

Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
01305	Soudal 2C Super Adhesive	50 gm	Clear

Recommended use:		Adhesive	
HSNO Group Standard		HSR002657	
UN number, shipping name and packaging group:		Not applicable	
Supplier contact details:	Supplier contact details: Soudal Ltd		
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		
Flammable Liquid Category 4 3.1D		H227	Combustible liquid	
Skin Effects Category 2 6.3A		H315	Causes skin irritation	
Eye Effects Category 2 6.4A		H319	Causes serious eye irritation	
Skin Sensitisation Category 1	6.5B	H317	May cause an allergic skin reaction	
STOT – SE RTI Category 3	6.9	H335	May cause respiratory irritation	

HSNO Signal Word: WARNING



Precautionary Statements:

Read label before use.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Use only outdoors or in a well-ventilated area

Avoid breathing dusts/ mists/ gas/ vapours/ sprays

Wear protective gloves/ protective clothing/ eye protection/ face protection

Contaminated work clothing should not be allowed out of the workplace

In case of Fire: Use water spray/ fog to extinguish

Store locked up

Store in a well-ventilated place. Keep container tightly closed



Section 3. Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Ethyl cyanoacrylate	7085-85-0	Flammable liquid Category 4; Skin Effects Category 2; Eye Effects Category 2	> 25
1,4-dihydroxybenzene	123-31-9	Acute Oral Toxicity Category 2; Skin Effects Category 2; Eye Effects Category 1; Skin Sensitisation Category 1; Mutagenicity Category 2; STOT – SE Category 2; STOT – RE Category 2; Acute Aquatic Hazard Category 1; Vertebrate Hazard Category 1	0.1 - 1

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:

Eyelid Adhesion

Wash thoroughly with water and apply moist pad; maintain in position. DO NOT force separation. Transport to hospital, or doctor without delay. Minor eye contamination should be treated by copious washing with water or 1% sodium carbonate solution. The eye will generally open without further action, typically in one to two days. there should be no residual damage. Adhesive introduced Removal of contact lenses after eye injury should only be undertaken by skilled personnel.

Adhesive in the Eye:

Adhesive will attach itself to eye proteins and will disassociate from these over intermittent periods, usually within several hours. This will result in weeping until clearance of the protein complex. It is important to understand that disassociation will normally occur within a matter of hours even with gross contamination.

Skin contact:

Cyanoacrylate adhesives is a very fast setting and strong, they bond human tissues including skin in seconds. Experience shows that accidents involving cyanoacrylates are best handled by passive, non-surgical first aid.

Skin Contact:

Remove excessive adhesive. Soak in warm water - the adhesive should loosen from the skin in several hours. Dried adhesive does not present a health hazard. Contact with clothes, fabric, rags or tissues may generate heat, and strong irritating odours; skin burns may also ensue.

Skin Adhesion:

IMMEDIATELY immerse affected areas in warm soapy water. DO NOT force bonded surfaces apart. Use a gentle rolling action to peel surfaces apart if possible. It may be necessary to use a blunt edge such as a spatula or spoon handle. Do NOT attempt to pull the surfaces apart with a direct opposing action. Remove any cured material with warm, soapy water. Seek medical attention without delay. A solvent such as acetone may be used (with care!) to separate bonded skin surfaces. NEVER use solvent near eyes, mouth, cuts, or abrasions.

Inhalation:

If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary

Ingestion:

Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. For material bonded in the mouth seek medical/dental attention. If lips are accidentally stuck together apply lots of warm water and encourage maximum wetting and pressure from saliva inside the mouth. Peal or roll lips apart. Do NOT attempt to pull the lips with direct opposing action. It is almost impossible to swallow cyanoacrylates. The adhesive solidifies and adheres in the mouth. Saliva will lip the adhesion in one or two days.

General advice and advice for physicians:

Treat symptomatically

It should never be necessary to use surgical means to separate tissues which become accidentally bonded. The action of physiological fluids or warm soapy water will cause this adhesive to eventually fail.

Section 5 Fire-Fighting Measures

Extinguishing media:

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

Special hazards due to combustion:

Combustible. Will burn if ignited.

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

If cloth has been used to wipe up spills, immediately soak the cloth in water to produce polymerisation and prevent possibility of autoignition. 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

Minor hazard. 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:

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
123-31-9	1,4-dihydroxybenzene	2 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:

Exposure conti	
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	Type A filter is recommended when exposure limits may be exceeded
Skin	Wear chemical protective gloves, e.g. Natural+Neoprene natural rubber Neoprene Nitrile PVC. 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 watch-bands should be removed and destroyed.

9 Physical and Chemical Properties

General substance properties:

Property	Details
Appearance	Clear liquid
Odour	Sharp
рН	No data
Vapour pressure	0.026 kPa
Viscosity	1200 – 1800 mPa.s
Boiling Point	> 200 °C
Volatile materials	No data
Freezing/melting point	No data
Solubility	No data
Specific gravity/density	1.05 – 1.07 g/ml
Flash point	80 – 93 ℃
Danger of explosion	No data
Auto-ignition temperature	485 ℃
Upper and lower flammability limits	No data
Corrosiveness	No data

Section 10 Stability and Reactivity

Stability

Stable under normal conditions. Cyanoacrylate adhesives undergo anionic polymerization in the presence of a weak base, such as water, and are stabilized through the addition of a weak acid. The stabiliser is usually in the form of a weak acidic gas such as SO2, NO, or BF3. An essential function of the stabiliser is to prevent polymerisation in the container, which is usually made of polyethylene. If too little stabiliser is added, the product will be prone to premature polymerization and if too much is added it will be less active and function less effectively as an adhesive.



Conditions to avoid:

Avoid heat, sparks, flames and any other sources of ignition. Avoid contact with clothes, fabric, rags (especially cotton and wool) rubber or paper; contact may cause polymerisation.

Incompatible materials to avoid:

Avoid contact with acids, bases, amines. Segregate from alcohol, water. Avoid reaction with oxidising agents

Hazardous decomposition products:

Combustion will result in the release of carbon monoxide; carbon dioxide and other toxic vapours

Section 11 Toxicological Information

Test	Data and symptoms of exposure
Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. In low humidity, cyanoacrylate vapours are irritating to the respiratory system and eyes. High concentrations may cause inflammation of the lungs and other complications.
Oral	Uncured cyanoacrylates are difficult to swallow as saliva cures the surface of the adhesive with negligible bonding. The cured material is considered to be non-hazardous. 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. Small n-alkyl cyanoacrylates cause burns and irritation on skin contact. Exposure to their vapours can cause irritation, but usually only in dry conditions.
Eye	This material can cause eye irritation and damage in some persons. Exposure to cyanoacrylate vapours can cause discomfort and tears, nasal discharge, and blurred vision. The eyelids may be glued shut.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Dermatitis may result from prolonged exposures. On repeated and prolonged exposure by skin contact or inhalation, a small proportion of individuals develop allergic sensitivities.

	Oral LD ₅₀ mg/m ³	Dermal LD ₅₀ mg/m ³	Inhalation LC₅omg/L
Ethyl Cyanaoacrylate	190.8	233.2	5.2775 /1hr
1,4-dihydroxybenzene	302	> 2000	

Section 12 Ecological Information

Summary of Ecotoxicity

Wastes resulting from use of the product must be disposed of on site or at approved waste sites. Do NOT discharge to sewer or waterway

	Fish mg/L	Crustacea mg/L	Algae mg/L	
Ethyl Cyanoacrylate	LC _{50 96hr} 0.662		EC _{50 96hr} 2.407	
1,4-dihydroxybenzene	LC _{50 96hr} 0.044	EC _{50 48hr} 0.061	EC _{50 96hr} 0.008 BCF _{24hr} 0.05 NOEC _{72hr} 0.002	

	Persistence H₂O/ Soil	Persistence Air	Bioaccumulation	Mobility
Ethyl cyanoacrylate	LOW	LOW	LOW	LOW
1,4-dihydroxybenzene	LOW	LOW	LOW	LOW

Section 13 Disposal Considerations

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:

HSR002657 Surface Coatings & Colourants (Combustible)

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 exceed 1,000Lt
Certified handler	Not required
Tracking	Not required
Bunding and secondary containment	Not applicable
Signage	Required when present in quantities exceed 1,000 Lt
Compliance Certificate	Not required
Hazardous Atmosphere Zone	Not required
Fire extinguisher	2x 3.5Kg required when quantities exceed 500 Lt

Ethyl cyanoacrylate (CAS 7085-85-0) is found on the following regulatory lists

International Air Transport Association (IATA) Dangerous Goods Regulations

International Maritime Dangerous Goods Requirements (IMDG Code)

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data

New Zealand Inventory of Chemicals (NZIoC)

 $New\ Zealand\ Land\ Transport\ Rule: Dangerous\ Goods\ 2005-Schedule\ 4\ Quantity\ Limits\ for\ Dangerous\ Goods\ in\ Excepted\ Quantities$

New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

$\textbf{1,4-dihydroxybenzeme} \, \textbf{(123-31-9]} \, \textbf{is found on the following regulatory lists} \,$

 $International\ Agency\ for\ Research\ on\ Cancer\ (IARC)\ -\ Agents\ Classified\ by\ the\ IARC\ Monographs$

International Air Transport Association (IATA) Dangerous Goods Regulations

International Maritime Dangerous Goods Requirements (IMDG Code)

 $New\ Zealand\ Hazardous\ Substances\ and\ New\ Organisms\ (HSNO)\ Act\ -\ Classification\ of\ Chemicals$

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits

New Zealand Workplace Exposure Standards (WES)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

National Inventories

AICS	Yes
DSL	Yes
NDSL	No
IESCS	Yes
EINECS	Yes
	DSL NDSL IESCS



Japan	ENCS	Yes
Korea	KECI	Yes
New Zealand	NZIoC	Yes
Philippines	PICCS	Yes
USA	TSCA	Yes

Section 16 Other Information

Revision History:

March 2019 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 http://www.collievale.com Phone +64 7 5432428

End of SDS