Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
20167	**Soudal Anti-Gravel Protective Coating**	500 ml	Black

Recommended use:		Sealant
HSNO Group Standard		HSR002515
UN number, shipping name and packaging group:		UN1950 Aerosol
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. Pressurized container: may burst if heated
Skin Effects	**Category 2**	H315	Causes skin irritation
Eye Effects	**Category 2**	H319	Causes serious eye irritation
STOT – SE NE	**Category 3**	H336	May cause dizziness or drowsiness
Aspiration	**Category 1**	H304	May be fatal if swallowed and enters airways
Chronic Aquatic Hazard	**Category 2**	H411	Toxic to aquatic life with long lasting effects

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

P211 Do not spray on an open flame or other ignition source
P251 Do not pierce or burn even after use

P261 Avoid breathing mists/ vapours/ sprays
P271 Use only in a well-ventilated area

P280 Wear protective gloves and protective clothing
P264 Wash all exposed external body areas thoroughly after handling

P273 Avoid release to the environment
P391 Collect spillage

P403+235 Store in a well-ventilated place. Keep cool
P405 Store locked up
P501 Dispose of contents/ container to authorised hazardous or special waste collection point in accordance with any local regulation

Section 3. Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Dimethyl Ether	115-10-6	Flammable Gas Category 1; Eye Effects Category 2	25 - 75
Hydrocarbons, C_{7-9} n-alkanes, isoalkanes, cyclics, <5% Hexane		Flammable Liquid Category 2; Skin Effects Category 2; STOT – SE NE Category 3; Aspiration Category 1; Chronic Aquatic Hazard Category 2	10 – 25
Ethyl acetate	141-78-6	Flammable Liquid Category 2; Eye Effects Category 2; STOT – RE Category 2	5 – 10
Methyl Ethyl Ketone	78-93-3	Flammable Liquid Category 2; Eye Effects Category 2; STOT – SE Category 2; STOT – RE Category 2	5 – 10
Hydrocarbons, C_7 n-alkanes, isoalkanes, cyclics	64742-49-0	Flammable Liquid Category 2; Skin Effects Category 2; STOT – SE NE Category 3; Aspiration Category 1; Chronic Aquatic Hazard Category 2	5 – 10
Hydrocarbons C_{7-9} n-alkanes, isoalkanes, cyclics	64742-49-0	Flammable Liquid Category 2; Skin Effects Category 2; STOT – SE NE Category 3; Aspiration Category 1; Chronic Aquatic Hazard Category 2	1 - 5
Cyclohexane	110-82-7	Flammable Liquid Category 2; Acute Oral Toxicity Category 4; Acute Inhalation Toxicity Category 4; Chronic Aquatic Hazard Category 2	1 - 5
Hydrocarbons, C_9 aromatics	64742-95-6	Flammable Liquid Category 3; Acute Dermal Toxicity Category 4; STOT – SE NE Category 3; Aspiration Category 1; Chronic Aquatic Hazard Category 3	1 - 5
Ingredients not contributing to the classification			balance

Section 4 First Aid Measures74

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. 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; Water spray, dry chemical or CO_2

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:
Extremely flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. 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. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Slight hazard when exposed to heat, flame and oxidisers.

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 in approved flame-proof area. No smoking, naked lights, heat or ignition sources. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. Keep containers securely sealed. Store away from incompatible materials in a cool, dry well ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Suitable Container:
Packing as supplied by manufacturer.

Section 8 Exposure Controls/Personal Protection

Exposure Limits

CAS no.	Substance or ingredient	WES-TWA		WES-STEL	
115-10-6	Dimethyl Ether	400 ppm	766 mg/m^3	500 ppm	958 mg/m^3
141-78-6	Ethyl Acetate	200 ppm	720 mg/m^3		
78-93-3	Methyl Ethyl Ketone	150 ppm	445 mg/m^3	300 ppm	890 mg/m^3
110-82-7	Cyclohexane	100 ppm	350 mg/m^3	300 ppm	1050 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.

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. 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
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. [AS/NZS 1336 or national equivalent] Close fitting gas tight goggles 
Respiratory	Not normally required. Where inadequate ventilation exists then a Type A filter is recommended 
Skin	Butyl or PE/EVAL/PE or Teflon 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:

Property	Details
Appearance	Black viscous liquid via Aerosol
Odour	Characteristic
pH	No data
Vapour pressure	6 kPa
Viscosity	No data
Vapour Density	No data

Boiling Point	-25 °C
Volatile materials	73 %
Freezing/melting point	No data
Solubility	Immiscible
Specific gravity/density	0.839 g/ml
Flash point	-20 °C
Danger of explosion	Not applicable
Auto-ignition temperature	>200 °C
Upper and lower flammability limits	LEL 0.6 % UEL 18 %
Evaporation Rate	No data Butyl acetate = 1
Corrosiveness	No data
Viscosity	No data

Section 10 Stability and Reactivity

Stability:
Stable under normal conditions.

Conditions to avoid:
Exposure to excessive heat, open flames and sparks. Avoid conditions that favour the formation of excessive mists and/or fumes. Contact with water may release flammable gases.

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 (CO_2); 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. The vapour is discomforting WARNING: Intentional misuse by concentrating/inhaling contents may be lethal. Serious poisonings may result in respiratory depression and may be fatal. Whole body symptoms of poisoning include light-headedness, nervousness, apprehension, a feeling of well-being, confusion, dizziness, drowsiness, ringing in the ears, blurred or double vision, vomiting and sensations of heat, cold or numbness, twitching, tremors, convulsions, unconsciousness, depression of breathing, and arrest. Heart stoppage may result from cardiovascular collapse. A slow heart rate and low blood pressure may also occur. 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. 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 mechanical ventilation.

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. Isoparaffinic hydrocarbons cause temporary lethargy, weakness, incoordination and diarrhoea. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Chronic inhalation or skin exposure to n-hexane may cause damage to nerve ends in extremities, e.g. finger, toes with loss of sensation.
Dermal	This material can cause inflammation of the skin on contact in some persons. 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 Absorption may produce headache, dizziness, and central nervous system depression. 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.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment.

	Oral LD_{50} mg/m³	**Dermal LD_{50} mg/m³**	**Inhalation LC_{50} mg/L**
Dimethyl Ether			>20000 ppm/4h
Hydrocarbons, C_{7-9} n-alkanes, isoalkanes, cyclics, <5% Hexane	>2000	>1900	>4.42 /4h
Ethyl acetate	4100	>18000	>18 /4h
Methyl Ethyl Ketone	2054	6480	32 / 4h
Hydrocarbons, C_7 n-alkanes, isoalkanes, cyclics	>2000	>1900	>4.42 / 4h
Hydrocarbons C_{7-9} n-alkanes, isoalkanes, cyclics	>5840	>2920	>23.3 / 4h
Cyclohexane	12705	>2000	>5540ppm /4h
Hydrocarbons, C_9 aromatics	>4500	>1900	>4.42 /4h

Section 12 Ecological Information

Summary of Ecotoxic

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. DO NOT discharge into sewer or waterways.

	Fish mg/L	**Crustacea mg/L**	**Algae mg/L**
Dimethyl Ether	$LC_{50\ 96h}$ 1783	$EC_{50\ 48h}$ >4400 NOEC $_{504h}$ >4000	$EC_{50\ 96h}$ 154.9
Hydrocarbons, C_{7-9} n-alkanes, isoalkanes, cyclics, <5% Hexane	$LC_{50\ 96h}$ 4.26	$EC_{50\ 48h}$ 0.64 NOEC $_{504h}$ 0.17	$EC_{50\ 96h}$ 64
Ethyl acetate	$LC_{50\ 96h}$ >75.6	$EC_{50\ 48h}$ 164	$EC_{50\ 96h}$ >100
Methyl Ethyl Ketone	$LC_{50\ 96h}$ >324	$EC_{50\ 48h}$ 308 NOEC $_{504h}$ 68	$EC_{50\ 72h}$ 1972 $EC_{50\ 96h}$ >500
Hydrocarbons, C_7 n-alkanes, isoalkanes, cyclics	$LC_{50\ 96h}$ 4.26	$EC_{50\ 48h}$ 0.64 NOEC $_{504h}$ 0.17	$EC_{50\ 96h}$ 64
Hydrocarbons C_{7-9} n-alkanes, isoalkanes, cyclics	$LC_{50\ 96h}$ 4.26	$EC_{50\ 48h}$ 0.64 NOEC $_{504h}$ 0.17	$EC_{50\ 96h}$ 64
Cyclohexane	$C_{50\ 96h}$ 4.53	$EC_{50\ 48h}$ 0.9	$EC_{50\ 96h}$ 3.428
Hydrocarbons, C_9 aromatics		$EC_{50\ 48h}$ 6.14	$EC_{50\ 72h}$ 19 $EC_{50\ 96h}$ 64 $NOEC_{72h}$ 1

	Persistence H_2O/ Soil	**Persistence Air**	**Bioaccumulation**	**Mobility**
Dirmethyl Ether	LOW	LOW	LOW	HIGH

Ethyl Acetate	LOW	LOW	HIGH	LOW
Methyl Ethyl Ketone	LOW	LOW	LOW	MEDIUM
Cyclohexane	HIGH	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 not applicable

Land Transport UNDG

UN Number	**1950**
Shipping Name	**Aerosols**
Class or division	**2.1**
Subsidiary Risk	None
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**
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	**200**
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	**30 Kg G**

Marine Transport IMDG

UN Number	**1950**
Shipping Name	**Aerosols**

IMDG Class	**2.1**
IMDG Subrisk	None
UN 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	Safety data sheet must be available to a person handling the substance within 10 minutes.
Emergency plan	Required when quantities exceed 3000Lt (water equivalent)
Certified Handler	Not required
Tracking	Not required
Bunding and secondary containment	Not required
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 the requirements of 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	N
Vietnam	NCI	Y
Russia	ARIPS	Y

Section 16 Other Information

Revision History:

November 2021	reformulation and reclassification against GHS v7 / EPA thresholds and reformat
July 2019	Error correction plus additional disposal information
June 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 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
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End of SDS