

This safety data sheet was created pursuant to the requirements of:
 GHS: The Globally Harmonized System of Classification and Labeling of Chemicals

RAINBOW PVC SOLVENT CEMENT
 Revision Number 1.02

Revision date 04-Jul-2021
Supersedes Date: 05-Nov-2017

1. Identification

Product identifier

Product Name RAINBOW PVC SOLVENT CEMENT
Pure substance/mixture Mixture

Details of the supplier of the safety data sheet

Responsible Party

Bostik New Zealand Limited
 19 Eastern Hutt Road Wingate,
 Lower Hutt, New Zealand
 Tel: 04-567 5119
 Fax: 04-567 5412

Manufacturer

Bostik New Zealand Limited
 19 Eastern Hutt Road Wingate,
 Lower Hutt, New Zealand
 Tel: 04-567 5119
 Fax: 04-567 5412

E-mail address

SDS.AP@Bostik.com

Emergency telephone number

Emergency Telephone

24 Hr: 0800 243 622
 +64 4 917 9888
 Poison Centre : 0800 764 766

Recommended use of the chemical and restrictions on use

Recommended use Adhesive
Restrictions on use No information available
Uses advised against Consumer use

2. Hazard(s) identification

Classification of the substance or mixture

Serious eye damage/eye irritation	Category 2 (6.4)
Carcinogenicity	Category 2 (6.7B)
Reproductive toxicity	Category 1B (6.8A)
Specific target organ toxicity - Single exposure	Category 3 (1)
Hazardous to the Aquatic Environment - Acute Hazard	Category 3 (9.1D)
Hazardous to the Aquatic Environment - Chronic Hazard	Category 3 (9.1C)
Flammable liquids	Category 2 (3.1B)

Classification in parenthesis is applicable for New Zealand Hazard Classification

Label elements



Signal word

Danger

Hazard statements

H319 - Causes serious eye irritation
 H336 - May cause drowsiness or dizziness
 H351 - Suspected of causing cancer
 H360 - May damage fertility or the unborn child
 H412 - Harmful to aquatic life with long lasting effects

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H225 - Highly flammable liquid and vapor

Prevention

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P281 - Use personal protective equipment as required
P264 - Wash face, hands and any exposed skin thoroughly after handling
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P235 - Keep cool

Response

P308 + P313 - IF exposed or concerned: Get medical advice/attention

Inhalation

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Eyes

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

Fire

P370 + P378 - In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish

Storage

P405 - Store locked up

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards

May be harmful if swallowed In use, may form flammable/explosive vapor-air mixture

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%
Methyl ethyl ketone	78-93-3	20- <40
Vinyl acetate-vinyl chloride copolymer	9003-22-9	20- <40
Tetrahydrofuran	109-99-9	10 - <20
Silica, amorphous	7631-86-9	5 - <10
Titanium dioxide	13463-67-7	5 - <10
Carbonic acid, calcium salt (1:1)	471-34-1	1 - <5
Dibutyltin dilaurate	77-58-7	0.1- <1
Water	7732-18-5	0.1- <1
Silica gel, precipitated, crystalline free	112926-00-8	0.1- <1
Aluminum hydroxide (Al(OH) ₃)	21645-51-2	0.1- <1
Fatty acids, C12-18 and C18-unsatd.	90990-15-1	0.1- <1
International sales & marketing NZ Ltd	--	0.01 - < 0.1

*** Any remaining ingredients are not hazardous

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4. First-aid measures

Description of necessary first aid measures

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms/effects, acute and delayed

Symptoms No information available.

For emergency responders

Self-protection of the first aider No information available.

Note to physicians

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical No information available.

Hazardous combustion products Carbon oxides. Carbon monoxide. Carbon dioxide (CO₂). Hydrogen chloride. Silicon dioxide.

Special protective actions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.
For emergency responders Use personal protection recommended in Section 8.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so.
Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

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7. Handling and storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.
See Section 8 for information on appropriate personal protective equipment

Conditions for safe storage, including any incompatibilities

Protect from moisture.

8. Exposure controls/personal protection

Occupational exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	New Zealand	Australia	European Union
Methyl ethyl ketone 78-93-3	TWA: 150 ppm TWA: 445 mg/m ³ STEL: 300 ppm STEL: 890 mg/m ³	150 ppm TWA 445 mg/m ³ TWA 300 ppm STEL 890 mg/m ³ STEL	TWA: 200 ppm TWA: 600 mg/m ³ STEL: 300 ppm STEL: 900 mg/m ³
Tetrahydrofuran 109-99-9	TWA: 100 ppm TWA: 295 mg/m ³ Skin	100 ppm TWA 295 mg/m ³ TWA	TWA: 50 ppm TWA: 150 mg/m ³ STEL: 100 ppm STEL: 300 mg/m ³ *
Silica, amorphous 7631-86-9	TWA: 0.05 mg/m ³	2 mg/m ³ TWA	TWA: 0.1 mg/m ³
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	10 mg/m ³ TWA	-
Carbonic acid, calcium salt (1:1) 471-34-1	TWA: 10 mg/m ³	10 mg/m ³ TWA	-
Dibutyltin dilaurate 77-58-7	TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³ Skin	0.1 mg/m ³ TWA 0.2 mg/m ³ STEL	-
Silica gel, precipitated, crystalline free 112926-00-8	TWA: 10 mg/m ³	10 mg/m ³ TWA	-

Chemical name	ACGIH TLV	NIOSH	OSHA PEL
Methyl ethyl ketone 78-93-3	STEL: 300 ppm TWA: 200 ppm	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³	TWA: 200 ppm TWA: 590 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m ³ (vacated) STEL: 300 ppm (vacated) STEL: 885 mg/m ³
Tetrahydrofuran 109-99-9	STEL: 100 ppm TWA: 50 ppm S*	IDLH: 2000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 250 ppm STEL: 735 mg/m ³	TWA: 200 ppm TWA: 590 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 735 mg/m ³
Silica, amorphous 7631-86-9	-	IDLH: 3000 mg/m ³ TWA: 6 mg/m ³	TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 6 mg/m ³ <1% Crystalline silica TWA: 20 mppcf : (80)/(%) SiO ₂ mg/m ³ TWA
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust
Carbonic acid, calcium salt (1:1) 471-34-1	-	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust	-
Dibutyltin dilaurate	STEL: 0.2 mg/m ³ Sn	IDLH: 25 mg/m ³ Sn	TWA: 0.1 mg/m ³ Sn

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77-58-7	TWA: 0.1 mg/m ³ Sn S*	TWA: 0.1 mg/m ³ except Cyhexatin Sn	(vacated) TWA: 0.1 mg/m ³ Sn (vacated) S*
Silica gel, precipitated, crystalline free 112926-00-8	-	-	(vacated) TWA: 6 mg/m ³ TWA: 20 mppcf : (80)/(% SiO ₂) mg/m ³ TWA
Aluminum hydroxide (Al(OH) ₃) 21645-51-2	TWA: 1 mg/m ³ respirable particulate matter	-	-

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

Engineering controls

Ensure adequate ventilation, especially in confined areas. Vapors/aerosols must be exhausted directly at the point of origin.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Tight sealing safety goggles. Face protection shield.
- Hand protection** Wear suitable gloves.
- Skin and body protection** Gloves made of plastic or rubber. Antistatic footwear. Wear fire/flame resistant/retardant clothing. Suitable protective clothing. Apron.

Environmental exposure controls No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Paste Viscous
Color	White
Physical state	Liquid
Odor	Solvent
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	Not applicable Insoluble in water
pH (as aqueous solution)	No data available	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	66 °C	
Flash point	-6 °C	
Evaporation rate	No data available	
Flammability	Not applicable for liquids .	
Flammability Limit in Air		
Upper flammability or explosive limits	11.5	
Lower flammability or explosive limits	1.9	
Vapor pressure	No data available	
Relative vapor density	No data available	
Relative density	No data available	
Water solubility	partially soluble	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	> 700	
Dynamic viscosity	No data available	

Additional information
Oxidizing properties No information available

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Solid content (%) approx 46
Density 1.4 g/cm³

10. Stability and reactivity

Stability Stable under normal conditions.

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Protect from moisture.

Incompatible materials None known based on information supplied.

Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. Toxicological information

Inhalation Based on available data, the classification criteria are not met.

Eye contact Based on available data, the classification criteria are not met.

Skin contact Based on available data, the classification criteria are not met.

Ingestion Based on available data, the classification criteria are not met.

Acute Toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 3,108.00
ATEmix (dermal) 8,784.00
ATEmix (inhalation-dust/mist) 5.89

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl ethyl ketone	=2483 mg/kg (Rattus)	= 5000 mg/kg (Oryctolagus cuniculus)	=11700 ppm (Rattus) 4 h
Tetrahydrofuran	=1650 mg/kg (Rattus)	>2000 mg/kg (rattus)	=21000 ppm (Rattus) 3 h
Silica, amorphous	=7900 mg/kg (Rattus)	> 5000 mg/kg (Oryctolagus cuniculus)	>2.2 mg/L (Rattus) 1 h
Titanium dioxide	>10000 mg/kg (Rattus)	LD50 > 10000 mg/Kg	>5 mg/l
Carbonic acid, calcium salt (1:1)	LD50 > 2000 mg/kg (Rattus) OECD 420	LD50 >2000 mg/kg (Rattus) OECD 402	LC50 (4h) >3mg/ml (Rattus)
Dibutyltin dilaurate	=2071 mg/kg (Rattus) OECD 401	> 2000 mg/kg (Rattus)	-
Water	>90 mL/kg (Rattus)	-	-
Silica gel, precipitated, crystalline free	LD50 >10000 mg/Kg (Rattus)	>5000 mg/kg (Oryctolagus cuniculus)	>2.2 mg/L (Rattus) 1 h
Aluminum hydroxide (Al(OH)3)	>5000 mg/kg (Rattus)	-	LC50 (4h) >2.3m/L air (Rattus)

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Skin corrosion/irritation Based on available data, the classification criteria are not met.

Component Information					
Titanium dioxide (13463-67-7)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion					Non-irritant

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Component Information					
Methyl ethyl ketone (78-93-3)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	eye			irritant

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Component Information			
Methyl ethyl ketone (78-93-3)			
Method	Species	Exposure route	Results
OECD Test No. 406: Skin Sensitization	Guinea pig	Dermal	No sensitization responses were observed

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Chemical name	China	IARC
Vinyl acetate-vinyl chloride copolymer	-	Group 3
Tetrahydrofuran	-	Group 2B
Silica, amorphous	-	Group 3
Titanium dioxide	Possibly carcinogenic to humans	Group 2B
Silica gel, precipitated, crystalline free	-	Group 3

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure) Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) Based on available data, the classification criteria are not met.

Target organ effects Central nervous system. Eyes. Lungs. Respiratory system. Skin.
Aspiration hazard Based on available data, the classification criteria are not met.

12. Ecological information

Ecotoxicity The environmental impact of this product has not been fully investigated.

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Chemical name	Algae/aquatic plants	Fish	Crustacea
Methyl ethyl ketone	EC50=1972 mg/l (Pseudokirchneriella subcapitata)	LC50: 3130 - 3320mg/L (96h, Pimephales promelas)	EC50 48 h > 308 mg/L (Daphnia magna)
Tetrahydrofuran	-	LC50: 1970 - 2360mg/L (96h, Pimephales promelas) LC50: 2700 - 3600mg/L (96h, Pimephales promelas)	EC50: =5930mg/L (24h, Daphnia magna)
Silica, amorphous	EC50: =440mg/L (72h, Pseudokirchneriella subcapitata)	LC50: =5000mg/L (96h, Brachydanio rerio)	EC50: =7600mg/L (48h, Ceriodaphnia dubia)
Titanium dioxide	LC50 (96h) >10000 mg/l (Cyprinodon variegatus) OECD 203	-	-
Carbonic acid, calcium salt (1:1)	IC50 72H Algae >1000 mg/l	CL50 96H >1000 mg/l	EC50 48H Daphnia >1000 mg/l
Dibutyltin dilaurate	EC50 1 (72h) mg/L (desmodesmus subspicatus)	LC50: =2mg/L (48h, Oryzias latipes)	0,463 (48h) mg/L (daphnia magna)
Silica gel, precipitated, crystalline free	-	CL50 (96h) >=10000 mg/l (Brachydanio rerio)	CE50 (24h) >=1000 mg/L (Daphnia magna)
Aluminum hydroxide (Al(OH)3)	EC50 >100 mg/l Algae (Selenastrum capricornutum)	LC50 >100 mg/L (Salmo trutta)	EC50 >100 mg/L Invertebrates (Daphnia magna)

Persistence and degradability No information available.

Bioaccumulative potential There is no data for this product.

Chemical name	Partition coefficient
Methyl ethyl ketone	0.3
Tetrahydrofuran	0.45
Dibutyltin dilaurate	4.44

Chemical name	PBT and vPvB assessment
Methyl ethyl ketone 78-93-3	The substance is not PBT / vPvB
Tetrahydrofuran 109-99-9	The substance is not PBT / vPvB PBT assessment does not apply
Silica, amorphous 7631-86-9	The substance is not PBT / vPvB PBT assessment does not apply
Titanium dioxide 13463-67-7	The substance is not PBT / vPvB PBT assessment does not apply
Carbonic acid, calcium salt (1:1) 471-34-1	The substance is not PBT / vPvB PBT assessment does not apply
Dibutyltin dilaurate 77-58-7	The substance is not PBT / vPvB
Aluminum hydroxide (Al(OH)3) 21645-51-2	The substance is not PBT / vPvB PBT assessment does not apply

Mobility in soil No information available.

13. Disposal considerations

Waste chemicals

Waste from residues/unused products Dispose of in accordance with local regulations Dispose of waste in accordance with environmental legislation

Contaminated packaging Do not reuse empty containers

14. Transport information

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IMDG

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Description	UN1133, Adhesives, 3, III, (-6°C c.c.)
Transport hazard class(es)	3
Packing group	III
Marine pollutant	NP
Special Provisions	223, 955
Limited Quantity (LQ)	5 L
EmS-No	F-E, S-D

IATA

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Description	UN1133, Adhesives, 3, III
Transport hazard class(es)	3
Packing group	III
Special Provisions	A3
Limited Quantity (LQ)	10 L
ERG Code	3L

ADR

UN number or ID number	UN1133
Proper Shipping Name	Adhesives
Transport hazard class(es)	3
Labels	3
Packing group	III
Description	UN1133, Adhesives, 3, III, (D/E)
Limited Quantity (LQ)	5 L
Classification code	F1
Tunnel restriction code	(D/E)

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

15. Regulatory information

National regulations

ERMA Group HSR002669

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. Other information

Abbreviations and acronyms

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value
*	Skin designation
SVHC	Substance(s) of Very High Concern

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PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB	Very Persistent and very Bioaccumulative (vPvB) Chemicals
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure

Revision date 04-Jul-2021

Revision note The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key literature references and sources for data used to compile the SDS

New Zealand's Chemical Classification and Information Database (CCID)
World Health Organization

Disclaimer

The information provided in this Safety Data Sheet 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 a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet