FSection 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
75129	Gorilla Zinc Spray	400 ml	Grey

Recommended use:		Spray Coating
HSNO Group Standard		HSR002515
UN number, shipping name and packaging group:		UN1950 AEROSOLS
Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80
	134 Kohia Drive	Phone: (07) 847 5540
	Horotiu	Fax: (07) 847 0324
	Hamilton 3288	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 GHS v7.

REGULATED under NZS5433:2020 Transport of Dangerous Goods on Land

GHS classification:

Classification		GHS Hazard statements
Flammable Aerosol	**Category 1**	H222 Extremely flammable aerosol H229 Pressurised container: May burst if heated
Skin Irritation	**Category 2**	H315 Causes skin irritation
Eye Irritation	**Category 2**	H319 Causes serious eye irritation
Reproductive Toxicity	**Category 2**	H361 Suspected of damaging fertility or the unborn child
STOT – RE	**Category 2**	H373 May cause damage to organs through prolonged or repeated inhalation
STOT – SE NE	**Category 3**	H336 May cause drowsiness or dizziness
Chronic Aquatic Hazard	**Category 2**	H411 Toxic to aquatic life with long lasting effects

HSNO Signal Word: DANGER

Precautionary Statements:

P102	Keep out of the reach of children
P103	Read label before use
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211	Do not spray on an open flame or other ignition sources

P251 Do not pierce or burn, even after use
P260 Do not breathe gas
P271 Use only outdoors or in a well-ventilated area
P280 Wear protective gloves, protective clothing, eye protection and face protection
P264 Wash all exposed external body areas thoroughly after handling

P370+378 In case of Fire: Use alcohol resistant foam or normal protein foam to extinguish

P273 Avoid release to the environment
P391 Collect spillage

P501 Dispose of contents/ container to authorised hazardous or special waste collection points in accordance with local regulation

Section 3. Composition/Information on Ingredients

Ingredient	CAS No.	Individual GHS classification	Concentration (% by Wt.)
Methyl acetate	79-20-9	Flammable Liquid Category 2 | Skin Irritation Category 2 | Eye Irritation Category 2 | STOT – SE NE Category 3	20 – 25
Propane	74-98-6	Flammable Gas Category 1	15 - 20
n-Butyl acetate	123-86-4	Flammable Liquid Category 2 | Acute Inhalation Toxicity Category 4 | Eye Irritation Category 2 | STOT – SE NE Category 3	15 – 20
Dimethyl carbonate	616-38-6	Flammable Liquid Category 2 | Chronic Aquatic Hazard Category 2	10 – 12.5
Butane	106-97-8	Flammable Gas Category 1	7 - 10
Isobutane	75-28-5	Flammable Gas Category 1	2.5 - 5
Zinc	7440-66-6	Flammable when Wet Category 2 | Acute Dermal Toxicity Category 4 | Chronic Aquatic Hazard Category 1	2.5 - 5
Methanol	67-56-1	Flammable Liquid Category 2 | Acute Oral Toxicity Category 3 | Acute Dermal Toxicity Category 3 | Acute Inhalation Toxicity Category 3 | Eye Irritation Category 2 | Reproductive Toxicity Category 2 | STOT – RE Category 1	1 – 2.5
Acetone	67-64-1	Flammable Liquid Category 2 | Eye Irritation Category 2 | STOT – SE NE Category 3	1 – 2.5
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:

Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

General advice and advice for physicians:

Treat symptomatically

Section 5 Fire-Fighting Measures

Extinguishing media:

Alcohol stable foam. Dry chemical powder. Carbon dioxide. Water spray or fog - Large fires only

Fire/ Explosion Hazard:

Extremely flammable aerosol

Advice for fire-fighters:

Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. 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. 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 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:

Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for 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

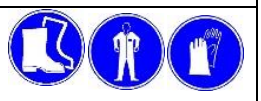
Exposure Limits

CAS no.	Substance or ingredient	WES-TWA	WES-STEL
79-20-9	Methyl acetate	200 ppm 606 mg/m³	250 ppm 757 mg/m³
123-86-4	N Butyl acetate	150 ppm 713 mg/m³	200 ppm 950 mg/m³
106-97-8	Butane	800 ppm 1900 mg/m³	
7440-66-6	Zinc	10 mg/m³ inhalable 3 mg/m³ respirable	
67-56-1	Methanol	200 ppm 262 mg/m³	250 ppm 328 mg/m³
67-64-1	Acetone	500 ppm 1185 mg/m³	1000 ppm 2375 mg/m³

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. If workplace exposure standards are likely to be exceeded, a Type A-P filter is recommended 
Skin	Wear chemical protective gloves, e.g., PE/EVAL/PE. Wear safety footwear or safety gumboots, e.g., Rubber NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watchbands should be removed and destroyed. 

Section 9 Physical and Chemical Properties

General substance properties:

Property	Details
Appearance	Aerosol

Odour	Characteristic
pH	8
Vapour pressure	400 kPa
Vapour Density	Not available
Viscosity	Not available
Boiling Point	No data
Volatile materials	Not available
Freezing/melting point	Not available
Water Solubility	Immiscible
Specific gravity/density	0.75 - 0.8 g/ml
Flash point	Not available
Auto-ignition temperature	No data
Upper and lower flammability limits	Not available
Corrosiveness	Not available

Section 10 Stability and Reactivity

Stability:
Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.

Conditions to avoid:

Incompatible materials to avoid:
Oxidising or reducing agents

Hazardous decomposition products:
carbon monoxide (CO) carbon dioxide (CO2) other pyrolysis products typical of burning organic material.

Section 11 Toxicological Information

Summary of Toxicity

Test	**Data and symptoms of exposure**
Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Headache, drowsiness, dizziness, coma and behavioural changes may occur. The vapour is discomforting WARNING: Intentional misuse by concentrating/inhaling contents may be lethal. The material has NOT been classified by EC Directives or other classification systems as "harmful by inhalation". This is because of the lack of corroborating animal or human evidence. Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. 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.
Oral	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. 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 Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. 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. There is some evidence to suggest that the material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
Eye	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	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Based on experiments and other information, there is ample evidence to presume that exposure to this material can cause genetic defects that can be inherited. 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. Ample evidence exists, from results in experimentation, that developmental disorders are directly caused by human exposure to the material. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following

Ingredient	**Oral LD_{50}**	**Dermal LD_{50}**	**Inhalation LC_{50}**
ATE			
Methyl acetate	3700 mg/kg	>2000 mg/kg	
Propane			>364726 ppm/4h
n-Butyl acetate	3200 mg/kg	3200 mg/kg	0.74 mg/L/4h
Dimethyl carbonate	>5000 mg/kg	> 2000 mg/Kg	> 5.36 mg/L/4h
Butane		>	656 mg/L/4h
Isobutane			> 13023 ppm/4h
Zinc	> 2000 mg/kg	1130 mg/kg	
Methanol	5628 mg/kg	15800 mg/kg	64000 ppm/4h
Acetone	5800 mg/kg	20000 mg/kg	44 mg/L/4h

Section 12 Ecological Information

Summary of Ecotoxicity
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**	**Crustacean**	**Algae**
ATE			
Methyl acetate	$LC_{50\ 96hr}$ 250 mg/L	$EC_{50\ 48hr}$ >1026 mg/L	$EC_{50\ 72hr}$ >120 mg/L NOEC $_{72hr}$ 120 mg/L
N-Butyl acetate	$LC_{50\ 96hr}$ 18 mg/L	$EC_{50\ 48hr}$ 32 mg/L	$EC_{50\ 72hr}$ 246 mg/L
Dimethyl carbonate	$LC_{50\ 96hr}$ > 100 mg/L	$EC_{50\ 48hr}$ >74 mg/L NOEC $_{504hr}$ 25 mg/L	$EC_{50\ 72hr}$ >57 mg/L
Butane	$LC_{50\ 96hr}$ > 24 mg/L		$EC_{50\ 96hr}$ >7 mg/L
Isobutane	$LC_{50\ 96hr}$ > 24 mg/L		$EC_{50\ 96hr}$ >7 mg/L
Zinc	$LC_{50\ 96hr}$ > 0.01 mg/L	$EC_{50\ 48hr}$ >0.06 mg/L	$EC5_{0\ 72hr}$ 0.005 mg/L

			$EC_{50\ 96hr}$ 0.042 mg/L
Methanol	$LC_{50\ 96hr}$ 290 mg/L NOEC $_{720hr}$ 0.007 mg/L	$EC_{50\ 48hr}$ >10000 mg/L	$EC_{50\ 96hr}$ >14 mg/L
Acetone	$LC_{50\ 96hr}$ > 3744 mg/L NOEC $_{12hr}$ 0.001 mg/L	$EC_{50\ 48hr}$ >9 mg/L	$EC5_{0\ 72hr}$ >5600 mg/L

Ingredient	Persistence Water/ Soil	Persistence Air	Bioaccumulation	Mobility
Methyl acetate	LOW	LOW	LOW	MEDIUM
Propane	LOW	LOW	LOW	LOW
N-Butyl acetate	LOW	LOW	LOW	LOW
Dimethyl carbonate	HIGH	HIGH	LOW	LOW
Butane	LOW	LOW	LOW	LOW
Isobutane	HIGH	HIGH	LOW	LOW
Methanol	LOW	LOW	LOW	HIGH
Acetone	LOW	MEDIUM	LOW	HIGH

Section 13 Disposal Considerations

Disposal methods:
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 recycle spilled material. Consult State Land Waste Management Authority for disposal. Neutralise spill material carefully and decontaminate empty containers and spill residues with 10% ammonia solution plus detergent or a proprietary decontaminant prior to disposal. DO NOT seal or stopper drums being decontaminated as CO_2 gas is generated and may pressurise containers. Puncture containers to prevent re-use. Bury or incinerate residues at an approved site.
Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017
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 **Not applicable**

Land Transport UNDG

UN Number	**1950**
Shipping Name	**AEROSOLS**
Class or division	**2.1**
Subsidiary Risk	Not applicable
UN Packing Group	not applicable
Environmental Hazard	**Environmentally hazardous**
Special Provisions	**63 190 277 327 344 381**
Limited Quantities	**1000 ml**

Air Transport IATA

UN/ID Number	**1950**
Shipping Name	**Aerosols, flammable**
ICAO/IATA Class	**2.1**
ICAO/IATA Subrisk	None
ERG Code	**10L**
Packing Group	not applicable
Environmental Hazard	**Environmentally hazardous**
Special provision	**A145 A167 A802**
Cargo only	
Packing instructions	**203**
Maximum Qty/pack	**150 Kg**
Passenger and Cargo	
Packing instructions	**203**
Maximum Qty/pack	**75 Kg**
Passenger & Cargo Limited Quantity	
Packing instructions	**Y203**
Maximum Qty/pack	**30Kg G**

Marine Transport IMDG

UN Number	**1950**
Shipping Name	**AEROSOLS**
IMDG Class	**2.1**
IMDG Subrisk	None
Packing Group	not applicable
Environmental Hazard	**Marine Pollutant**
EmS Number	**F-D S-U**
Special provisions	**63 190 277 327 344 381 959**
Limited quantities	**1000 ml**

Section 15 Regulatory Information

HSNO approval number and Group Standard:

HSR002515 **Aerosols, Flammable**

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Required
Emergency plan	Required when quantities exceed 3000Lt water equivalent
Certified handler	Not required
Tracking	Not applicable
Bunding and secondary containment	Not applicable
Signage	Required when quantities exceed 3000Lt water equivalent
Location Compliance certificate	**Flammable Aerosol Category 1** required when quantities exceed 3000Lt water equivalent
Hazardous Atmosphere Zone	Required to meet AS/NZS 60079.10
Fire extinguisher	2 required when quantities exceed 3000Lt water equivalent

National Inventories

Y = All ingredients are on the inventory

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

Section 16 Other Information

Revision History:

June 2023	Updated formulation
April 2019	Reformulation; updated format
January 2014	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 5433:2020	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 GHS 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 13th Edition (April 2022).

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 Hazardous Substances (Safety Data Sheets) Notice 2020
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End of SDS