

Section 1 – Identification of Chemical Product and Company

Code	Description	Size	Colour
21611	Gorilla Silicone Spray	400 ml	Clear

Recommended use:		Lubricant
Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80
	14 Avalon Drive	Phone: (07) 847 5540
	Nawton	Fax: (07) 847 0324
	Hamilton 3200	Email: sales@soudal.co.nz
	New Zealand	Website: www.soudal.co.nz
POISON CENTRE NUMBER: 0800 764 766 (24 hours)		

Section 2 – Hazard Identification

Statement of Hazardous Nature

This product is classified as:

HAZARDOUS SUBSTANCE according to the criteria of HSNO.

REGULATED under NZS5433:2007 Transport of Dangerous Goods on Land

Hazardous Substances and New Organisms (HSNO) classification:

Classification		Hazard statements
Flammable Aerosol Cat 1	2.1.2A	H222 Extremely flammable aerosol
Skin Effects Cat 2	6.3A	H315 Causes skin irritation
Eye Effects Cat 2	6.4A	H319 Causes serious eye irritation
Reproductive Effects Cat 2	6.8B	H361 Suspected of damaging fertility or the unborn child
Narcotic Effects Cat 3	6.9	H336 May cause dizziness or drowsiness
Chronic Aquatic Effects Cat 2 9.1B		H411 Toxic to aquatic life with long lasting effects
Invertebrate Toxicity Cat 2	9.4B	H442 Toxic to terrestrial invertebrates

HSNO Signal Word :

DANGER



Precautionary Statements:

P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
No smoking

P211 Do not spray on an open flame or other ignition source

P251 pressurised container: Do not pierce or burn even after use

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

P281 Use personal protective equipment as required

P261 Avoid breathing fumes/ mists/ vapours

P271 Use only outdoors or in a well ventilated place

P273 Avoid release to the environment

P405 Store locked up

P403+P235 Store in a well ventilated place. Keep container tightly closed.

Section 3 - Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Butane	106-97-8	Flammable Gas Category 1	30 – 40
Naphtha petroleum hydrotreated light	64742-49-0	Flammable Liquid Category 2; Acute Oral Toxicity Category 5; Acute Dermal Toxicity Category 5; Acute Inhalation Toxicity Category 5; Skin Effects Category 2; Eye Effects Category 2; Reproductive Effects Category 2; Narcotic Effects Category 3; Aspiration Category 1; Chronic aquatic Effects Category 2	30 – 40
Propane	74-98-6	Flammable Gas Category 1	10 – 20
Dimethylsiloxane	63148-62-9	Invertebrate Toxicity Category 1	10 – 20
Hexane	110-54-3	Flammable Liquid Category 2; Acute Oral Toxicity Category 5; Skin Effects Category 3; Eye Effects Category 2; STOT – SE Category 1; STOT – RE Category 1; Chronic aquatic Effects Category 2	< 1
Cyclohexane	110-82-7	Flammable liquid Category 2; Acute Oral Toxicity Category 4; Acute Inhalation Toxicity Category 4; Skin Effects Category 3; Chronic Aquatic Effects Category 2; Vertebrate Toxicity Category 3	< 1
Ingredients not contributing to classification			balance

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

Section 4 – First Aid Measures

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Eye contact:

Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes 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. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin contact:

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:

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:

Avoid giving milk or oils. Avoid giving alcohol. 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.

General advice and advice for physicians:

Treat symptomatically.

Section 5 - Fire-Fighting Measures

Extinguishing media:

Foam, Carbon Dioxide, Dry Powder

Fire/ Explosion Hazard

Containers may explode when heated - Ruptured cylinders may rocket May burn but does not ignite easily. Fire exposed cylinders may vent contents through pressure relief devices thereby increasing vapour concentration. Fire may produce irritating, poisonous or corrosive gases. Runoff may create fire or explosion hazard. May decompose explosively when heated or involved in fire. Contact with gas may cause burns, severe injury and/ or frostbite. **POISONOUS: MAY BE FATAL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN**

Advice for fire-fighters:

Alert Fire Brigade and tell them location and nature of hazard. 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. Use water delivered as a fine spray to control fire and cool adjacent area. **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 cylinders from path of fire. Equipment should be thoroughly decontaminated after use. Excessive pressures may develop in a gas cylinder exposed in a fire; this may result in explosion. 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. Positive pressure, self-contained breathing apparatus is required for fire-fighting of hazardous materials.

Full structural fire-fighting (bunker) gear is the minimum acceptable attire. The need for proximity, entry and special protective clothing should be determined for each incident, by a competent fire-fighting safety professional.

Section 6 - Accidental Release Measures**Minor Spills**

Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Wear protective clothing, impervious gloves and safety glasses.

Shut off all possible sources of ignition and increase ventilation. Wipe up. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely.

Major Spills

Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by all means available, spillage from entering drains or water courses. Consider evacuation (or protect in place).

No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse / absorb vapour.

Contain or absorb spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services. **DO NOT enter confined space where gas may have collected.** Keep area clear until gas has dispersed. Remove leaking cylinders to a safe place. **DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve.** May be violently or explosively reactive. If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely. Collect residues and seal in labelled drums for disposal.

Section 7 - Handling and Storage**Handling:**

The conductivity of this material may make it a static accumulator. A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. **DO NOT enter confined spaces until atmosphere has been checked.** Avoid smoking, naked lights or ignition sources.

Avoid contact with incompatible materials. **When handling, DO NOT eat, drink or smoke. DO NOT incinerate or puncture aerosol cans. DO NOT spray directly on humans, exposed food or food utensils.** Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Storage:

Cylinders should be stored in a purpose-built compound with good ventilation, preferably in the open. Such compounds should be sited and built in accordance with statutory requirements. The storage compound should be kept clear and access restricted to authorised personnel only. Cylinders stored in the open should be protected against rust and extremes of weather. Cylinders in storage should be properly secured to prevent toppling or rolling.

Cylinder valves should be closed when not in use. Where cylinders are fitted with valve protection this should be in place and properly secured.

Gas cylinders should be segregated according to the requirements of the Hazardous Substances & New Organisms Act. Preferably store full and empty cylinders separately. Check storage areas for hazardous concentrations of gases prior to entry. Full cylinders should be arranged so that

the oldest stock is used first. Cylinders in storage should be checked periodically for general condition and leakage. Protect cylinders against physical damage. Move and store cylinders correctly as instructed for their manual handling.

Section 8 - Exposure Controls/Personal Protection

Exposure limits:



CAS no.	Substance or ingredient	WES-TWA	WES-STEL
106-79-8	Butane	1900 mg/m ³ (800 ppm)	
110-54-3	Hexane	72 mg/m ³ (20 ppm)	
110-82-7	Cyclohexane	350 mg/m ³ (100 ppm)	1050 mg/m ³ (300 ppm)

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Engineering Controls:

CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build-up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear. 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. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Exposure controls:

Control	Protective measure
Eye	Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent] No special equipment required due to the physical form of the product. 
Respiratory	Type AG Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent) Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.
Skin	PE/EVAL/PE or Viton. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn. [AS 2161] Wear protective clothing. 

Section 9 - Physical and Chemical Properties

General substance properties:

Property	Details
Appearance	Aerosol
Odour	No data
pH	No data
Vapour pressure	No data
Vapour Density	No data
Viscosity	Not applicable
Boiling Point	No data
Volatile materials	No data
Water solubility	immiscible
Freezing/melting point	No data.
Specific gravity/density	0.7 +/- 0.02 g/ml
Flash point	20 C
Auto-ignition temperature	No data
Upper and lower flammability limits	Lower % Upper %
Corrosiveness	No data.

Section 10 - Stability and Reactivity

Stability:

Stable under normal conditions.

Conditions to avoid:

Ignition sources; elevated temperatures

Incompatible materials to avoid:

Avoid oxidising agents (nitrates, oxidising acids, chlorine bleaches, pool chlorine etc) as ignition may result

Hazardous decomposition products:

Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂) other pyrolysis products typical of burning organic material. May emit corrosive fumes.

Section 11 - Toxicological Information

Summary of Toxicity

Test	Data and symptoms of exposure
Inhaled	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of the vapour is hazardous and may even be fatal. 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

	<p>mechanical ventilation. Inhalation of toxic gases may cause: Central Nervous System effects including depression, headache, confusion, dizziness, stupor, coma and seizures; respiratory: acute lung swellings, shortness of breath, wheezing, rapid breathing, other symptoms and respiratory arrest; heart: collapse, irregular heartbeats and cardiac arrest; gastrointestinal: irritation, ulcers, nausea and vomiting (may be bloody), and abdominal pain. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and incoordination. 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. WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.</p>
Oral	<p>Accidental ingestion of the material may be damaging 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 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.</p>
Dermal	<p>This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Spray mist may produce discomfort 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.</p>
Eye	<p>This material can cause eye irritation and damage in some persons. Not considered to be a risk because of the extreme volatility of the gas.</p>
Chronic	<p>Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Principal route of occupational exposure to the gas is by inhalation. Chronic inhalation or skin exposure to n-hexane may cause damage to nerve ends in extremities, e.g. finger, toes with loss of sensation. Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]</p>

Butane LC₅₀ Rat inhalation 658 mg/Lt/4hr

Naphtha petroleum hydrotreated light
 LD₅₀ Rat oral >2000mg/kg
 LD₅₀ Rabbit dermal >1900 mg/kg

Section 12 - Ecological Information

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

Section 13 - Disposal Considerations

DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal.

In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Consult Land Waste Management Authority for disposal. Discharge contents of damaged aerosol cans at an approved site. Allow small quantities to evaporate. **DO NOT incinerate or puncture aerosol cans.** Bury residues and emptied aerosol cans at an approved site. Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

Section 14 - Transport Information



HAZCHEM

Land Transport UNDG

Class or division 2.1
 Subsidiary Risk
 UN Number **1950**
 UN Packing Group
 Shipping Name **AEROSOLS, FLAMMABLE**
 Special Provisions 63 190 277 327 344 381
 Limited Quantities 1000 ml

Air Transport IATA

ICAO/IATA Class 2.1
 ICAO/IATA Subrisk
 UN/ID Number **1950**
 Packing Group
 Special provision A145 A167 A802
 Cargo only
 Packing instructions 203
 Maximum Qty/pack 150 Kg
 Passenger and Cargo
 Packing instructions 203 Forbidden
 Maximum Qty/pack 75 Kg Forbidden
 Passenger & Cargo Limited Quantity
 Packing instructions Y203 Forbidden
 Maximum Qty/pack 30 Kg G Forbidden
 Shipping Name **AEROSOLS, FLAMMABLE**

Marine Transport IMDG

IMDG Class 2.1
 IMDG Subrisk
 UN Number **1950**
 UN Packing Group
 EmS Number F-D, S-U
 Special provisions 63 190 277 327 344 959
 Limited quantities SP277
 Marine pollutant Yes
 Shipping Name **AEROSOLS, FLAMMABLE**

Section 15 - Regulatory Information

HSNO approval number and Group Standard:

HSR002515 Aerosols (Flammable)

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Safety data sheet must be available to a person handling the substance within 10 minutes.
Emergency plan	Required when quantities exceed 100 Lt
Approved handler	Class 2.1.2A when quantities exceed 3000 L water equivalent

Tracking	Not applicable
Bunding and secondary containment	Not applicable
Signage	Required when present in quantity 1,000 L.
Test certificate	Class 2.1.2A when quantities exceed 3000 L water equivalent
Hazardous Atmosphere zone	Required
Fire extinguisher	2x required

Butane (CAS 106-97-8) is found on the following regulatory lists

- International Air transport Association (IATA) Dangerous Goods Regulations – Prohibited List Passenger and Cargo Aircraft
- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

Propane (CAS 74-98-6) is found on the following regulatory lists

- International Air transport Association (IATA) Dangerous Goods Regulations – Prohibited List Passenger and Cargo Aircraft
- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

Polydimethylsiloxane (CAS 63148-62-9) is found on the following regulatory lists

- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

n-hexane (CAS 110-54-3) is found on the following regulatory lists

- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
- New Zealand Workplace Exposure Standards WES

cyclohexane (CAS 110-82-7) is found on the following regulatory lists

- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
- New Zealand Workplace Exposure Standards WES

Naphtha petroleum hydrotreated light (CAS 64742-48-9) is found on the following regulatory lists

- New Zealand Inventory of Chemicals (NZIoC)

Section 16 – Other Information

Revision History

March 2017

origination

Abbreviations:

Abbreviation	Description
CAS number	Number assigned to chemical in the Chemical Abstracts Service registry
HAZCHEM code	Code used by fire-fighters to determine correct method of action in the case of fire
HSNO	Hazardous Substances and New Organisms (Act)
ICAO Technical Instructions	International Civil Aviation Organization Technical Instructions
IMDG code	International Maritime Dangerous Goods code controlled by the International Maritime Organization (IMO)
LC ₅₀	Lethal concentration 50% - concentration fatal to 50% of the tested population
LD ₅₀	Lethal dose 50% - dose fatal to 50% of the tested population

NZS 5433	New Zealand Standard 5433 (Standard for the Transport of Dangerous Goods on Land)
SDS	Safety data sheet
STEL	Short term exposure limit
TWA	Time weighted average (typically measured as 8 hours)
UN number	United nations number
WES	Workplace exposure standard

References

Chemical properties and HSNO classifications derived from the New Zealand chemical classification information database (CCID). www.epa.govt.nz.

Workplace exposure limits derived from Workplace Exposure Standards and Biological Exposure Indices 7th Edition. www.mbie.govt.nz.

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material in combination with any other material or in any process, unless specified in the text.

This SDS was prepared by Collievale Enterprises in accord with the EPA "Code of Practice for the Preparation of Safety Data Sheets" [HSNOCOP 8-1 (2006)] <http://www.collievale.com> Phone +64 7 5432428

End of MSDS

Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80
	14 Avalon Drive	Phone: (07) 847 5540
	Nawton	Fax: (07) 847 0324
	Hamilton 3200	Email: sales@soudal.co.nz
	New Zealand	Website: www.soudal.co.nz