

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Chemtools Pty Ltd

Chemwatch Hazard Alert Code: 4

Issue Date: **28/03/2023**Print Date: **04/04/2023**S.GHS.AUS/NZ.EN.E

Chemwatch: **39-45435**

Version No: **3.1**Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name	Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	AEROSOLS
Chemical formula	Not Applicable
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Use according to manufacturer's directions.
Relevant identified uses	Application is by spray atomisation from a hand held aerosol pack

Details of the manufacturer or supplier of the safety data sheet

Registered company name	Chemtools Pty Ltd	Chemtools Pty Ltd
Address	Unit 2, 14 - 16 Lee Holm Road St Marys NSW 2760 Australia	15/62 Factory Road Belfast Christchurch 8051 New Zealand
Telephone	1300 738 250, +61 2 9833 9766	+64 9 940 2745
Fax	+61 2 9623 3670	+61 2 9623 3670
Website	www.chemtools.com.au	www.chemtools.co.nz
Email	sales@chemtools.com.au	sales@chemtools.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre	National Poisons Centre
Emergency telephone numbers	13 11 26	0800 764 766
Other emergency telephone numbers	Not Available	Not Available

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
Classification [1]	Aerosols Category 1, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Issue Date: **28/03/2023** Print Date: **04/04/2023**

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Label elements

Hazard pictogram(s)





Signal word

Danger

Hazard statement(s)

AUH019	May form explosive peroxides.
AUH044	Risk of explosion if heated under confinement.
H222+H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P271	Use only outdoors or in a well-ventilated area.
P261	Avoid breathing mist/vapours/spray.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary statement(s) Storage

P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification [1]	Aerosols Category 1, Aspiration Hazard Category 1, Serious Eye Damage/Eye Irritation Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	2.1.2A, 6.1E (aspiration), 6.4A

Page 3 of 15

Part Number: Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Version No: 3.1

Issue Date: **28/03/2023**Print Date: **04/04/2023**

Hazard pictogram(s)







Signal word

Danger

Hazard statement(s)

H222+H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.

Supplementary Phrases

Not Applicable

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.	
P331	Do NOT induce vomiting.	
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.	

Precautionary statement(s) Storage

P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
67-63-0	>60	isopropanol
124-38-9	<5	carbon dioxide
Not Available	balance	Ingredients determined not to be hazardous
Legend: 1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available		

SECTION 4 First aid measures

Description of first aid measures

If aerosols come in contact with the eyes:

Eye Contact

Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes 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.

Chemwatch: 39-45435 Page 4 of 15 Issue Date: 28/03/2023
Part Number: Print Date: 04/04/2023

Version No: 3.1

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

	 Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If solids or aerosol mists are deposited upon the skin: Flush skin and hair with running water (and soap if available). Remove any adhering solids with industrial skin cleansing cream. DO NOT use solvents. Seek medical attention in the event of irritation.
Inhalation	If aerosols, fumes or combustion products are inhaled: Remove to fresh air. 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. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	Not considered a normal route of entry. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to isopropanol:

- Rapid onset respiratory depression and hypotension indicates serious ingestions that require careful cardiac and respiratory monitoring together with immediate intravenous access.
- Rapid absorption precludes the usefulness of emesis or lavage 2 hours post-ingestion. Activated charcoal and cathartics are not clinically useful. Ipecac is most useful when given 30 mins. post-ingestion.
- ► There are no antidotes.
- Management is supportive. Treat hypotension with fluids followed by vasopressors.
- Watch closely, within the first few hours for respiratory depression; follow arterial blood gases and tidal volumes.
- Ice water lavage and serial haemoglobin levels are indicated for those patients with evidence of gastrointestinal bleeding.

SECTION 5 Firefighting measures

Extinguishing media

SMALL FIRE:

▶ Water spray, dry chemical or CO2

LARGE FIRE:

Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility

Fire Fighting

Fire/Explosion Hazard

 Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Alert Fire Brigade and tell them location and nature of hazard.	
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May be violently or explosively reactive.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water course.

If safe, switch off electrical equipment until vapour fire hazard removed.

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.

 $\mbox{\Large \ \ }$ Equipment should be thoroughly decontaminated after use.

Liquid and vapour are highly flammable.

Severe fire hazard when exposed to heat or flame.

▶ Vapour forms an explosive mixture with air.

▶ Severe explosion hazard, in the form of vapour, when exposed to flame or spark.

Vapour may travel a considerable distance to source of ignition.

▶ Heating may cause expansion or decomposition with violent container rupture.

Aerosol cans may explode on exposure to naked flames.

- Rupturing containers may rocket and scatter burning materials.
- Hazards may not be restricted to pressure effects.
- ▶ May emit acrid, poisonous or corrosive fumes.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

Chemwatch: **39-45435**Part Number:

Version No: 3.1

Page **5** of **15**

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

Combustion products include:

carbon dioxide (CO2)

other pyrolysis products typical of burning organic material.

WARNING: Long standing in contact with air and light may result in the formation

of potentially explosive peroxides.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

motificas and material for	containment and clearing up
Minor Spills	 Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Wear protective clothing, impervious gloves and safety glasses. Shut off all possible sources of ignition and increase ventilation. Wipe up. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse / absorb vapour. Absorb or cover spill with sand, earth, inert materials or vermiculite. If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely. Collect residues and seal in labelled drums for disposal.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Safe handling

Precautions for safe handling

The substance accumulates peroxides which may become hazardous only if it evaporates or is distilled or otherwise treated to concentrate the peroxides. The substance may concentrate around the container opening for example.

Purchases of peroxidisable chemicals should be restricted to ensure that the chemical is used completely before it can become peroxidised.

- A responsible person should maintain an inventory of peroxidisable chemicals or annotate the general chemical inventory to indicate which chemicals are subject to peroxidation. An expiration date should be determined. The chemical should either be treated to remove peroxides or disposed of before this date.
- The person or laboratory receiving the chemical should record a receipt date on the bottle. The individual opening the container should add an opening date.
- ▶ Unopened containers received from the supplier should be safe to store for 18 months.
- Opened containers should not be stored for more than 12 months.
- 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.
- Avoid smoking, naked lights or ignition sources.
- Avoid contact with incompatible materials.
- ► When handling, **DO NOT** eat, drink or smoke.
- ► DO NOT incinerate or puncture aerosol cans.
- ▶ DO NOT spray directly on humans, exposed food or food utensils.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- ▶ Observe manufacturer's storage and handling recommendations contained within this SDS.

Chemwatch: 39-45435 Page 6 of 15

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: 28/03/2023 Print Date: 04/04/2023

- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
- Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of
- ▶ Store in original containers in approved flammable liquid storage area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.
- Keep containers securely sealed. Contents under pressure.
- Store away from incompatible materials.
- Store in a cool, dry, well ventilated area.
- Avoid storage at temperatures higher than 40 deg C.
- ▶ Store in an upright position.
- Protect containers against physical damage.
- Check regularly for spills and leaks.
- ▶ Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Suitable container

Storage incompatibility

Other information

Version No: 3.1

- ▶ DO NOT use aluminium or galvanised containers
- Aerosol dispenser.
- Check that containers are clearly labelled.

Carbon dioxide:

- reacts violently with strong bases and alkali metals (especially their dusts)
- may ignite or explode when heated or in suspended chemically active metals (and their hydrides) such as aluminium, chromium, manganese, magnesium (above 775 C), titanium (above 550 C), uranium (above 750 C) or zirconium, diethylmagnesium
- is incompatible with water, acrolein, acrylaldehyde, amines, anhydrous ammonia, aziridine, metal acetylides (such as lithium acetylide), caesium monoxide (moist), lithium, potassium, sodium, sodium carbide, sodium-potassium alloy, sodium peroxide,
- may build up static electricity when discharged at high flow rates from storage cylinders or fire extinguishers this may produce sparks resulting in ignition of flammables or explosives.
- may decompose to toxic carbon monoxide and flammable oxygen when exposed to electrical discharges or very high temperatures

Isopropanol (syn: isopropyl alcohol, IPA):

- forms ketones and unstable peroxides on contact with air or oxygen; the presence of ketones especially methyl ethyl ketone (MEK, 2-butanone) will accelerate the rate of peroxidation
- reacts violently with strong oxidisers, powdered aluminium (exothermic), crotonaldehyde, diethyl aluminium bromide (ignition), dioxygenyl tetrafluoroborate (ignition/ ambient temperature), chromium trioxide (ignition), potassium-tert-butoxide (ignition), nitroform (possible explosion), oleum (pressure increased in closed container), cobalt chloride, aluminium triisopropoxide, hydrogen plus palladium dust (ignition), oxygen gas, phosgene, phosgene plus iron salts (possible explosion), sodium dichromate plus sulfuric acid (exothermic/ incandescence), triisobutyl aluminium
- reacts with phosphorus trichloride forming hydrogen chloride gas
- reacts, possibly violently, with alkaline earth and alkali metals, strong acids, strong caustics, acid anhydrides, halogens, aliphatic amines, aluminium isopropoxide, isocyanates, acetaldehyde, barium perchlorate (forms highly explosive perchloric ester compound), benzoyl peroxide, chromic acid, dialkylzincs, dichlorine oxide, ethylene oxide (possible explosion), hexamethylene diisocyanate (possible explosion), hydrogen peroxide (forms explosive compound), hypochlorous acid, isopropyl chlorocarbonate, lithium aluminium hydride, lithium tetrahydroaluminate, nitric acid, nitrogen dioxide, nitrogen tetraoxide (possible explosion), pentafluoroguanidine, perchloric acid (especially hot), permonosulfuric acid, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium, trinitromethane
- attacks some plastics, rubber and coatings
- reacts with metallic aluminium at high temperature
- may generate electrostatic charges

Alcohols

- ▶ are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents.
- reacts, possibly violently, with alkaline metals and alkaline earth metals to produce hydrogen
- react with strong acids, strong caustics, aliphatic amines, isocyanates, acetaldehyde, benzoyl peroxide, chromic acid, chromium oxide, dialkylzincs, dichlorine oxide, ethylene oxide, hypochlorous acid, isopropyl chlorocarbonate, lithium tetrahydroaluminate, nitrogen dioxide, pentafluoroguanidine, phosphorus halides, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium
- ▶ should not be heated above 49 deg. C. when in contact with aluminium equipment
- · Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances



- Must not be stored together
- May be stored together with specific preventions
- May be stored together

Part Number: Version No: **3.1**

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	isopropanol	Isopropyl alcohol	400 ppm / 983 mg/m3	1230 mg/m3 / 500 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	isopropanol	Isopropyl alcohol	400 ppm / 983 mg/m3	1230 mg/m3 / 500 ppm	Not Available	Not Available
Australia Exposure	carbon	Carbon dioxide in coal mines	12500 ppm / 22500	54000 mg/m3 / 30000	Not	Not
Standards	dioxide		mg/m3	ppm	Available	Available
Australia Exposure	carbon	Carbon dioxide	5000 ppm / 9000	54000 mg/m3 / 30000	Not	Not
Standards	dioxide		mg/m3	ppm	Available	Available
New Zealand Workplace	carbon	Carbon dioxide	5000 ppm / 9000	54000 mg/m3 / 30000	Not	Not
Exposure Standards (WES)	dioxide		mg/m3	ppm	Available	Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
isopropanol	400 ppm	2000* ppm	12000** ppm

Ingredient	Original IDLH	Revised IDLH
isopropanol	2,000 ppm	Not Available
carbon dioxide	40,000 ppm	Not Available

Exposure 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 conditions. If risk of overexposure exists, wear SAA 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.

Appropriate engineering controls

Type of Contaminant:	Speed:
aerosols, (released at low velocity into zone of active generation)	0.5-1 m/s
direct spray, spray painting in shallow booths, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction

Version No: 3.1

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used Individual protection measures, such as personal protective equipment No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: For potentially moderate or heavy exposures: Eye and face protection Safety glasses with side shields • NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them. Skin protection See Hand protection below Hands/feet protection ► Elbow length PVC gloves **Body protection** See Other protection below No special equipment needed when handling small quantities. OTHERWISE: Overalls. Skin cleansing cream. Eyewash unit. Other protection Do not spray on hot surfaces. The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton. ▶ Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost.

BRETHERICK: Handbook of Reactive Chemical Hazards.

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Material	СРІ
NEOPRENE	Α
NITRILE	Α
NITRILE+PVC	Α
PE/EVAL/PE	Α
PVC	В
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С

^{*} CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	Air-line*	A-2	A-PAPR-2 ^
up to 20 x ES	-	A-3	-
20+ x ES	-	Air-line**	-

^{* -} Continuous-flow; ** - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance Liquid aerosol with a characteristic odour; mixes with water. Clear

Physical state Liquid Relative density (Water = 1)

Not Available

^{^ -} Full-face

Page 9 of 15

Part Number: Version No: **3.1**

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

Odour	Characteristic	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	 Elevated temperatures. Presence of open flame. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicologi	ical effects
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. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. WARNING:Intentional misuse by concentrating/inhaling contents may be lethal.
Ingestion	Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Accidental ingestion of the material may be damaging to the health of the individual.
Skin Contact	Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. There is some evidence to suggest that the material may cause mild but significant 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. Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, 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. Not considered to be a risk because of the extreme volatility of the gas.
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. 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.

Part Number: Version No: **3.1**

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

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.

There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Main route of exposure to the gas in the workplace is by inhalation.

Long term, or repeated exposure of isopropanol may cause inco-ordination and tiredness.

Repeated inhalation exposure to isopropanol may produce sleepiness, inco-ordination and liver degeneration. Animal data show developmental effects only at exposure levels that produce toxic effects in adult animals. Isopropanol does not cause genetic damage.

There are inconclusive reports of human sensitisation from skin contacts with isopropanol. Chronic alcoholics are more tolerant of the whole-body effects of isopropanol.

Animal testing showed the chronic exposure did not produce reproductive effects.

NOTE: Commercial isopropanol does not contain "isopropyl oil", which caused an excess incidence of sinus and throat cancers in isoproanol production workers in the past. "Isopropyl oil" is no longer formed during production of isopropanol.

Rapidstick™ Cyanoacrylate Adhesives	TOXICITY	IRRITATION	
Accelerator (IPA-Based) (Aerosol)	Not Available	Not Available	
	TOXICITY	IRRITATION	
isopropanol	Dermal (rabbit) LD50: 12800 mg/kg ^[2]	Eye (rabbit): 10 mg - moderate	
	Inhalation(Mouse) LC50; 53 mg/L4h ^[2]	Eye (rabbit): 100 mg - SEVERE	
	Oral (Mouse) LD50; 3600 mg/kg ^[2]	Eye (rabbit): 100mg/24hr-moderate	
		Skin (rabbit): 500 mg - mild	
carbon dioxide	TOXICITY	IRRITATION	
	Not Available Not Available		
Legend:	Nalue obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.		
	Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances		

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.

ISOPROPANOL

Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled. Intentional swallowing is common particularly among alcoholics or suicide victims and also leads to fainting, breathing difficulty, nausea, vomiting and headache. In the absence of unconsciousness, recovery usually occurred. Repeated doses may damage the kidneys. A decrease in the frequency of mating has been found in among animals, and newborns have been found to have a greater incidence of low birth weight. Tumours of the testes have been observed in the male rat. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	~

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

Rapidstick™	Endpoint	Test Duration (hr)	Species	Value	Source
Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50(ECx)	24h	Algae or other aquatic plants	0.011mg/L	4
isopropanol	LC50	96h	Fish	>1400mg/l	4
	EC50	72h	Algae or other aquatic plants	>1000mg/l	1
	EC50	96h	Algae or other aquatic plants	>1000mg/l	1
	EC50	48h	Crustacea	7550mg/l	4
	Endpoint	Test Duration (hr)	Species	Value	Source
carbon dioxide	LC50	96h	Fish	35mg/l	1
Legend:			HA Registered Substances - Ecotoxicologica	•	
	4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

For Isopropanol (IPA): log Kow: -0.16- 0.28; Half-life (hr) air: 33-84;

Half-life (hr) H2O surface water: 130; Henry's atm m3 /mol: 8.07E-06;

BOD 5: 1.19,60%; COD: 1.61-2.30, 97%;

ThOD: 2.4; BOD 20: >70%.

Environmental Fate: IPA is expected to partition primarily to the aquatic compartment (77.7%) with the remainder to the air (22.3%). Overall, IPA presents a low potential hazard to aquatic or terrestrial biota.

Aquatic Fate: IPA has been shown to biodegrade rapidly in aerobic, aqueous biodegradation tests and therefore, would not be expected to persist in aquatic habitats. IPA is expected to volatilize slowly from water. The calculated half-life for the volatilization from surface water (1 meter depth) is predicted to range from 4 days (from a river) to 31 days (from a lake). Hydrolysis is not considered a significant degradation process for IPA, however; aerobic biodegradation of IPA has been shown to occur rapidly under non-acclimated conditions. IPA is readily biodegradable in both freshwater and saltwater (72 to 78% biodegradation in 20 days)

Terrestrial Fate: Soil - IPA is also not expected to persist in surface soils due to rapid evaporation to the air. IPA will evaporate quickly from soil and is not expected to partition to the soil however; IPA has the potential to leach through the soil due to its low soil adsorption. Plants - Toxicity of IPA to plants is expected to be low. Atmospheric Fate: IPA is subject to oxidation predominantly by hydroxy radical attack. The atmospheric half-life is expected to be 10 to 25 hours. Direct photolysis is not expected to be an important transformation process for the degradation of IPA.

Ecotoxicity: IPA has been shown to have a low order of acute aquatic toxicity and is not acutely toxic to fish and invertebrates. Chronic aquatic toxicity has also been shown to be of low concern and bioconcentration in aquatic organisms is not expected to occur.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
carbon dioxide	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
isopropanol	LOW (LogKOW = 0.05)
carbon dioxide	LOW (LogKOW = 0.83)

Mobility in soil

Ingredient	Mobility
isopropanol	HIGH (KOC = 1.06)

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

Ingredient	Mobility
carbon dioxide	HIGH (KOC = 1.498)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging

disposal

• 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.
- Consult State Land Waste Management Authority for disposal.
- ▶ Discharge contents of damaged aerosol cans at an approved site.
- Allow small quantities to evaporate.
- DO NOT incinerate or puncture aerosol cans.
- ▶ Bury residues and emptied aerosol cans at an approved site.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

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.

DO NOT deposit the hazardous substance into or onto a landfill or a sewage facility.

Burning the hazardous substance must happen under controlled conditions with no person or place exposed to

- (1) a blast overpressure of more than 9 kPa; or
- (2) an unsafe level of heat radiation.

The disposed hazardous substance must not come into contact with class 1 or 5 substances.

SECTION 14 Transport information

Labels Required

	2
Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG)

UN number or ID number	1950			
UN proper shipping name	AEROSOLS	AEROSOLS		
Transport hazard class(es)		2.1 Not Applicable		
Packing group	Not Applicable			
Environmental hazard	Not Applicable			
Special precautions for user	Special provisions 63 190 277 327 344 381 Limited quantity 1000ml			

Land transport (UN)

UN number or ID number	1950				
UN proper shipping name	AEROSOLS				
Transport hazard class(es)	Class	2.1			

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

	Subsidiary risk Not Applicable		
Packing group	Not Applicable		
Environmental hazard	Not Applicable		
Special precautions for user	Special provisions 63; 190; 277; 327; 344; 381 Limited quantity 1000ml		

Air transport (ICAO-IATA / DGR)

UN number	1950				
UN proper shipping name	Aerosols, flammable				
Transport hazard class(es)	ICAO/IATA Class	2.1			
	ICAO / IATA Subrisk	Not Applicable			
	ERG Code 10L				
Packing group	Not Applicable				
Environmental hazard	Not Applicable				
	Special provisions		A145 A167 A802		
	Cargo Only Packing Instructions		203		
	Cargo Only Maximum Qty / Pack		150 kg		
Special precautions for user	Passenger and Cargo Packing Instructions		203		
	Passenger and Cargo Maximum Qty / Pack		75 kg		
	Passenger and Cargo Limited Quantity Packing Instructions		Y203		
	Passenger and Cargo Limited Maximum Qty / Pack		30 kg G		

Sea transport (IMDG-Code / GGVSee)

UN number	1950		
UN proper shipping name	AEROSOLS		
Transport hazard class(es)		2.1 Not Applicable	
Packing group	Not Applicable		
Environmental hazard	Not Applicable		
Special precautions for user	EMS Number Special provisions Limited Quantities		

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

•	
Product name	Group
isopropanol	Not Available
carbon dioxide	Not Available

Transport in bulk in accordance with the IGC Code

•	
Product name	Ship Type
isopropanol	Not Available
carbon dioxide	Not Available

SECTION 15 Regulatory information

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard	
HSR002515	Aerosols Flammable Group Standard 2020	

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

isopropanol is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by
the IARC Monographs - Not Classified as Carcinogenic
New Zealand Approved Hazardous Substances with controls

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 Workplace Exposure Standards (WES)

carbon dioxide is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)
FEI Equine Prohibited Substances List - Controlled Medication
FEI Equine Prohibited Substances List (EPSL)
New Zealand Approved Hazardous Substances with controls

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 Workplace Exposure Standards (WES)

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)	
2.1.2A	3 000 L (aggregate water capacity)	3 000 L (aggregate water capacity)	

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Maximum quantities of certain hazardous substances permitted on passenger service vehicles

Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Gas (aggregate water capacity in mL)	Liquid (L)	Solid (kg)	Maximum quantity per package for each classification
2.1.2A				1L (aggregate water capacity)

Tracking Requirements

Not Applicable

National Inventory Status

tational inventory status		
National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (isopropanol; carbon dioxide)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	Yes	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	

Chemwatch: **39-45435** Page **15** of **15**

Chemwatch: **39-45435**Part Number:
Version No: **3.1**

Rapidstick™ Cyanoacrylate Adhesives Accelerator (IPA-Based) (Aerosol)

Issue Date: **28/03/2023**Print Date: **04/04/2023**

National Inventory	Status
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes
	Yes = All CAS declared ingredients are on the inventory
Legend:	No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	28/03/2023
Initial Date	21/03/2023

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.