Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
174755	Soudal PVC Pipe Cement Type N	125 ml	Clear
172146	Soudal PVC Pipe Cement Type N	250 ml	Clear
172147	Soudal PVC Pipe Cement Type N	500 ml	Clear
173985	Soudal PVC Pipe Cement Type N	1 L	Clear
175734	Soudal PVC Pipe Cement Type N	5 L	Clear

Recommended use:		Adhesive
HSNO Group Standard		HSR002669
UN number, shipping name and packaging group:		UN 1133 Adhesive PG II
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 Liquid	**Category 2**	H225	Highly flammable liquid and vapour
Acute Oral Toxicity	**Category 4**	H302	Harmful if swallowed
Eye Irritation	**Category 2**	H319	Causes serious eye irritation
Carcinogenicity	**Category 2**	H351	Suspected of causing cancer
STOT – RE **Category 2**		H373	May cause damage to organs through prolonged or repeated exposure

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

P233 Keep container tightly closed
P240 Ground and bond container and receiving equipment
P241 Use explosion proof electrical/ ventilating/ lighting/ intrinsically safe equipment
P242 Use non-sparking tools
P243 Take action to prevent static discharge
P260 Do not breathe mists/ gas/ vapours/ sprays
P280 Wear protective gloves, protective clothing, eye protection and face protection
P264 Wash all exposed external body areas thoroughly after handling
P270 Do not eat, drink or smoke while handling this product

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

P403+235 Store in a well-ventilated place. Keep cool

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.)
2-Butanone	78-93-3	Flammable Liquid Category 2 | Eye Irritation Category 2 | STOT – RE Category 2	30 – 60
Cyclohexanone	108-94-1	Flammable Liquid Category 3 | Acute Oral Toxicity Category 4 | Acute Dermal Toxicity Category 3 | Eye Irritation Category 2	40 - 70
Tetrahydrofuran	109-99-9	Flammable Liquid Category 2 | Acute Oral Toxicity Category 4 | Skin Irritation Category 2 | Eye Irritation Category 2 | Carcinogenicity Category 2 | STOT – RE Category 2	< 10
Ingredients not contributing to classification			balance

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

Section 4 First Aid Measures

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

Eye contact:

Immediately hold eyelids apart and flush the eye continuously with 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. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin contact:

Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Inhalation:

remove from contaminated area. 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. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.

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

Fire/ Explosion Hazard:

Liquid and vapour are highly 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 & Emergency New Zealand 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 courses. Use water delivered as a fine spray to control fire and cool adjacent 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:

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

Section 7 Handling and Storage

Handling:

Always release caps or seals slowly to ensure slow dissipation of vapours 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, heat or ignition sources. When handling, DO NOT eat, drink or smoke. Vapour may ignite on pumping or pouring due to static electricity. DO NOT use plastic buckets. Earth and secure metal containers when dispensing or pouring product. Use spark-free tools when handling. Avoid contact with incompatible materials. Keep containers securely sealed. 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.

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	
78-93-3	2-Butanone	445 mg/m^3	150 ppm	890 mg/m^3	300 ppm
108-94-1	Cyclohexanone	100 mg/m^3	25 ppm		
109-99-9	Tetrahydrofuran	150 mg/m^3	50 ppm	300 mg/m^3	100 ppm

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 AX 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	Coloured Liquid
Odour	Ethereal
pH	Not available
Vapour pressure	17.2 kPa
Vapour Density	> 2 air =1

Viscosity	No data
Boiling Point	66 °C
Volatile materials	Not available
Freezing/melting point	Not available
Water Solubility	Immiscible
Specific gravity/density	0.961 g/ml
Flash point	-20 °C
Auto-ignition temperature	321 °C
Upper and lower flammability limits	LEL 1.1 % UEL 11.8 %
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 (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 or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects. The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. 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 hazard is increased at higher temperatures. 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. 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 is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum. Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
Dermal	The material may accentuate any pre-existing dermatitis condition 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 be harmful; systemic effects may result following absorption. 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	The vapour when concentrated has pronounced eye irritation effects and this gives some warning of high vapour concentrations. If eye irritation occurs seek to reduce exposure with available control measures or evacuate area. There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Strong evidence exists that this substance may cause irreversible mutations (though not lethal) even following a single exposure. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. 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. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Long term cyclohexanone exposure may cause liver and kidney changes. Clouding of the eye lens and cataract development may occur. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. 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.

Ingredient	**Oral LD_{50}**	**Dermal LD_{50}**	**Inhalation LC_{50}**
ATE			
2-Butanone	2054 mg/kg	6480 mg/kg	32 mg/L/1h
Cyclohexanone	1535 mg/kg	948 mg/kg	8000 ppm/4h
Tetrahydrofuran	2816 mg/kg	2000 mg/kg	45 mg/L/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.

Ingredient	**Fish**	**Crustacean**	**Algae**
ATE			
2-Butanone	$LC_{50\ 96hr}$ >324 mg/L	$LC_{50\ 48hr}$ 308 mg/L	$EC_{50\ 96hr}$ >500 mg/L
Cyclohexanone	$LC_{50\ 96hr}$ >481 mg/L	$LC_{50\ 48hr}$ >100 mg/L	$EC_{50\ 96hr}$ >17.7 mg/L
Tetrahydrofuran	$LC_{50\ 96hr}$ >1970 mg/L		

Ingredient	**Persistence Water/ Soil**	**Persistence Air**	**Bioaccumulation**	**Mobility**
2-Butanone	LOW	LOW	LOW	MED
Cyclohexanone	LOW	LOW	LOW	LOW
Tetrahydrofuran	LOW	LOW	LOW	LOW

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	**3YE**

Land Transport UNDG

UN Number	**1133**
Shipping Name	**ADHESIVES**
Class or division	**3**
Subsidiary Risk	Not applicable
UN Packing Group	**II**
Environmental Hazard	not applicable
Special Provisions	not applicable
Limited Quantities	**5 L**

Air Transport IATA

UN/ID Number	**1133**
Shipping Name	**ADHESIVES**
ICAO/IATA Class	**3**
ICAO/IATA Subrisk	None
ERG Code	**3L**
Packing Group	**II**
Environmental Hazard	not applicable
Special provision	**A3**

Cargo only

Packing instructions	**364**
Maximum Qty/pack	**60 L**

Passenger and Cargo

Packing instructions	**353**
Maximum Qty/pack	**5 L**

Passenger & Cargo Limited Quantity

Packing instructions	**Y341**
Maximum Qty/pack	**1 L**

Marine Transport IMDG

UN Number	**1133**
Shipping Name	**ADHESIVES**
IMDG Class	**3**

IMDG Subrisk	None
Packing Group	**II**
Environmental Hazard	not applicable
EmS Number	**F-E S-D**
Special provisions	not applicable
Limited quantities	**5 L**

Section 15 Regulatory Information

HSNO approval number and Group Standard:

HSR002669 **Surface Coatings & Colourants Flammable, Carcinogenic**

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Required
Emergency plan	Required when quantities exceed 250 Lt
Certified handler	Not required
Tracking	Not applicable
Bunding and secondary containment	Required and dependent on total pooling volume
Signage	Required when quantities exceed 250 Lt
Location Compliance certificate	**Flammable Liquid Category 2** required when volumes exceed 100L in closed containers of more than 5L capacity and/or when volumes exceed 250L in closed containers of upto 5Lt capacity and/or when volumes exceed 50L in open containers of any capacity
Hazardous Atmosphere Zone	Required to meet AS/NZS 60079.10
Fire extinguisher	2 required when quantities exceed 250 Lt

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	Y
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:

March 2024 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