Material safety data sheet

Product name: Stryker Lubricant Can

	Australian sponsor	**New Zealand sponsor**
Name:	Stryker Australia	Stryker New Zealand
Address:	8 Herbert Street St Leonards NSW Australia 2065	511 Mt Wellington Highway Auckland, New Zealand 1060
Phone No:	+61 02 9467 1000	+64 09 573 1890
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Emergency:	Poisons Information Centre: Ph: 131 126	Poisons and hazardous chemicals emergency: Ph: 0800 764 766

Stryker Lubricant Can

Safety Data Sheet (SDS)

SECTION 1: IDENTIFICATION

1.1 Product Identifier:

Product name: Stryker Lubricant Can

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

Identified uses: Medical device lubricant.

1.3 Details of the Supplier of the Safety Data Sheet (SDS):

Supplier: Stryker Distribution

6300 S. Sprinkle Road
Portage, Michigan 49002
United States
Phone: 1-269-389-3706

Contact: Melissa.Kann@stryker.com

Manufacturer: Stryker Instruments

4100 E. Milham Avenue
Kalamazoo, Michigan 49001
United States

1.4 Emergency Telephone Number:

From Europe: 00353 61 498200 (24 hrs)

From US or Canada: CHEMTREC 1-(800)-424-9300
For Hazardous Materials [or Dangerous Goods] Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC within the USA and Canada at 800-424-9300 or globally at 703-527-3887 (collect calls accepted).

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

2.1.1 Classification in accordance with EC 1272/2008:

Press. Gas - H280

2.1.2 Classification in accordance with GHS:

Press. Gas - H280

2.1.3 Classification in accordance with 29 CFR 1910 (OSHA HCS):

This product is hazardous under the OSHA Hazard Communication Standard.

2.1.4 Classification in accordance with HSNO:

Not a hazardous substance, dangerous goods only.

2.1.5 Classification in accordance with WHMIS:

Class A Compressed Gas: If heated, exposed to variations in temperature, dropped or abused, it may explode.

2.1.6 Classification in accordance with HMIS III:

Health hazard:	1
Flammability:	1
Physical Hazard:	0

2.1.7 Classification in accordance with NFPA:

Health hazard:	2
Flammability:	1
Instability:	0

2.2 Label Elements:

Label in accordance with (EC) No. 1272/2008:

Signal word: **Warning**

Hazard statements:	**H280**	Contains gas under pressure; may explode if heated.
Precautionary statements:	**P405**	Store locked up.
	P410+403	Protect from sunlight. Store in a well ventilated place.

2.3 Other Hazards:

No additional information available.

2.3.1 Potential Health Effects:

Inhalation:	Major potential route of exposure. Minimal effects observed below 1000 ppm. Dizziness, drowsiness, and throat irritation possible at levels above 1000 ppm. Unconsciousness and death at levels above 10000 ppm. Blood pressure depression, cardiac sensitization, and ventricular arrhythmia can result from exposure to near-anesthetic levels.
Ingestion:	Single dose toxicity is low to moderate. If vomiting occurs the liquid can be aspirated into the lungs, which can cause chemical pneumonia and systemic effects. Human psychotropic, gastrointestinal and central nervous system effects possible.
Skin:	Prolonged or repeated contact with liquid can cause freezing of skin tissues, defatting, and dermatitis.
Eyes:	Liquid can cause slight, temporary irritation with slight temporary corneal injury. Vapors can irritate eyes.
Route of Entry:	No data
Target Organs:	No data

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

This product is a preparation.

3.2 Mixtures:

Product Name:	Product Identifier:	Percent Range:	GHS Classification (EC1272/2008):
trans-1,3,3,3-Tetrafluoroprop-1-ene	29118-24-9	90-99%	Press. Gas - H280

Note: The full text for all R-Phrases and Hazard Statements are displayed in *Section 16*.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:

Inhalation:	Move to fresh air in case of accidental inhalation of vapors. If victim has stopped breathing, give artificial respiration. Call for prompt medical attention.
Ingestion:	Do not induce vomiting unless directed by a physician. If conscious and alert, give two glasses of water. Seek medical attention immediately.
Skin:	Remove contaminated clothing (including shoes) and wash before reuse. Flush with copious lukewarm (not hot) water. Use soap if available. If irritation persists, seek medical attention.
Eyes:	Flush eyes with large amounts of lukewarm (not hot) water for 15 minutes or until irritation subsides. If irritations persist, get medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed:

General information:	The severity of the symptoms described will vary dependent of the concentration and the length of exposure.
Inhalation:	Major potential route of exposure. Minimal effects observed below 1000 ppm. Dizziness, drowsiness, and throat irritation possible at levels above 1000 ppm. Unconsciousness and death at levels above 10000 ppm. Blood pressure depression, cardiac sensitization, and ventricular arrhythmia can result from exposure to near-anesthetic levels.
Ingestion:	Single dose toxicity is low to moderate. If vomiting occurs the liquid can be aspirated into the lungs, which can cause chemical pneumonia and systemic effects. Human psychotropic, gastrointestinal, and central nervous system effects possible.
Skin:	Prolonged or repeated contact with liquid can cause freezing of skin tissues, defatting, and dermatitis.

Eyes: Liquid can cause slight, temporary irritation with slight temporary corneal injury. Vapors can irritate eyes.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media:

Fire can be extinguished using: Water mist, foam, dry chemical, carbon dioxide.

5.2 Special Hazards Arising from the Substance or Mixture:

Hazardous combustion products: Smoke, fumes, oxides of carbon, and hydrogen fluoride.

Unusual fire and explosion hazards: No unusual fire and explosion hazards noted.

Specific hazards: Aerosol cans may erupt with force at temperatures above 120˚F.

5.3 Advice for Firefighters:

Special firefighting procedures: Use water to cool containers exposed to a fire. Avoid breathing fire vapors.

Protective equipment for firefighters: Firefighters should wear self-contained, positive-pressure breathing apparatus and avoid skin contact.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures:

Follow precautions for safe handling described in this SDS. In case of spills, beware of slippery floors and surfaces.

6.2 Environmental Precautions:

Do not discharge into drains, water courses, or onto the ground.

6.3 Methods and Material for Containment and Cleaning Up:

Evacuate area. Ventilate area well and avoid breathing vapors. Vapor concentration will be highest along floor and in low lying areas. Pick up liquid on suitable absorbent and store in sealed containers.

6.4 Reference to Other Sections:

For waste disposal, see *Section 13*.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Use proper personal protection when handling (see *Section 8*). Use under well-ventilated conditions. Wash thoroughly after handling. Rinse container before disposal.

7.2 Conditions for Safe Storage, Including any Incompatibilities:

Keep container closed when not in use. Store in cool, well ventilated place out of direct sunlight and away from incompatible materials (see *Section 10*). Follow all SDS and Label warnings even after container is emptied.

7.3 Specific End Use(s):

The identified uses for this product are detailed in *Section 1.2*.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Guidelines:

Components	CAS-No.	Value	Control Parameters	Update	Basis
trans-1,3,3,3-Tetrafluoroprop-1-ene	29118-24-9	TWA: Time weighted average	(800 ppm)	2102	WEEL: US. OARS. WEELs Workplace Environmental Exposure Level Guide
trans-1,3,3,3-Tetrafluoroprop-1-ene	29118-24-9	TWA: Time weighted average	(800 ppm)	31.03.11	Honeywell: Limit established by Honeywell International Inc.

8.2 Exposure Controls:

8.2.1 Engineering measures:

Provide adequate ventilation.

8.2.2 Protective equipment:

Eye protection: To avoid contact with eyes, use safety goggles.

Skin 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. Handle with gloves.

Other protection: No information required.

8.2.3 Environmental exposure controls:

Do not discharge into drains, water courses, or onto the ground.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

Appearance:	Clear water-white liquid	**Vapor Pressure:**	No data
Odor:	Low odor	**Vapor Density:**	No data
Odor Threshold:	No data	**Relative Density:**	1.17 g/cm^3 at 21.1˚C (70˚F)
pH:	Neutral	**Bulk Density:**	No data
Melting Point/Freezing Point:	No data	**Solubility(ies):**	0
Initial Boiling Point	-19˚C (-2.2˚F)	**Partition Coefficient:**	No data
Flash Point:	No data	**Auto Ignition Temperature:**	325˚C (617˚F)
Evaporation Rate:	No data	**Decomposition Temperature:**	No data
Flammability:	No data	**Viscosity:**	No data
Flammability Limit – Lower	No data	**Explosive Properties:**	No data
Flammability Limit – Upper	No data	**Oxidizing Properties:**	No data

9.2 Other Information:

No other information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

Reacts with alkali metals.

10.2 Chemical Stability:

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions:

Reaction with: Alkali metals

Hazardous polymerization: Hazardous polymerization does not occur.

10.4 Conditions to Avoid:

Contact with open flame or heat.

Oxygen or air above atmospheric pressure.

10.5 Incompatible Materials:

Materials to avoid: Alkali metals

10.6 Hazardous Decomposition Products:

Pyrolysis products containing fluoride, fluorocarbons, or hydrogen fluoride.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

11.1.1 Toxicological information:

No data

11.1.2 Acute toxicity:

No data

11.1.3 Skin corrosion/irritation:

No data

11.1.4 Serious eye damage/irritation:

No data

11.1.5 Respiratory or skin sensitization:

Respiratory sensitization:	No data	**Skin sensitization:**	No data

11.1.6 Germ cell mutagenicity:

Genotoxicity - In Vitro:	No data	**Genotoxicity - In Vivo:**	No data

11.1.7 Carcinogenicity:

IARC Carcinogenicity:	No data	**NTP Carcinogenicity:**	No data

11.1.8 Specific target organ toxicity - single exposure:

STOT - Single exposure: No data **STOT - Repeated exposure:** No data

11.1.9 Route of entry:

No data

11.1.10 Target organs:

No data

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

Not regarded as dangerous to the environment.

12.2 Toxicity:

Acute Toxicity - Fish: No data

Acute Toxicity - Aquatic Invertebrates: No data

Acute Toxicity - Aquatic Plants: No data

12.3 Persistence and Degradability:

Degradability: This product is readily biodegradable.

12.4 Degradability:

Bioaccumulative potential: No data

12.5 Mobility in Soil:

Mobility: No data

12.6 Results of PBT and vPvB Assessment:

This product does not contain any PBT or vPvB substances.

12.7 Other Adverse Effects:

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 General Information:

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.2 Waste Treatment Methods:

Do not dump into any sewers, on the ground, or into any body of water. Rinse containers before disposal. Dispose of all waste in accordance with local, state, and federal regulations covering solid waste disposal.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number:

UN 1950

14.2 UN Proper Shipping Name:

ADR Proper Shipping Name: AEROSOLS, asphyxiant

IMDG Proper Shipping Name: AEROSOLS

ICAO Proper Shipping Name: AEROSOLS, non-flammable

DOT Proper Shipping Name: CONSUMER COMMODITYORM-D

14.3 Transport Hazard Class(es):

Class 2.2

14.4 Packing Group:

ADR/RID/ADN Packing Group: Not applicable

IMDG Packing Group: Not applicable

ICAO Packing Group: Not applicable

DOT Packing Group: Not applicable

14.5 Environmental Hazards:

Environmentally Hazardous Substance/Marine Pollutant: No

14.6 Special Precautions for User:

EMS: F-D, S-U

Emergency Action Code: A98 A145 A153

Hazard Number (ADR): None

Tunnel Restriction Code: (D)

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code:

Not applicable

SECTION 15: REGULATORY INFORMATION

15.1 International Legislation:

15.1.1 **EU Legislation:** Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.1.2 **Canadian Regulations:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

15.1.3 **Australian Regulations:** **Carcinogen Classification Under WHS Regulation 2011, Schedule 10:** Not listed
Standard for the Uniform Scheduling of Medicines & Poisons: Not listed

15.1.4 **US Regulations:** This SDS was prepared in accordance with the (US) Hazard Communication Standard (29 CFR 1910.1200).

California Prop 65: Not listed
Massachusetts "Right-To-Know" List: Not listed
New Jersey "Right-To-Know" List: Not listed
Pennsylvania "Right-To-Know" List: Not listed

15.2 International Inventories:

EU - EINECS/ELINCS:	All listed
Canada - DSL/NDSL:	All listed on DSL
US - TSCA:	All listed
Australia - AICS:	All listed
Japan - MITI:	All listed
Korea - KECI:	All listed
China - IECSC:	All listed
Philippines - PICCS:	All listed
New Zealand - NZIOC:	All listed

15.3 Chemical Safety Assessment:

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Indication of changes:	SDS updated to reflect GHS and formatting of document.
Revision date:	07/2018
Revision:	AA
Hazard statements in full:	**H280** Contains gas under pressure; may explode if heated.

Disclaimer

The foregoing information has been compiled by Stryker from sources it considers reliable and as of the date of this document, is believed to be accurate to the best of Stryker's knowledge. Before using the product identified hereon, all of the foregoing information should be carefully considered. The information herein applies only to the product identified hereon and does not relate to its use in combination with any other material or in any process. The information is provided in good faith to comply with applicable laws. However, no warranty or representation of law or fact, with respect to such information, is intended or given.

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