

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **SabreFix F35 – Part B**
Product Use: Foam Insulation
Restriction of Use: Refer to Section 15

New Zealand Supplier: Sabre Adhesives Ltd
Address: 42 Cambridge Street South
Levin, 5510, New Zealand
Telephone: +64 (0)6 366 0007
Emergency No: **0800 764 766 (National Poison Centre)**

Australian Supplier: Sabre Adhesives Ltd
Address: Level 6, 10 Herb Elliot Avenue, Sydney NSW, 2127
Telephone No: +61 2 9098 8244
Emergency No: **13 11 26 (National Poison Line)**

Date SDS Issued: 24 July 2024

Section 2. Hazards Identification

Australia:

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

New Zealand:

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

NZ - EPA Approval Code: Construction Products (Carcinogenic) - HSR002545

Pictograms



SIGNAL WORD: Warning

GHS Category	Hazard Code	Hazard Statement
Liquified Gas	H280	Contains gas under pressure may explode if heated.
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Carcinogenicity Cat. 2	H351	Suspected of causing cancer.
Reproductive toxicity Cat. 2	H361	Suspected of damaging fertility or the unborn child.

	AUH044	Risk of explosion if heated under confinement.
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Prevention Code Prevention Statement

P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective clothing as detailed in SDS Section 8.

Response Code Response Statement

P101	If medical advice is needed, have product container or label at hand.
P330	Rinse mouth.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash before reuse.

Storage Code Storage Statement

P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P410 + P403	Protect from sunlight. Store in a well-ventilated place.

Disposal Code Disposal Statement

P501	Dispose of according to the local authorities
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Section 3. Composition of hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
tris(2-chloroisopropyl)phosphate	5-30	13674-84-5
1,1,1,2-Tetrafluoroethane	10-20	811-97-2
ethylenediamine, propoxylated	<10	25214-63-5
Non-hazardous ingredients	To bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes

Open the eyelid(s) wide to allow the material to evaporate. Gently rinse the affected eye(s) with clean, cool water for at least 15 minutes. Have the patient lie or sit down and tilt the head back. Hold the eyelid(s) open and pour water slowly over the eyeball(s) at the inner corners, letting the water run out of the outer corners. The patient may be in great pain and wish to keep the eyes closed. It is important that the material is rinsed from the eyes to prevent further damage. Ensure that the patient looks up, and side to side as the eye is rinsed in order to better reach all parts of the eye(s). Transport to hospital or doctor. Even when no pain persists and vision is good, a doctor should examine the eye as delayed damage may occur. If the patient cannot tolerate light, protect the eyes with a clean, loosely tied bandage.

Ensure verbal communication and physical contact with the patient.
DO NOT allow the patient to rub the eyes
DO NOT allow the patient to tightly shut the eyes
DO NOT introduce oil or ointment into the eye(s) without medical advice
DO NOT use hot or tepid water.
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DO NOT allow the patient to tightly shut the eyes
DO NOT introduce oil or ointment into the eye(s) without medical advice
DO NOT use hot or tepid water.

If on Skin Immediately remove all contaminated clothing. Flush skin with water and soap. In case of cold burns (frost-bite):
Move casualty into warmth before thawing the affected part; if feet are affected carry if possible. Bathe the affected area immediately in luke-warm water (not more than 35 deg C) for 10 to 15 minutes, immersing if possible and without rubbing.
DO NOT apply hot water or radiant heat.
Apply a clean, dry, light dressing of "fluffed-up" dry gauze bandage
If a limb is involved, raise and support this to reduce swelling
If an adult is involved and where intense pain occurs provide pain killers such as paracetamol. Transport to hospital, or doctor

If Swallowed Not considered a normal route of exposure. Avoid giving milk, oils or alcohol. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell.

If Inhaled Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Inhalation	Not applicable.
Ingestion	Harmful if swallowed.
Skin contact	May cause an allergic skin reaction.
Eye contact	Not applicable.
Chronic	Suspected of causing cancer. Suspected of damaging fertility or the unborn child.

Notes to Doctor: Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable.
Hazards from products	Containers may explode when heated - Ruptured cylinders may rocket Fire exposed containers may vent contents through pressure relief devices. High concentrations of gas may cause asphyxiation without warning. May decompose explosively when heated or involved in fire. Contact with gas may cause burns, severe injury and/ or frostbite. Decomposition may produce toxic fumes of: carbon monoxide (CO) Combustion products include: carbon dioxide (CO ₂) hydrogen chloride phosgene phosphorus oxides (PO _x) hydrogen fluoride other pyrolysis products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup

	under fire conditions. Vented gas is more dense than air and may collect in pits, basements.
Suitable Extinguishing media	SMALL FIRE: Use extinguishing agent suitable for type of surrounding fire. LARGE FIRE: Cool cylinder. DO NOT direct water at source of leak or venting safety devices as icing may occur.
Precautions for firefighters and special protective clothing	<p>Wear full body protective clothing with breathing apparatus. Fight fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed.</p> <p>Use water delivered as a fine spray to control fire and cool adjacent area.</p> <p>DO NOT approach cylinders suspected to be hot. Cool fire-exposed cylinders with water spray from a protected location. If safe to do so, remove containers from path of fire. Excessive pressures may develop in a gas cylinder exposed in a fire; this may result in explosion.</p> <p>Cylinders with pressure relief devices may release their contents as a result of fire and the released gas may constitute a further source of hazard for the fire-fighter.</p> <p>Cylinders without pressure-relief valves have no provision for controlled release and are therefore more likely to explode if exposed to fire.</p>
HAZCHEM CODE	2ZE

Section 6. Accidental Release Measures

Wear protective clothing as described in Section 8. Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing vapour and any contact with liquid or gas. Do not enter confined spaces where gas may be accumulated. Shut off all sources of ignition and increase ventilation. No smoking or naked lights within area.

Prevent by any means available, spillage from entering drains and water-courses.

Stop leak if safe to do so. Water spray or fog may be used to disperse vapour. DO NOT enter confined space where gas may have collected. Keep area clear until gas has dispersed. 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. Dispose of as per Section 13.

Section 7. Handling and Storage

Handling:

- Read carefully and follow all instructions.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Avoid breathing fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective clothing as detailed in SDS Section 8.
- Before connecting gas cylinders, ensure manifold is mechanically secure and does not contain another gas.
- Before disconnecting gas cylinder, isolate supply line segment proximal to cylinder, remove trapped gas in supply line with aid of vacuum pump.
- When connecting or replacing cylinders take care to avoid airborne particulates violently ejected when system pressurises.

- Consider the use of doubly-contained piping; diaphragm or bellows sealed, soft seat valves; backflow prevention devices; flash arrestors; and flow monitoring or limiting devices. Gas cabinets, with appropriate exhaust treatment, are recommended, as is automatic monitoring of the secondary enclosures and work areas for release.
- Use a pressure reducing regulator when connecting cylinder to lower pressure (<100 psig) piping or systems
- Use a check valve or trap in the discharge line to prevent hazardous back-flow into the cylinder
- Check regularly for spills or leaks. Keep valves tightly closed but do not apply extra leverage to hand wheels or cylinder keys.
- Open valve slowly. If valve is resistant to opening then contact your supervisor
- Valve protection caps must remain in place unless container is secured with valve outlet piped to use point.
- Never insert a pointed object (e.g hooks) into cylinder cap openings as a means to open cap or move cylinder. Such action can inadvertently turn the valve and gas a gas leak. Use an adjustable strap instead of wrench to free an over-tight or rusted cap.
- A bubble of gas may buildup behind the outlet dust cap during transportation, after prolonged storage, due to defective cylinder valve or if a dust cap is inserted without adequate evacuation of gas from the line. When loosening dust cap, preferably stand cylinder in a suitable enclosure and take cap off slowly. Never face the dust cap directly when removing it; point cap away from any personnel or any object that may pose a hazard. under negative pressure (relative to atmospheric gas)
- Suck back of water into the container must be prevented. Do not allow backfeed into the container.
- Do NOT drag, slide or roll cylinders - use a suitable hand truck for cylinder movement
- Test for leakage with brush and detergent - **NEVER** use a naked flame.
- Do NOT heat cylinder by any means to increase the discharge rate of product from cylinder.
- Leaking gland nuts may be tightened if necessary.
- If a cylinder valve will not close completely, remove the cylinder to a well ventilated location (e.g. outside) and, when empty, tag as FAULTY and return to supplier.
- Obtain a work permit before attempting any repairs.
- DO NOT attempt repair work on lines, vessels under pressure.
- Atmospheres must be tested and O.K. before work resumes after leakage.
- **DO NOT** transfer gas from one cylinder to another.

Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store locked up.
- Protect from sunlight. Store in a well-ventilated place.
- Keep container tightly closed.
- Cylinder valve must be closed when not in use or when empty.
- Segregate full from empty cylinders.
- Suckback into cylinder may result in rupture. Use back-flow preventive device in piping.

Section 8 Exposure Controls / Personal Protection

Exposure Limit Values:

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
1,1,1,2-Tetrafluoroethane (HCF 134a) [811-97-2]	1000	4200	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term

Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2023 14TH EDITION.

Engineering Controls

Ensure good ventilation of the work station.

Personal Protection Equipment



Eyes	Wear chemical goggles. Avoid wearing contact lenses.
Hands	Wear cloth or leather gloves. Insulated gloves should be loose fitting so that may be removed quickly if liquid is spilled upon them. Insulated gloves are not made to permit hands to be placed in the liquid; they provide only short-term protection from accidental contact with the liquid.
Skin	Wear protective clothing and safety shoes.
Respiratory	Type KAX-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Section 9 Physical and Chemical Properties

Appearance	Liquified Gas Canister
Odour	Not available
Odour Threshold	Not available
pH	Not available
Boiling Point	-26.2°C
Melting Point	-101°C
Freezing Point	-101°C
Flash Point	Not available
Flammability	Not Flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	560.5 kPa
Vapour Density	3.5 (air=1)
Relative Density	1.2 (water=1)
Solubility in water	Miscible
Partition Coefficient:	Not available
Auto-ignition Temperature	>743°C
Viscosity	Not available
Molecular weight	102 g/mol
Volatile Compound	10% vol

Section 10. Stability and Reactivity

Stability of Substance	Stable at normal conditions.
Conditions to Avoid	Refer to Section 7.
Incompatible Materials	Refer to Section 7.
Hazardous Decomposition Products	Refer to Section 5.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Not applicable.
Skin	May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Suspected of causing cancer.
Reproductive Toxicity	Suspected of damaging fertility or unborn child.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Individual component information:**Acute Toxicity:**

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
tris(2- chloroisopropyl)phosphate	~632 mg/kg (rat)	>2000 mg/kg (rabbit)	>4.6 mg/l/4hr (rat)
1,1,1,2-tetrafluoroethane	-	-	359453.102 ppm/4h (rat)
ethylenediamine, propoxylated	>2000 mg/kg (rat)	>2000 mg/kg (rat)	-

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

Persistence and degradability	No data available on product 1,1,1,2-tetrafluoroethane and tris(2- chloroisopropyl)phosphate: Persistence: Water/Soil = HIGH Air: HIGH
Bioaccumulative	No data available on product 1,1,1,2-tetrafluoroethane: LOW (LogKOW)=1.68) tris(2- chloroisopropyl)phosphate: LOW (BCF=4.6)
Mobility in soil	No data available on product 1,1,1,2-tetrafluoroethane: LOW (KOC = 96.63) tris(2- chloroisopropyl)phosphate: LOW(LogKOC=1278)
Other adverse effects	No data available on product

Toxicity

1,1,1,2-tetrafluoroethane

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	48h	Crustacea	980mg/l	Not available
EC50	96h	Algae or other aquatic plants	142mg/l	2
EC50	72h	Algae or other aquatic plants	>114mg/l	2
NOEC(ECx)	96h	Fish	300mg/l	Not Available
LC50	96h	Fish	450mg/l	Not Available

Tris(2-chloroisopropyl)phosphate

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	96h	Algae or other aquatic plants	4mg/l	1
BCF	1008h	Fish	0.8-2.8	7
ErC50	72h	Algae or other aquatic plants	4mg/l	1
EC50	48h	Crustacea	65335mg/l	1
EC50	72h	Algae or other aquatic plants	82mg/l	Not Available
EC50(ECx)	96h	Algae or other aquatic plants	4mg/l	1
LC50	96h	Fish	56.2mg/l	Not available

Ethylenediamine, propoxylated

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	72h	Algae or other aquatic plants	150.67mg/l	2
LC50	96h	Fish	~4600mg/l	2
NOEC(ECx)	72h	Algae or other aquatic plants	4.25mg/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

Section 13. Disposal Considerations

Disposal Method:

Ensure containers are empty before discarding. Recycle where possible. Dispose as per Local Regulations.

Precautions and methods to avoid: None known.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in Australia; ADG 7

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021



Road, Rail, Sea and Air Transport

UN No	3500
Class - Primary	2.2

Product Name: SabreFix F35 – Part B
Date of SDS: 24 July 2024

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: +64 9 475 5240 WWW.techcomp.co.nz

Packing Group	Not applicable
Proper Shipping Name	CHEMICAL UNDER PRESSURE, N.O.S.
Marine Pollutant	No
Special Provisions	274, 362

Section 15 Regulatory Information

Australia:

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Poison Schedule No: Not scheduled

New Zealand:

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: Construction Products (Carcinogenic) - HSR002545

Controls in New Zealand:

Trigger quantities for this substance:

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	10 000kg
Emergency Response Plan	1000kg
Secondary Containment	1000kg
Restriction of Use	Only use for the intended purpose.

Section 16 Other Information

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

Australia:

1. Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
2. Standard for the Uniform Scheduling of Medicines and Poisons.
3. Australian Code for the Transport of Dangerous Goods by Road & Rail.

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4. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
5. Workplace exposure standards for airborne contaminants, Safe work Australia.
6. American Conference of Industrial Hygienists (ACGIH).
7. Globally Harmonised System of classification and labelling of chemicals.

New Zealand:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the Australian Manufacturer or New Zealand distributor, if further information is required.

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