LD50 Oral	Rat	15840 mg/kg	-
	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	LD50 Oral	Rat	4880 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
acetone	Eyes - Mild irritant	Human	-	186300 ppm	-
	Eyes - Mild irritant	Rabbit	-	10 uL	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
n-hexane	Skin - Mild irritant	Rabbit	-	395 mg	-
toluene	Eyes - Mild irritant	Rabbit	-	10 mg	-
	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Eyes - Severe irritant	Rabbit	-	870 ug	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Pig	-	24 hours 250 uL	-
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Skin - Moderate irritant	Rabbit	-	500 mg	-

Section 11. Toxicological information

6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
--	--------------------------	--------	---	-----------------	---

Conclusion/Summary

Skin : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes : Moderately irritating to eyes.

Respiratory : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Sensitization

Not available.

Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Inhalation : Causes damage to organs through prolonged or repeated exposure if inhaled.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child if inhaled.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility if inhaled.

Chronic toxicity

Not available.

Carcinogenicity

Not available.

Mutagenicity

Not available.

Teratogenicity

Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
toluene	-	-	-	Rat	Inhalation	-

Conclusion/Summary : Reproductive toxicant - female

Specific target organ toxicity

Name	Category	Route of exposure	Target organs
Titebond Heavy Duty Construction Adhesive	Category A	Inhalation	peripheral nervous system
n-hexane	Category B	Inhalation	liver
toluene	Category A	Inhalation	Not determined
	Category B	Inhalation	Not determined

Aspiration hazard

Section 11. Toxicological information

Not available.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
acetone	Acute EC50 20.565 mg/l Marine water Acute LC50 4.42589 ml/L Marine water Acute LC50 10000 µg/l Fresh water Acute LC50 5600 ppm Fresh water Chronic NOEC 4.95 mg/l Marine water Chronic NOEC 0.016 ml/L Fresh water Chronic NOEC 0.1 ml/L Fresh water Chronic NOEC 5 µg/l Marine water	Algae - <i>Ulva pertusa</i> Crustaceans - <i>Acartia tonsa</i> - Copepodid Daphnia - <i>Daphnia magna</i> Fish - <i>Poecilia reticulata</i> Algae - <i>Ulva pertusa</i> Crustaceans - <i>Daphniidae</i> Daphnia - <i>Daphnia magna</i> - Neonate Fish - <i>Gasterosteus aculeatus</i> - Larvae	96 hours 48 hours 48 hours 96 hours 96 hours 21 days 21 days 42 days
n-hexane	Acute EC50 0.89 mg/l Acute EC50 3.9 mg/l Acute LC50 2500 µg/l Fresh water Chronic NOEC 4.9 mg/l	Algae Crustaceans	96 hours 48 hours
toluene	Chronic NOEC 2.8 mg/l Acute EC50 12500 µg/l Fresh water Acute EC50 11600 µg/l Fresh water Acute EC50 6000 µg/l Fresh water Acute LC50 5500 µg/l Fresh water Chronic NOEC 1000 µg/l Fresh water	Fish - <i>Pimephales promelas</i> Crustaceans Fish - <i>rainbow trout</i> Algae - <i>Pseudokirchneriella subcapitata</i> Crustaceans - <i>Gammarus pseudolimnaeus</i> - Adult Daphnia - <i>Daphnia magna</i> - Juvenile (Fledgling, Hatchling, Weanling) Fish - <i>Oncorhynchus kisutch</i> - Fry Daphnia - <i>Daphnia magna</i>	21 days 72 hours 48 hours 48 hours 96 hours 21 days 28 days 48 hours 48 hours

Persistence/degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-hexane	-	-	Readily
toluene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
acetone	-0.23	3	low
n-hexane	4	501.187	high
toluene	2.73	90	low
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	6.25	549.54	high

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
New Zealand Class	UN1133	ADHESIVES, containing flammable liquid	3	III	
ADG Class	UN1133	ADHESIVES, containing flammable liquid	3	III	
UN Class	UN1133	ADHESIVES, containing flammable liquid	3	III	
ADR/RID Class	UN1133	ADHESIVES, containing flammable liquid	3	III	
IATA Class	UN1133	ADHESIVES, containing flammable liquid	3	III	
IMDG Class	UN1133	ADHESIVES, containing flammable liquid	3	III	

Additional information

ADR/RID Class : Tunnel code (D/E)
Remarks Limited quantity

IMDG Class : Remarks Limited quantity

PG* : Packing group

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

HSNO Approval Number	:	HSR002662
HSNO Group Standard	:	Surface Coatings and Colourants
HSNO Classification	:	3.1 - FLAMMABLE LIQUIDS - Category B 6.3 - SKIN IRRITATION - Category A 6.4 - EYE IRRITATION - Category A (Irritant) 6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Fertility) (inhalation) - Category B 6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Unborn child) (inhalation) - Category B 6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE) (peripheral nervous system) (inhalation) - Category A 6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE) (liver) (inhalation) - Category B

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

New Zealand	:	All components are listed or exempted.
United States	:	All components are active or exempted.

Section 16. Other information

History

Date of printing	:	2/8/2022
Date of issue/Date of revision	:	2/7/2022
Date of previous issue	:	No previous validation
Version	:	1
Key to abbreviations	:	ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations
References	:	Not available.

 Indicates information that has changed from previously issued version.

Section 16. Other information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.