

Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
21423	Gorilla Boltfix Part A	300 ml	Beige

Recommended use:		Part A of a multi-component Adhesive
HSNO Group Standard		HSR002670
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	
	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 NZS5433:2020 Transport of Dangerous Goods on Land

Hazardous Substances and New Organisms (HSNO) classification:

Classification	GHS Hazard statements
Skin Effects Category 2 6.3A	H316 Causes skin irritation
Eye Effects Category 1 6.4A	H318 Causes serious eye irritation
Skin Sensitisation Category 1 6.5B	H317 May cause an allergic skin reaction
STOT – SE NE Category 3 6.9	H336 May cause drowsiness or dizziness
Chronic Aquatic Hazard Category 3 9.1C	H412 Harmful to aquatic life with long lasting effects

HSNO Signal Word:

WARNING


Precautionary Statements:

P101 If medical advice is needed, have product container or label at hand
P102 Keep out of reach of children

P261 Avoid breathing fumes/ mists/ vapours
P271 Use in a well ventilated area
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection

P272 Contaminated work clothing should not be allowed out of the workplace

P273 Avoid release to the environment

P405 Store locked up
P403+P233 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.)
Tetramethylene dimethacrylate	2082-81-7	Skin Effects Category 2; Eye Effects Category 2; Skin Sensitisation Category 1	10 - 20
Vinyltoluene	25013-15-4	Flammable Liquid Category 3; Acute Inhalation Toxicity Category 4; STOT – SE NE Category 3; Aspiration Category 1; Acute Aquatic Hazard Category 2; Chronic Aquatic Hazard Category 2	1 – 10
Ethylene dimethacrylate	97-90-5	Skin Sensitisation Category 1; STOT – SE NE Category 3	1 - 10
Hydroxypropyl methacrylate	27813-02-1	Eye Effects Category 2; Skin Sensitisation Category 1	1 – 10
2,2'-[(4-methylphenyl)imino] bisethanol	3077-12-1	Acute Oral Toxicity Category 4; Skin Effects Category 2; Eye Effects Category 1; Skin Sensitisation Category 1; STOT – SE RTI Category 3; Acute Aquatic Hazard Category 3; Chronic Aquatic Hazard Category 3	1 - 10
1,1'-(p-tolylimino)dipropyl-2-ol	38668-48-3	Acute Oral Toxicity Category 2; Eye Effects Category 2; Acute Aquatic Hazard Category 3; Chronic Aquatic Hazard Category 3	< 1
1,4-naphthoquinone	130-15-4	Acute Oral Toxicity Category 2; Acute Inhalation Toxicity Category 1; Skin Effects Category 1C; Eye Effects Category 1; Skin Sensitisation Category 1; STOT – SE NE Category 3; Acute Aquatic Hazard Category 1; Chronic Aquatic Hazard 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 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.

General advice and advice for physicians:

Treat symptomatically.

Section 5 Fire-Fighting Measures

Extinguishing media:

Water spray, dry chemical or CO₂

Special hazards due to combustion:

Combustible. Not considered a significant fire risk, however containers may burn. May emit poisonous fumes. May emit corrosive fumes.

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

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 spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.

Major Spills

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:

Do NOT use localised heat sources such as band heaters to heat/ melt product. Do NOT use steam. Hot boxes or hot rooms are recommended for heating/ melting material. The hot box or hot room should be set a maximum temperature of 60 deg. C. (140 F.). Do NOT overheat - this may compromise product quality and/ or result in an uncontrolled hazardous polymerisation. If product freezes, heat as indicated above and mix gently to redistribute the inhibitor. Product should be consumed in its entirety after heating/ melting; avoid multiple "reheats" which may affect product quality or result in product degradation. Product should be packaged with inhibitor(s). Unless inhibited, product may polymerise, raising temperature and pressure, possibly rupturing container. Check inhibitor level periodically, adding to bulk material if needed. In addition, the product's inhibitor(s) require the presence of dissolved oxygen. Maintain, at a minimum, the original headspace in the product container and do NOT blanket or mix with oxygen-free gas as it renders the inhibitor ineffective. Ensure air space (oxygen) is present during product heating / melting. Store product indoors at temperatures greater than the product's freezing point (or greater than 0 deg. C. (32 F.)) if no freezing point available and below 38 deg. C (100 F.). Avoid prolonged storage (longer than shelf-life) storage temperatures above 38 deg. C (100 F.). Store in tightly closed containers in a properly vented storage area away from heat, sparks, open flame, strong oxidisers, radiation and other initiators. Prevent contamination by foreign materials. Prevent moisture contact. Use only non-sparking tools and limit storage time. Unless specified elsewhere, shelf-life is 6 months from receipt. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. 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. DO NOT allow clothing wet with material to stay in contact with skin

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. Storage requires stabilising inhibitor content and dissolved oxygen content to be monitored. Refer to manufacturer's recommended levels. DO NOT overfill containers so as to maintain free head space above product. Blanketing or sparging with nitrogen or oxygen free gas will deactivate stabiliser. Store below 38 deg. C. 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	
25013-15-4	Vinmyltoluene	242 mg/m ³	50 ppm	483 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:

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,

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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	<p>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</p> <p>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</p> 
Respiratory	Not normally required. In case of inadequate ventilation, a Type A filter is recommended
Skin	<p>Butyl or Neoprene gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn. [AS 2161] Wear protective clothing.</p> 

Section 9 Physical and Chemical Properties

General substance properties:

Property	Details
Appearance	Coloured Paste
Odour	Characteristic
pH	No data
Vapour pressure	No data kPa
Viscosity	No data
Vapour Density	No data
Boiling Point	No data °C
Volatile materials	No data
Freezing/melting point	No data °C
Solubility	Insoluble in water
Specific gravity/density	1.72 g/ml
Flash point	N data °C
Danger of explosion	Not applicable
Auto-ignition temperature	No data
Upper and lower flammability limits	<p>LEL – no data %</p> <p>UEL –no data %</p>
Evaporation Rate	No data Butyl acetate = 1

Corrosiveness	No data
VOC	2.8 % by weight

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 (CO₂); Nitrogen oxides (NO_x) and pyrolysis products typical of burning organic material. May emit corrosive fumes.

Section 11 Toxicological Information

Test	Data and symptoms of exposure
Inhaled	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. No report of respiratory illness in humans as a result of exposure to multifunctional acrylates has been found. The material has NOT been classified by EC Directives or other classification systems as "harmful by inhalation". This is because of the lack of corroborating animal or human evidence. Central nervous system (CNS) depression is seen at styrene exposures exceeding 50 ppm, whilst headache, fatigue, nausea and dizziness are seen consistently at exposures of 100 ppm. Evidence exists that at 100 ppm, 5-10% reductions in sensory nerve conductions occur, and after exposure to 50 ppm, there is slowing of reaction times
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. All multifunctional acrylates (MFA) produce skin disorders and sensitise the skin and inflammation. Vapours generated by the heat of milling may occur in sufficient concentration to produce inflammation. 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.
Eye	This material can cause eye irritation and damage in some persons. Irritation of the eyes may produce a heavy secretion of tears (lachrymation)
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Exposure to styrene may aggravate central nervous system disorders, chronic respiratory disease, skin disease, kidney disease and liver disease. Exposure to styrene at work causes effects on the nervous system.

	Oral LD ₅₀ mg/m ³	Dermal LD ₅₀ mg/m ³	Inhalation LC ₅₀ mg/L
Tetramethylene dimethacrylate	10056	>3000	
Vinyltoluene	2255		3.02 /4hr
Ethylene dimethacrylate		>2000	
Hydroxypropyl methacrylate	5050		
2,2'-[(4-methylphenyl)imino]bisethanol	0.88	> 2000	
1,1'-(p-tolylimino)dipropen-2-ol	25-200	> 2000	
1,4-naphthoquinone	124		

Section 12 Ecological Information

Summary of Ecotoxicity

Harmful 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
Tetramethylene dimethacrylate			EC ₅₀ 72hr 4.97 NOEC 72hr 2.11
Vinyltoluene	LC 50 96hr 5.2	EC ₅₀ 48hr 1 - 10 NOEC 504hr 0.07	EC ₅₀ 72hr 0.319
Ethylene dimethacrylate	LC 50 96hr 15.95	EC ₅₀ 48hr 44.9	EC ₅₀ 96hr 10.1 NOEC 96hr 0.804
Hydroxypropyl methacrylate	LC 50 96hr 833	EC ₅₀ 48hr >143 NOEC 504hr 45.2	EC ₅₀ 72hr >97.2
2,2'-[(4-methylphenyl)imino]bisethanol			EC ₅₀ 72hr >100 NOEC 72hr 100
1,1'-(p-tolylimino)dipropen-2-ol	LC 50 96hr 17	EC ₅₀ 48hr 28.8	EC ₅₀ 72hr 245 NOEC 72hr 57.8
1,4-Naphthoquinone	LC 50 96hr 0.045	EC ₅₀ 48hr 0.025	EC ₅₀ 72hr 0.42 NOEC 72hr 0.07

	Persistence H ₂ O/ Soil	Persistence Air	Bioaccumulation	Mobility
Tetramethylene dimethacrylate	LOW	LOW	LOW	LOW
Ethylene dimethacrylate	LOW	LOW	LOW	LOW
Hydroxypropyl methacrylate	LOW	LOW	LOW	LOW
2,2'-[(4-methylphenyl)imino]bisethanol	LOW	LOW	LOW	LOW
1,1'-(p-tolylimino)dipropen-2-ol	LOW	LOW	LOW	LOW
1,4-Naphthoquinone	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 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:

HSR002670 Surface Coatings & Colourants Subsidiary Hazard

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Safety data sheet must be available to a person handling the substance within 10 minutes.

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Emergency plan	Required when quantities exceed 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 quantities exceed 500 Lt
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	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	N
Vietnam	NCI	Y
Russia	ARIPS	Y
Thailand	TECI	Y

Section 16 Other Information

Revision History:

February 2021	Review and update to GHS v7 format
October 2016	inclusion of VOC
June 2016	amended formulation and subsequent classification.
September 2015	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

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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