

Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
20255	Gorilla MS Expanding Foam	500 ml	White

Recommended use:	Expanding Foam	
HSNO Group Standard	HSR002515	
UN number, shipping name and packaging group:	UN1950 Aerosols	
Suppliers contact details:	Soudal Ltd	Freephone:0800 70 10 80
	14 Avalon Drive	Phone:(07) 847 5540
	Nawton	
	Hamilton 3200	Email:sales@soudal.co.nz
	New Zealand	Website: www.soudal.co.nz
POISON CENTRE NUMBER: 0800 764 766 (24 hours)		

Section 2 Hazards 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 Category 1 2.1.2A	H222 Extremely flammable aerosol
Eye Effects Category 2 6.4A	H319 Causes serious eye irritation
Chronic Aquatic Hazard Category 2 9.1B	H411 Toxic to aquatic life with long lasting effects

HSNO Signal Word:

DANGER



Precautionary Statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking	P273	Avoid release to the environment
P211	Do not spray on an open flame or other ignition source	P391	Collect spillage
P251	Do not pierce or burn even after use		
P260	Do not breathe gas	P405	Store locked up
P271	Use only outdoors or in a well-ventilated place	P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C
P284	In case of inadequate ventilation wear respiratory protection	P403+P233	Store in a well-ventilated place. Keep container tightly closed
P280	Wear protective gloves/ Protective clothing/ face protection		

Section 3. Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Propane, 2-methyl	75-28-5	Flammable Gas Category 1	1 – 10
Dimethyl ether	115-10-6	Flammable Gas Category 1; Eye Effects Category 2	1 – 10
Phenyltrimethoxysilane	2996-92-1	Flammable Liquid Category 4; Acute Inhalation Category 5; Skin Effects Category 2; Eye Effects Category 2; STOT – SE RTI Category 3; Acute Aquatic Hazard Category 3	1 - 10
Propane	74-98-6	Flammable Gas Category 1	1 - 10
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:

Following uptake by inhalation, move person to an area free from risk of further exposure. Oxygen or artificial respiration should be administered as needed. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. A physician should be consulted. If aerosols, fumes or combustion products are inhaled: Remove to fresh air; Lay patient down. Keep warm and rested; Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures; If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.

Ingestion:

Not considered a normal route of entry.

General advice and advice for physicians:

Treat symptomatically.

Section 5 Fire-Fighting Measures

Extinguishing media:

Foam, Carbon Dioxide, Dry Powder

Fire/ Explosion Hazard

Extremely flammable. Serious fire hazard when exposed to heat or flame. When heated to high temperatures decomposes rapidly generating vapour which pressures and may then rupture containers with release of flammable and highly toxic isocyanate vapour. Burns with acrid black smoke and poisonous fumes. Due to reaction with water producing CO₂-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Combustion yields traces of highly toxic hydrogen cyanide HCN, plus toxic nitrogen oxides NO_x and carbon monoxide. 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 & Emergency New Zealand 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 containers suspected to be hot. Equipment should be thoroughly decontaminated after use.

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. Alert Fire & Emergency New Zealand and tell them location and nature of hazard. Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal. Wash area and prevent runoff into drains or waterways. If contamination of drains or waterways occurs, advise emergency services.

Section 7 Handling and Storage

Handling:

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:

Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. 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. Check storage areas for hazardous concentrations of gases prior to entry. 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. Observe manufacturer's storage and handling recommendations contained within this SDS.

Section 8 Exposure Controls/Personal Protection

Exposure Limits




CAS no.	Substance or ingredient	WES-TWA	WES-STEL

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:

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 operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear 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] 
Respiratory	Not generally required, but if concentration exceeds exposure limits then a Type A filter of sufficient capacity is recommended 
Skin	No special equipment needed when handling small quantities. OTHERWISE: For potentially moderate exposures: Wear general Butyl or Neoprene protective gloves. For potentially heavy exposures: Wear chemical protective gloves, eg. PVC, and safety footwear. 

General substance properties:

Property	Details
Appearance	Aerosol
Odour	Characteristic
pH	No data
Vapour pressure	kPa
Vapour Density	> 1 heavier than air
Viscosity	Not applicable
Boiling Point	No data °C
Volatile materials	No data %
Water solubility	miscible
Freezing/melting point	No data.
Specific gravity/density	0.95 g/ml
Flash point	No data °C
Auto-ignition temperature	No data °C
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 and some acids

Hazardous decomposition products:

Combustion products include carbon monoxide (CO), carbon dioxide (CO₂), silicone dioxide and other pyrolysis products typical of burning organic material.

Section 11 Toxicological Information

Summary of Toxicity

Test	Data and symptoms of exposure
Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Isobutane produces a dose dependent action and at high concentrations may cause numbness, suffocation, exhilaration, dizziness, headache, nausea, confusion, incoordination and unconsciousness in severe cases. The vapour is discomforting WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.
Oral	Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments
Dermal	The material may accentuate any pre-existing dermatitis condition 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..
Eye	Not considered to be a risk because of the extreme volatility of the gas. This material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure.
Chronic	There is ample evidence that this material can be regarded as being able to cause cancer in humans based on experiments and other information. Main route of exposure to the gas in the workplace is by inhalation.

Ingredient	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
Isobutane			658 mg/L/4hr
Propane			49943 mg/L/15m

Section 12 Ecological Information

Toxic to aquatic life with long lasting effects. 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.

Ingredient	Fish	Crustacea	Algae
Isobutane	LC _{50 96hr} 6.7 mg/L		EC _{50 96hr} 7.7 mg/L
Propane	LC _{50 96hr} 10.3 mg/L		EC _{50 96hr} 7.7 mg/L

	Persistence H ₂ O/ Soil	Persistence Air	Bioaccumulation	Mobility
Isobutane	HIGH	HIGH	LOW	LOW
Propane	LOW	LOW	LOW	LOW

Section 13 Disposal Considerations

Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product. 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. Recycle wherever possible or consult manufacturer for recycling options. Consult Land Waste Authority for disposal. Bury or incinerate residue at an approved site. Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was

appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled. The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous. Only dispose to the environment if a tolerable exposure limit has been set for the substance. Only deposit the hazardous substance into or onto a landfill or sewage facility or incinerator, where the hazardous substance can be handled and treated appropriately.

Section 14 Transport Information



HAZCHEM

Land Transport UNDG

Class or division 2.1
 Subsidiary Risk None
 UN Number **1950**
 UN Packing Group
 Shipping Name **Aerosols**
 Special Provisions 63 190 277 327 344 381
 Limited Quantities 1000 ml

Air Transport IATA

ICAO/IATA Class 2.1
 ICAO/IATA Subrisk None
 UN/ID Number **1950**
 Packing Group
 Special provision A145 A167A802A1
 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**

Marine Transport IMDG

IMDG Class 2.1
 IMDG Subrisk None
 UN Number **1950**
 UN Packing Group
 EmS Number F-D, S-U
 Special provisions 63 190 277 327 344 381 969
 Limited quantities 1000 ml
 Marine pollutant Yes
 Shipping Name **Aerosols**

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 3000 Lt waterequivalent
Certified handler	Not required

Tracking	Not applicable
Bunding and secondary containment	Not applicable
Signage	Required when present in quantities exceeding 3000 Lt water equivalent
Location Compliance Certificate	Required when present in quantities exceeding 3000 Lt water equivalent
Hazardous Area	As per AS/NZS60079.10
Fire extinguisher	2 required when present in quantities exceeding 3000 Lt water equivalent

National Inventories

Australia	AICS	Y
Canada	DSL	Y
Canada	NDSL	N
China	IECSC	Y
Europe	EINEC/ELINCS/NLP	Y
Japan	ENCS	Y
Korea	KECI	Y
New Zealand	NZIOC	Y
Philippines	PICCS	Y
USA	TSCA	Y
Taiwan	TCSI	Y
Mexico	INSQN	
Vietnam	NCI	Y
Russia	ARIPS	T

Section 16 Other Information

Revision History October 2020 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 11th Edition (November 2019).

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 Ltd in accord with the Hazardous Substances (Safety Data Sheets) Notice 2017

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End of SDS