

Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
20173	Soudal Soudaflex Façade 20LM PU Sealant	600 ml	Grey

Recommended use:		Sealant
HSNO Group Standard		HSR002679
UN number, shipping name and packaging group:		Not Regulated
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.

NOT REGULATED under NZS5433:2020 Transport of Dangerous Goods on Land

GHS classification:

Classification	GHS Hazard statements
Skin Irritant Category 2	H315 Causes skin irritation
Eye Irritant Category 2	H319 Causes serious eye irritation
Respiratory Sensitisation Category 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Sensitisation Category 1	H317 May cause an allergic skin reaction
Carcinogenicity Category 2	H351 Suspected of causing cancer
STOT – RE Category 2	H373 May cause damage to organs through prolonged or repeated exposure
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
	P260	Do not breathe mists/ gas/ vapours/ sprays

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- P280 Wear protective gloves, protective clothing, eye protection and face protection
- P284 In case of inadequate ventilation, wear respiratory protection
- P272 Contaminated work clothing should not be allowed out of the workplace
- P264 Wash all exposed external body areas thoroughly after handling
- 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.)
4,4'-diphenylmethane diisocyanate	101-68-8	Acute Inhalation Toxicity Category 4 Skin Irritation Category 2 Eye Irritation Category 2 Respiratory Sensitisation Category 1 Skin Sensitisation Category 1 Carcinogenicity Category 2 STOT – RE Category 2	1 – 10
n-Butylamine	109-73-9	Flammable Liquid Category 2 Metallic Corrosive Category 1 Acute Oral Toxicity Category 4 Acute Dermal Toxicity Category 3 Acute Inhalation Toxicity Category 2 Skin Corrosive Category 1B Eye Corrosive Category 1 STOT – SE RTI Category 3	< 1
Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	41556-26-7	Skin Sensitisation Category 1 Chronic Aquatic Hazard Category 1	< 1
p-Toluenesulfonyl isocyanate	4083-64-1	Skin Irritation Category 2 Eye Irritation Category 2 Respiratory Sensitisation Category 1	< 1
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. Following

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uptake by inhalation, move person to an area free from risk of further exposure. Oxygen or artificial respiration should be administered as needed. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. A physician should be consulted.

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:

Flooding quantities of water only. There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

Fire/ Explosion Hazard:

Combustible. Moderate fire hazard when exposed to heat or flame. When heated to high temperatures decomposes rapidly generating vapour which pressures and may then rupture containers with release of flammable and highly toxic isocyanate vapour. Burns with acrid black smoke and poisonous fumes. Due to reaction with water producing CO₂-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Combustion yields traces of highly toxic hydrogen cyanide HCN, plus toxic nitrogen oxides NO_x and carbon monoxide.

Advice for fire-fighters:

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

Section 6 Accidental Release Measures

Minor Spills:

Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety goggles. Trowel up/scrape up. Place spilled material in clean, dry, sealed container. Flush spill area with water.

Major Spills:

Avoid contamination with water, alkalis and detergent solutions. Material reacts with water and generates gas, pressurises containers with even drum rupture resulting. DO NOT reseal container if contamination is suspected. Open all containers with care. Minor hazard. Clear area of personnel. Alert Fire Brigade 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:

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. DO NOT allow material to contact humans, exposed food or food utensils. 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. Launder contaminated clothing before re-use. 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
101-68-8	4,4'-diphenylmethane diisocyanate	0.02 mg/m ³	0.07 mg/m ³
4083-64-1	p-Toluenesulfonyl isocyanate	0.02 mg/m ³	0.07 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. 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 AK-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	White paste
Odour	Nauseating

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pH	Not available
Vapour pressure	No data kPa
Vapour Density	Not available
Viscosity	No data mPa.s
Boiling Point	No data °C
Volatile materials	Not available
Freezing/melting point	Not available
Water Solubility	Immiscible
Specific gravity/density	1.25 g/ml
Flash point	> 100 °C
Auto-ignition temperature	No data °C
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 is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless, inhalation of the material, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce severe damage to the health of the individual. Relatively small amounts absorbed through the lungs may prove fatal.
Oral	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.
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. Open cuts abraded or irritated skin should not be exposed to this material Entry into the

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	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	There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. 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. Ample evidence exists, from results in experimentation, that developmental disorders are directly caused by human exposure to the material. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. 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. Persons with a history of asthma or other respiratory problems or are known to be sensitised, should not be engaged in any work involving the handling of isocyanates.

Ingredient	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
ATE			
4,4'-diphenylmethane diisocyanate	2200 mg/kg	> 6200 mg/kg	0.308 mg/L/4hr
n-butylamine	366 mg/kg	306 mg/kg	>4.6 mg/L/4h
Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	3100 mg/kg		
p-toluenesulfonyl isocyanate	2000 mg/kg	>2000 mg/kg	>320 ppm/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			
4,4'-diphenylmethane diisocyanate	LC _{50 96hr} 96 mg/L	EC _{50 48hr} >100 mg/L	
n-butylamine	LC _{50 96hr} 24 mg/L	EC _{50 48hr} >100 mg/L	EC _{50 72hr} 9.2 mg/L
Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	LC _{50 96hr} 0.34 mg/L	EC _{50 48hr} >10 mg/L	
p-toluenesulfonyl isocyanate	LC _{50 96hr} 45 mg/L	EC _{50 48hr} >100 mg/L	EC _{50 72hr} 25 mg/L

Ingredient	Persistence Water/Soil	Persistence Air	Bioaccumulation	Mobility
4,4'-diphenylmethane diisocyanate	LOW	LOW	LOW	LOW
n-butylamine	LOW	LOW	LOW	LOW
p-toluenesulfonyl isocyanate	HIGH	HIGH	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

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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 CO₂ 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



Not Regulated

Section 15 Regulatory Information

HSNO approval number and Group Standard:

HSR002679

Surface Coatings & Colourants Carcinogenic

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Required
Emergency plan	Required when quantities exceed 100 Lt
Certified handler	Not required
Tracking	Not applicable
Bunding and secondary containment	Not applicable
Signage	Required when quantities exceed 100Lt
Location Compliance certificate	Not required
Hazardous Atmosphere Zone	Not required
Fire extinguisher	Not required

National Inventories

Y = All ingredients are on the inventory

Australia	AICS	N
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	N
Vietnam	NCI	Y
Russia	ARIPS	Y

Section 16 Other Information

Revision History:

June 2024	Reviewed and format updated
January 2021	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