Section 1 – Identification of Chemical Product and Company

Code	Description	Size	Colour
20155	**Soudal Underbody Protective Coating**		Black

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

Section 2 – Hazard Identification

Statement of Hazardous Nature
This product is classified as: **HAZARDOUS SUBSTANCE** according to the criteria of HSNO.

REGULATED under NZS5433:2007 Transport of Dangerous Goods on Land

Hazardous Substances and New Organisms (HSNO) classification:

Classification		Hazard statements	
Flammable Liquid Category 2 3.1B		H225	Highly Flammable Aerosol
Acute Oral Toxicity Category 5 6.1E		H303	May be harmful if swallowed
Acute Dermal Toxicity Category 5	**6.1E**	H313	May be harmful in contact with skin
Acute Inhalation Toxicity Category 5	**6.1E**	H333	May be harmful if inhaled
Skin Effects Category 2	**6.3A**	H315	Causes skin irritation
Eye Effects Category 2	**6.4A**	H319	Causes serious eye irritation
STOT – SE Narcotic Effects Category 3	**6.9**	H336	May cause drowsiness or dizziness
Aspiration Hazard Category 1 6.1E		H304	May be fatal if swallowed and enters airways
Chronic Aquatic Hazard Category 2	**9.1B**	H411	Toxic to aquatic effects with long lasting effects

HSNO Signal Word: DANGER

Precautionary Statements:

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

P240 Ground/ bond container and receiving equipment
P241 Use explosion proof electrical/ ventilating. Lighting/ intrinsically safe equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P270 Do not eat, drink or smoke whilst handling this product
P271 Use only in a well-ventilated area
P260 Do not breathe vapours/ mists/ sprays
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
P281 Use personal protective equipment as required
P273 Avoid release to the environment

P405 Store locked up
P403+P235 Store in a well-ventilated place. Keep Cool

Section 3 - Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Naphtha (petroleum) hydrotreated light	64742-49-0	Flammable Liquid Category 2; Acute Oral Toxicity Category 5; Acute Dermal Toxicity Category 5; Acute Inhalation Toxicity Category 5; Skin Effects Category 2; Eye Effects Category 2; narcotic Effects Category 3; Aspiration Category 1; Chronic Aquatic Hazard Category 2	20 – 50
Solvent naphtha (Petroleum), light arom	64742-95-6	Flammable Liquid Category 3; Acute Oral Toxicity Category 5; Skin Effects Category 3; Eye Effects Category 2; Narcotic Effects Category 3; Aspiration Category 1; Chronic Aquatic Hazard Category 2	1 – 3
Propylene carbonate	108-32-7	Skin effects category 3; eye effects category 2; aspiration category 2	1 - 3
Ingredients not contributing to classification			balance

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

Section 4 – First Aid Measures

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

Eye contact:
Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin contact:
Flush skin and hair with running water (and soap if available). Remove any adhering solids with industrial skin cleansing cream. DO NOT use solvents. Seek medical attention in the event of irritation.

Inhalation:
Remove to fresh air. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.

Ingestion:
Avoid giving milk or oils. Avoid giving alcohol. Not considered a normal route of entry. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

General advice and advice for physicians:
Treat symptomatically.

Section 5 - Fire-Fighting Measures

Extinguishing media:
Foam, Carbon Dioxide, Dry Powder

Fire/ Explosion Hazard
Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Moderate explosion hazard when exposed to heat or flame. 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. 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
Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.

Major Spills
Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent).
Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.

Section 7 - Handling and Storage

Handling:
The conductivity of this material may make it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Do NOT use compressed air for filling discharging or handling operations. Avoid all personal contact, including inhalation. Wear protective clothing when risk of overexposure 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 generation of static electricity.DO NOT use plastic buckets. Earth all lines and equipment. Use spark-free tools when handling. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. 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. DO NOT allow clothing wet with material to stay in contact with skin

Storage:
Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access. Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances. Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems. Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors. Keep adsorbents for leaks and spills readily available. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. In addition, for tank storages (where appropriate): Store in grounded, properly designed and approved vessels and away from incompatible materials. For bulk storages, consider use of floating roof or nitrogen blanketed vessels; where venting to atmosphere is possible, equip storage tank vents with flame arrestors; inspect tank vents during winter conditions for vapour/ ice build-up. Storage tanks should be above ground and diked to hold entire contents.

Section 8 - Exposure Controls/Personal Protection

Exposure limits:

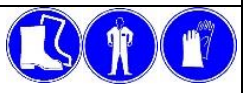
CAS no.	Substance or ingredient	WES-TWA	WES-STEL

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 conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Exposure controls:

Control	Protective measure
Eye	No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: For potentially moderate or heavy exposures: Safety glasses with side shields. 
Respiratory	Not normally required Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of a Type AX cartridge respirators is considered appropriate
Skin	 No special equipment needed when handling small quantities. OTHERWISE: For potentially moderate exposures: Wear general Nitrile protective gloves. For potentially heavy exposures: Wear chemical protective gloves, eg. PVC. and safety footwear.

Section 9 - Physical and Chemical Properties

General substance properties:

Property	Details
Appearance	Black liquid
Odour	Characteristic
pH	No data
Vapour pressure	2 kPa
Vapour Density	> 1 heavier than air
Viscosity	7 mm^2/s

Boiling Point	90 °C
Volatile materials	35 %
Water solubility	immiscible
Freezing/melting point	No data.
Specific gravity/density	1.09 g/ml
Flash point	9 °C
Auto-ignition temperature	200 °C
Upper and lower flammability limits	Lower 0.6 % Upper 7.0 %
Corrosiveness	No data.

Section 10 - Stability and Reactivity

Stability:
Stable under normal conditions.

Conditions to avoid:
Ignition sources; elevated temperatures

Incompatible materials to avoid:
Avoid oxidising agents (nitrates, oxidising acids, chlorine bleaches, pool chlorine etc) as ignition may result

Hazardous decomposition products:
Combustion products include: carbon monoxide (CO), carbon dioxide (CO_2) other pyrolysis products typical of burning organic material.

Section 11 - Toxicological Information

Summary of Toxicity

Test	**Data and symptoms of exposure**
Inhaled	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of toxic gases may cause: Central Nervous System effects including depression, headache, confusion, dizziness, stupor, coma and seizures; respiratory: acute lung swellings, shortness of breath, wheezing, rapid breathing, other symptoms and respiratory arrest; heart: collapse, irregular heartbeats and cardiac arrest; gastrointestinal: irritation, ulcers, nausea and vomiting (may be bloody), and abdominal pain. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal
Oral	Accidental ingestion of the material may be damaging to the health of the individual. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.

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 with the material may damage the health of the individual; systemic effects may result following absorption. Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	There is some evidence to suggest that this material can cause eye irritation and damage in some persons. Not considered to be a risk because of the extreme volatility of the gas.
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. 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. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Main route of exposure to the gas in the workplace is by inhalation Animal testing shows that methyl ethyl ketone may have slight effects on the nervous system, liver, kidney and respiratory system; there may also be developmental effects and an increase in birth defects. However, there is limited information available on the long-term effects of methyl ethyl ketone in humans, and no information is available on whether it causes developmental or reproductive toxicity or cancer. It is generally considered to have low toxicity, but it is often used in combination with other solvents, and the toxic effects of the mixture may be greater than with either solvent alone. Combinations of n-hexane or methyl n-butyl ketone with methyl ethyl ketone may increase the rate of peripheral neuropathy, a progressive disorder of the nerves of the extremities. Combinations with chloroform also show increase in toxicity. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]

Ingredient	**Oral LD_{50}**	**Dermal LD_{50}**	**Inhalation LC_{50}**
Naphtha (petroleum) light hydrotreated	> 2000 mg/kg	> 1900 mg/kg	
Naphtha (petroleum) light arom	4500 mg/kg	> 1900 mg/kg	> 7340 ppm/8hr

Section 12 - Ecological Information

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 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**
Naphtha (petroleum) light hydrotreated	$LC_{50\ 96hr}$ 8.4 mg/L	$EC_{50\ 48hr}$ 4.7 mg/L	$EC_{50\ 96hr}$ 12.4 mg/L NOEC $_{72hr}$ 6.47 mg/L
Naphtha (petroleum) light arom		$EC_{50\ 48hr}$ 6.14 mg/L	$EC_{50\ 96hr}$ 3.29 mg/L NOEC $_{72hr}$ <1 mg/L

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

HAZCHEM

3YE

Land Transport UNDG

Class or division	3
Subsidiary Risk	None
UN Number	**1139**
UN Packing Group	II
Shipping Name	**Coating solution**
Special Provisions	223
Limited Quantities	5 L

Air Transport IATA

ICAO/IATA Class	3
ICAO/IATA Subrisk	None
UN/ID Number	**1139**
Packing Group	II
Special provision	A3
Cargo only	
Packing instructions	366
Maximum Qty/pack	220 L
Passenger and Cargo	
Packing instructions	355
Maximum Qty/pack	60 L
Passenger & Cargo Limited Quantity	
Packing instructions	Y344
Maximum Qty/pack	10L
Shipping Name	**Coating Solution**

Marine Transport IMDG

IMDG Class	3
IMDG Subrisk	None
UN Number	**1139**
UN Packing Group	II
EmS Number	F-E, S-E
Special provisions	955
Limited quantities	5 L
Marine pollutant	Yes
Shipping Name	**Coating Solution**

Section 15 - Regulatory Information

HSNO approval number and Group Standard:

HSR002662 Surface Coatings & Colourants (Flammable)

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Safety data sheet must be available to a person handling the substance within 10 minutes.
Emergency plan	Required when quantities exceed 100 Lt
Approved handler	**Class 3.1B** Required when present for quantities in excess of 500Lt in container of upto and including 5Lt, else greater than 50Lt in open containers
Tracking	Not applicable
Bunding and secondary containment	Required dependent on pack size and total volume
Signage	Required when present in quantities exceeding 100 Lt

Test certificate	**Class 3.1B** Required when present for quantities in excess of 500Lt in container of up to and including 5Lt, else greater than 50Lt in open containers
Hazardous Atmosphere zone	Required when present in quantities exceeding 1L open occasionally
Fire extinguisher	2 required when quantities exceed 250 Lt

Naphtha (petroleum) light hydrotreated (CAS 64742-49-0) is found on the following regulatory lists
- New Zealand Inventory of Chemicals (NZIoC

Propylene carbonate (CAS 108-32-7) is found on the following regulatory lists
- New Zealand Inventory of Chemicals (NZIoC
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

Naphtha (petroleum) light arom (CAS 64742-95-6) is found on the following regulatory lists
- New Zealand Inventory of Chemicals (NZIoC

National Inventories

Australia	AICS	N
Canada	DSL	N
Canada	NDSL	N
China	IECSC	Y
Europe	EINEC/ELINCS/NLP	Y
Japan	ENCS	N
Korea	KECI	N
New Zealand	NZIOC	Y
Philippines	PICCS	Y
USA	TSCA	N

Section 16 – Other Information

Revision History

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 7th Edition. www.mbie.govt.nz.

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

This SDS was prepared by Collievale Enterprises Ltd in accord with the EPA "Code of Practice for the Preparation of Safety Data Sheets" [HSNOCOP 8-1 (2006)]
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End of MSDS