

Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
20256	Gorilla One Shot Foam	150 ml	Champagne

Recommended use:		Sealant	
HSNO Group Standard		HSR002517	
UN number, shipping name and packaging group:		UN1950 Aerosols	
Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80	
	14 Avalon Drive	Phone: (07) 847 5540	
	Nawton		
	Hamilton 3200	Email: info@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 NZS5433:2020 Transport of Dangerous Goods on Land

Hazardous Substances and New Organisms (HSNO) classification:

Classification		GHS Hazard statements
Flammable Aerosol Category 1		H222+229 Extremely flammable aerosol. Pressurised container: may burst if inhaled
Acute Inhalation Toxicity	Category 4	H332 Harmful if inhaled
Skin Effects	Category 2	H315 Causes skin irritation
Eye Effects	Category 2	H319 Causes serious eye irritation
Respiratory Sensitisation	Category 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Sensitisation	Category 1	H317 May cause an allergic skin reaction
Carcinogenicity	Category 2	H351 Suspected of causing cancer
STOT – RE Category 1		H372 Causes damage to organs through prolonged or repeated inhalation
STOT – SE RTI	Category 3	H335 May cause respiratory irritation

HSNO Signal Word: DANGER





Precautionary Statements:

Keep out of reach of children

Ensure all safety directions are read and understood before use

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking	P272		minated work clothing should not be allowed out workplace
P211	Do not spray on an open flame or other ignition source)270	Do not	t eat, drink or smoke while handling this product
P251	Do not pierce or burn, even after use			
P260	Do not breathe gas	P405	Store I	ocked up
P271	Use only outdoors or in a well-ventilated area	P410+4	12	Protect from sunlight. Do not expose to
P284	In case of inadequate ventilation wear respiratory		tempe	ratures exceeding 50°C
	protection	P403+2	33	Store in a well-ventilated place. Keep container
P280	Wear protective clothing/ protective gloves/ eye protection and face protection		tightly	closed
P284	Wash all exposed external body areas thoroughly after handling	P501	hazard	e of contents/ container to an authorised lous or special waste collection point in lance with any local legislation

Section 3. Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Polymethylene polyphenylisocyanate	9016-87-9	Acute Inhalation Toxicity Category 4; Skin Effects Category 2; Eye Effects Category 2; Respiratory Sensitisation Category 1; Skin Sensitisation Category 1; Carcinogenicity Category 2; STOT – RE Category 1; STOT – SE RTI Category 3	25 – 50
Reaction Products of phosphoryl trichloride and 2-methyloxirane	1244733-77-4	Acute Oral Toxicity Category 4	10 – 25
Isobutane	75-28-5	Flammable Gas Category 1	5 - 10
Dimethyl Ether	115-10-6	Flammable Gas Category 1	5 - 10
Propane	74-98-6	Flammable Gas Category 1	5 - 10
Ingredients not contributing to the class	balance		

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

Gorilla One Shot Foam Updated: 31st March 2022



Ingestion:

Not considered a normal route of entry

General advice and advice for physicians:

Treat symptomatically.

Section 5 Fire-Fighting Measures

Extinguishing media:

Foam; Water spray, dry chemical or CO₂

Fire Incompatibility:

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Special hazards due to combustion:

Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Severe explosion hazard, in the form of vapour, when exposed to flame or spark. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition with violent container rupture. Aerosol cans may explode on exposure to naked flames. Rupturing containers may rocket and scatter burning materials. Hazards may not be restricted to pressure effects. May emit acrid, poisonous or corrosive fumes. On combustion, may emit toxic fumes of carbon monoxide (CO)

Advice for fire-fighters:

Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

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

Remove leaking cylinders to a safe place. DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses 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. Absorb or cover spill with sand, earth, inert materials or vermiculite. 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:

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:

Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can Store in original containers in approved flammable liquid storage area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Keep containers securely sealed. Contents under pressure. Store away from incompatible materials. Store in a cool, dry, well-ventilated area. Avoid storage at temperatures higher than 40 deg C. Store in an upright position. Protect containers against physical damage. Check regularly for spills and leaks. Observe manufacturer's storage and handling recommendations contained within this SDS

Suitable Container:

Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.



Section 8 Exposure Controls/Personal Protection

Exposure Limits

CAS no.	Substance or ingredient	WES-TWA	WES-STEL
9016-87-9	Polymeric diphenylmethane diisocyanate	0.02 mg/m ^{3 as -NCO}	0.07 mg/m ^{3 as -NCO}
115-10-6	Dimethyl ether	766 mg/m³	958 mg/m ³

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.

Engiineering 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. For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. 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
Еуе	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. [AS/NZS 1336 or national equivalent] Close fitting gas tight goggles
Respiratory	Not normally required. Where inadequate ventilation exists then a full face respirator with supplied air is recommended
Skin	Butyl or Neoprene gloves. 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:

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Property	Details	
Appearance	Liquid in aerosol form	
Odour	No data	
рН	No data	
Vapour pressure	Not applicable kPa	
Viscosity	No data	
Vapour Density	No data	



Boiling Point		
Volatile materials	No data %	
Freezing/melting point	No data	
Solubility	Insoluble	
Specific gravity/density	0.963 g/ml	
Flash point	No data °C	
Danger of explosion	Not applicable	
Auto-ignition temperature	Not applicable °C	
Upper and lower flammability limits	LEL Not applicable % UEL Not applicable %	
Evaporation Rate	No data Butyl acetate = 1	
Corrosiveness	No data	
Viscosity	mm²/s 20°C	

Section 10 Stability and Reactivity

Stability:

Stable under normal conditions.

Conditions to avoid:

Elevated temperatures. Presence of open flame

Incompatible materials to avoid:

Avoid oxidising agents, strong acids and strong bases.

Hazardous decomposition products:

Combustion will result in the release of carbon monoxide (CO), carbon dioxide (CO₂); isocyanates (-NCO), Hydrogen Cyanide (HCN) and minor amounts of Nitrogen oxides (NO_x) and pyrolysis products typical of burning organic material. May emit corrosive fumes.

Section 11 Toxicological Information

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. 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. 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. The vapour/mist may be highly irritating to the upper respiratory tract and lungs; the response may be severe enough to produce bronchitis and pulmonary oedema. Gastrointestinal disturbances are characterised by nausea and vomiting. Pulmonary sensitisation may produce asthmatic reactions ranging from minor breathing difficulties to severe allergic attacks; this may occur following a single acute exposure or may develop without warning for several hours after exposure. Sensitized people can react to very low doses and should not be allowed to work in situations allowing exposure to this material. Continued exposure of sensitised persons may lead to possible long term respiratory impairment. Inhalation hazard is increased at higher temperatures.



Oral	Constant use of purgatives/laxatives may decrease the sensitivity of the intestinal mucosa causing a diminished response to normal stimuli. The redevelopment of a normal habit is thus prevented. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments incoordination and diarrhoea. Accidental ingestion of the material may be seriously damaging to the health of the individual; animal experiments indicate that ingestion of less than 40 gram may be fatal.
Dermal	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Entry into the bloodstream 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. Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.
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 has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother. This product contains a polymer with a functional group considered to be of high concern. Isothiocyanates may cause hypersensitivity of the skin and airways. Main route of exposure to the gas in the workplace is by inhalation. Persons with a history of asthma or other respiratory problems or are known to be sensitised, should not be engaged in any work involving the handling of isocyanates.

	Oral LD ₅₀ mg/m ³	Dermal LD ₅₀ mg/m ³	Inhalation LC50 mg/L
ATE			3.981 /4h
Polymeric diphenylmethane diisocyanate	43000	>9400	0.49 /4h
Reaction products of phosphoryl trichloride and 2- methyloxirane	632	>2000	>7 /4h
Tris(2-chloroisopropyl)phosphate	>500	>2000	>4.6 / 4h
Castor Oil	>4800		
Isobutane			>13023 ppm/4h
Dimethyl ether			>20000 ppm/4h
Propane			>13023 ppm/4h

Section 12 Ecological Information

Summary of Ecotoxicity

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. DO NOT discharge into sewer or waterways.

	Fish mg/L	Crustacea mg/L	Algae mg/L
Tris(2-chloroisopropyl) phosphate	LC _{50 96hr} 11	EC _{50 48h} 65335	EC _{50 72hr} 33
		NOEC _{48hr} ≥10	EC _{50 96hr} 4
Castor Oil		EC _{50 48hr} > 100	EC _{50 72hr} > 100
Isobutane	LC _{50 96hr} 24.11		EC _{50 96hr} 7.71
Dimethyl ether	LC _{50 96hr} 1783	EC _{50 48h} >4400	EC _{50 96hr} 154.917
-		NOEC _{48hr} ≥4000	
Propane	LC _{50 96hr} 24.11		EC _{50 96hr} 7.71

	Persistence H₂O/ Soil	Persistence Air	Bioaccumulation	Mobility
Tris(2-chloroisopropyl)phosphate	HIGH	HIGH	LOW	LOW
Isobutane	HIGH	HIGH	LOW	LOW
Dimethyl ether	LOW	LOW	LOW	HIGH



Dronana	LOW	LOW	LOW	LOW
Propane	LOW	LOW	LOW	LOW

Section 13 Disposal Considerations

Disposal methods:

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 State 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.

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. DO NOT deposit the hazardous substance into or onto a landfill or a sewage facility. Burning the hazardous substance must happen under controlled conditions with no person or place exposed to (1) a blast overpressure of more than 9 kPa; or (2) an unsafe level of heat radiation.

The disposed hazardous substance must not come into contact with class 1 or 5 substances.

Section 14 Transport Information



HAZCHEM

Land Transport UNDG

UN Number 1950
Shipping Name Aerosols
Class or division 2.1
Subsidiary Risk None

UN Packing Group Not applicable Environmental hazard Not applicable

Special Provisions **63 190 277 327 344 381**

Limited Quantities 1000 ml

Air Transport IATA

UN/ID Number 1950
Shipping Name Aerosols
ICAO/IATA Class 2.1
ICAO/IATA Subrisk None
ERG Code 10L

Packing Group Not applicable Environmental hazard Not applicable

Special provision A145 A167 A802 A1

Cargo only

Packing instructions 203
Maximum Qty/pack 150 Kg

Passenger and Cargo

Packing instructions

Maximum Qty/pack **203; Forbidden 75Kg: Forbidden**

Passenger & Cargo Limited Quantity

Packing instructions Y203: Forbidden
Maximum Qty/pack 30 Kg G: Forbidden

Marine Transport IMDG

UN Number 1950
Shipping Name Aerosol
IMDG Class 2,1
IMDG Subrisk None



UN Packing Group Not applicable Environmental hazard Not applicable EmS Number F-D S-U

Special provisions **63 190 277 327 344 361 959**

Limited quantities 1000 ml

Section 15 Regulatory Information

HSNO approval number and Group Standard:

HSR002517 Aerosols, Flammable, Carcinogenic

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 present in quantities exceed 3000 L aggregate water capacity
Certified Handler	Not required
Tracking	Not required
Bunding and secondary containment	Required based on total quantity and pack size
Signage	Required when present in quantities exceed 3000 L aggregate water capacity
Location Compliance certificate	Required when present in quantities exceed 3000 L aggregate water capacity
Hazardous Atmosphere Zone	Required to meet AS/NZS60079.10
Fire extinguisher	Required when present in quantities exceed 3000 L aggregate water capacity

National Inventories

Y = All ingredients are on the inventory Australia **AICS** Υ Canada DSL Υ Canada NDSL Ν China **IECSC** EINEC/ELINCS/NLP N Europe Japan **ENCS** Korea KECI NZIOC New Zealand Philippines **PICCS** USA **TSCA** Taiwan **TCSI** Mexico INSQ Vietnam NCI ARIPS Russia

Section 16 Other Information

Revision History:

March 2022 Initial preparation

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 12-1 Edition.

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 2020 http://www.collievale.com Phone +64 7 5432428

End of SDS