Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
20173	Soudal Soudaflex Facade 20LM PU Elastic Joint Sealant	600 ml	Grey

Recommended use:		Sealant
HSNO Group Standard		HSR002679
UN number, shipping name and packaging group:		Not applicable
Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80
	134 Kohia Drive	Phone: (07) 847 5540
	Horotiu	
	Hamilton 3288	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.

NOT REGULATED under NZS5433:2007 Transport of Dangerous Goods on Land

Hazardous Substances and New Organisms (HSNO) classification:

Classification		GHS Hazard statements	
Skin Effects Category 2	**6.3A**	H315	Causes skin irritation
Eye Effects Category 2	**6.4A**	H319	Causes serious eye irritation
Respiratory Sensitisation Category 1	**6.5A**	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Sensitisation Category 1	**6.5B**	H317	May cause an allergic skin reaction
Carcinogenicity Category 2	**6.7B**	H351	Suspected of causing cancer
STOT – SE Category 1	**6.9A**	H370	Causes damage to organs
STOT – RE Category 1	**6.9A**	H372	Causes damage to organs through prolonged or repeated exposure
Chronic Aquatic Hazard Category 2	**9.1B**	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

P260 Do not breathe fumes/ mists/ vapours/ sprays
P284 In case of inadequate ventilation, use respiratory protection
P271 Use only outdoors or in a well-ventilated area
P270 Do not eat, drink or smoke when using this product
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
P273 Avoid release to the environment
P391 Collect spillage
P405 Store locked up

Section 3. Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
1,2-benzenedicarboxylic acid, diisodecyl ester	26761-40-0	Flammable Liquid Category 4; Carcinogenicity Category 2; Chronic Aquatic Hazard Category 2	20 – 30
Benzene, 2,2'-methylenebis[4-isocyanato	101-68-8	Acute Inhalation Toxicity Category 2; Skin Effects Category 2; Eye Effects Category 2; Respiratory Sensitisation Category 1; Skin Sensitisation Category 1; Carcinogenicity Category 2; STOT – RE Category 1; STOT – SE Category 1	1 -10
1-butanamine	109-73-9	Flammable Liquid Category 2; Acute Oral Toxicity Category 4; Acute Dermal Toxicity Category 3; Acute Inhalation Toxicity Category 2; Skin Effects Category 1B; Eye Effects Category 1; Metallic Corrosivity Category 1; Chronic Aquatic Hazard Category 4; Vertebrate Hazard Category 2	1 – 19
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester	41556-26-7	Skin Sensitisation Category 1; Acute Aquatic Hazard Category 1; Chronic Aquatic Hazard	< 1
Benzenesulfonyl isocyanate, 4-methyl-	4083-64-1	Skin Effects Category 2; Eye Effects Category 2; Respiratory Sensitisation Category 1	< 1
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:
Wash out immediately 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin contact:
Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor.

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 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:
Water spray, dry chemical or CO_2

Special hazards due to combustion:
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 CO_2-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 NOx and carbon monoxide.

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
Environmental hazard - contain spillage. 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
Clear area of personnel and move upwind. 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 course. Stop leak if safe to do so. 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.

Section 8 Exposure Controls/Personal Protection

Exposure Limits

CAS no.	Substance or ingredient	WES-TWA	WES-STEL
26761-40-0	1,2-benzenedicarboxylic acid, diisodecyl ester	5 mg/m^3	
101-68-8	Benzene, 2,2'-methylenebis[4-isocyanato	0.02 mg/m^3	0.07 mg/m^3
4083-64-1	Benzenesulfonyl isocyanate, 4-methyl-	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:
Enclosed local exhaust ventilation is required at points of dust, fume or vapour generation HEPA terminated local exhaust ventilation should be considered at point of generation of dust, fumes or vapours. Barrier protection or laminar flow cabinets should be considered for laboratory scale handling. A fume hood or vented enclosure is recommended for weighing/ transferring quantities exceeding 500 mg. When handling quantities up to 500 grams ensure general dilution ventilation (e.g. 6-12 air changes per hour) is preferred. Quantities up to 1 kilogram may require a designated fume hood, biological safety cabinet, or approved vented enclosures. Barrier/ containment technology and direct coupling (totally enclosed processes that create a barrier between the equipment and the room) typically use double or split butterfly valves and hybrid unidirectional airflow/ local exhaust ventilation solutions (e.g., powder containment booths). Glove bags, isolator glove box systems are optional. HEPA filtration of exhaust from dry product handling areas is required. Fume-hoods and other open-face containment devices are acceptable when face velocities of at least 1 m/s (200 feet/minute) are achieved. Partitions, barriers, and other partial containment technologies are required to prevent migration of the material to uncontrolled areas. For non-routine emergencies maximum local and general exhaust are necessary. 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	An isocyanate vapour respirator is strongly recommended when ventilation is limited. 
Skin	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	Paste
Odour	Characteristic
pH	No data
Vapour pressure	No data kPa
Viscosity	Paste
Vapour Density	No data
Boiling Point	No data ℃
Volatile materials	No data
Freezing/melting point	No data
Solubility	Insoluble in water
Specific gravity/density	1.24 g/ml
Flash point	No data ℃
Danger of explosion	Not applicable
Auto-ignition temperature	No data
Upper and lower flammability limits	LEL – no data % UEL –no data %
Evaporation Rate	No data Butyl acetate = 1
Corrosiveness	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), hydrogen cycanide (HCN), isocyanates and minor amounts of hydrogen chloride (HCl), phosgene ($COCl_2$), nitrogen oxides (NOx) and pyrolysis products typical of burning organic material. May emit corrosive fumes.

Section 11 Toxicological Information

Test	Data and symptoms of exposure
Inhaled	There is strong evidence to suggest that this material can cause, if inhaled once, very serious, irreversible damage of organs. 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 hazard is increased at higher temperatures. Not normally a hazard due to non-volatile nature of product There is strong evidence to suggest that this material can cause, if swallowed once, very serious, irreversible damage of organs. There is strong evidence to suggest that this material, on a single contact with skin, can cause very serious, irreversible damage of organs.
Oral	There is strong evidence to suggest that this material can cause, if swallowed once, very serious, irreversible damage of organs. 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. The toxicity of phthalates is not excessive due to slow oral absorption and metabolism. Absorption is affected by fat in the diet. Repeated doses can cause cumulative toxic effects, and symptoms include an enlarged liver which often reverses if exposure is maintained. Carbohydrate metabolism is disrupted, and cholesterol and triglyceride levels in the blood falls. In rats, there is also strong evidence of withering of the testicles. Some phthalates can increase the effects of antibiotics, thiamine (vitamin B1) and sulfonamides. Accidental ingestion of the material may be damaging to the health of the individual.
Dermal	There is strong evidence to suggest that this material, on a single contact with skin, can cause very serious, irreversible damage of organs. 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 bloodstream, through for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. There is some evidence to suggest that the material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
Eye	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	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. Exposure to phthalates over years leads to pain, numbness and spasms in the hands and feet. Many people have developed multiple disorders in the nervous system and the balancing system. 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. [CCTRADE-Bayer, APMF] There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Isocyanate vapours are irritating to the airways and can cause their inflammation, with wheezing, gasping, severe distress, even loss of consciousness and fluid in the lungs.

	Oral LD_{50} mg/m³	Dermal LD_{50} mg/m³	Inhalation LC_{50} mg/L
1,2-benzenedicarboxylic acid, diisodecyl ester	15000	>2900	
Benzene, 2,2'-methylenebis[4-isocyanato	>2000	>6200	
1-butanamine	366	629	0.4 /2hr
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester	3100		

Benzenesulfonyl isocyanate, 4-methyl-	2234	>2000	>159 /hr

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. DO NOT discharge into sewer or waterways.

	Fish mg/L	Crustacea mg/L	Algae mg/L
1,2-benzenedicarboxylic acid, diisodecyl ester	LC_{50} 0.002	$EC_{50\ 48hr}$ >0.02 BCF_{504hr} 0.1 $NOEC_{504hr}$ 0.03	$EC_{50\ 96hr}$ 0.000244
Benzene, 2,2'-methylenebis[4-isocyanato	LC_{50} 0.5		$EC_{50\ 96hr}$ 1.64 $NOEC_{2688hr}$ 10
1-butanamine	LC_{50} 24	$EC_{50\ 48hr}$ 8.3	$EC_{50\ 96hr}$ 0.716 $NOEC_{72hr}$ 0.156
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester	LC_{50} 0.34		
Benzenesulfonyl isocyanate, 4-methyl-	LC_{50} 45	$EC_{50\ 48hr}$ 100	$EC_{50\ 96hr}$ 25 $NOEC_{72hr}$ 10

	Persistence H_2O/ Soil	Persistence Air	Bioaccumulation	Mobility
1,2-benzenedicarboxylic acid, diisodecyl ester	HIGH	HIGH	HIGH	LOW
Benzene, 2,2'-methylenebis[4-isocyanato	LOW	LOW	LOW	LOW
1-butanamine	LOW	LOW	LOW	LOW
Benzenesulfonyl isocyanate, 4-methyl-	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 pertaining to the product.
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. Recycle wherever possible or consult manufacturer for recycling options. Consult Land Waste Authority for disposal. Bury or incinerate residue 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. 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 (Toxic [6.7])

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 present in quantities >500 Lt.
Certified Handler	Not required

Tracking	Not required
Bunding and secondary containment	Based on total volumes and pack sizes held on site
Signage	Required when present in quantities >500 L
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	N
Canada	NDSL	N
China	IECSC	N
Europe	EINEC/ELINCS/NLP	N
Japan	ENCS	N
Korea	KECI	N
New Zealand	NZIOC	Y
Philippines	PICCS	N
USA	TSCA	N
Taiwan	TCSI	Y
Mexico	INSQ	N
Vietnam	NCI	N
Russia	ARIPS	N
Thailand	TECI	N

Section 16 Other Information

Revision History:

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	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 9th 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 2017
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End of SDS