

SOLVENT SUPPLIES LTD

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Section 1: Identification of the Material and Supplier

Product Name:	IPA
Other Names:	Propan-2-ol, Propyl alcohol, isopropanol, dimethyl carbinol
Recommended use:	Solvent for use in industrial manufacturing processes.
Company Name:	Solvent Supplies Limited
Address:	33 Miro Street Otaki New Zealand PO Box 2019 Raumati Beach Paraparaumu
Fax:	04 902 1857
Email:	ss1994ltd@gmail.com
Emergency Telephone:	New Zealand: 0800 737 63 Monday to Friday 8.00am – 4.30pm New Zealand Poisons Centre: 0800 764 766 Australia: 1800 738 383 Australian Poisons Centre: 1800 131 126

Section 2: Hazards Identification

Emergency Overview:

EPA Approval Code:	HSR001180
HSNO Hazard Classification:	3.1B Flammable liquid: High hazard
 Signal Word: DANGER	6.1E (Oral): Substance that is acutely toxic
	6.3B Substance that is mildly irritating to the skin
	6.4A Substance that is mildly irritating to the eyes

Hazardous Statements:

H225	Highly Flammable liquid and vapour
H303	May be harmful if swallowed
H316	Causes mild skin irritation
H320	Causes mild eye irritation

Pictogram (s)**Prevention Statements:**

P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release into the environment.
P280	Wear protective gloves and protective eye/face protection.

Response Statements:

P101	If medical advice is needed have product container or label at hand.
P312	Call a poison centre or doctor immediately if you feel unwell.
P303+P361+P353	If on skin or hair wash remove immediately all contaminated clothing. Rinse skin with water.
P332+P313	If skin irritation occurs get medical advice.
P305+P351+P338	If in eyes rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.
P337+P313	If eye irritation persists get medical advice.
P370+P378	In case of fire use foam, dry chemical or carbon dioxide (CO2).
P363	Wash contaminated clothing before reuses.
P373+P313	If eye irritation persists, get medical attention/advice.
P301+P312	If swallowed, call a Poison Centre or doctor/physician if you feel unwell.
P330	Rinse mouth.
P304+P340	If inhaled, move victim to fresh air and keep at rest in a position comfortable for breathing.

Storage Statement:

P403+P235	Store in well-ventilated place. Keep cool.
P405	Store locked up.

Disposal Statement:

P501	In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposible) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 for disposal details.
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Section 3:	Composition/Information on Ingredients
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Common Name:	CAS No:	Proportion (% v/v)
Isopropyl alcohol	67-63-0	100
Ethylbenzene	100-41-4	10-30%

Section 4:	First Aid Measures
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Consult the National Poisons Centre (telephone 0800 764 766 / 0800 POISON) or a doctor in every case of suspected poisoning. If medical advice is needed have product label or container at hand.

Ingestion:	DO NOT induce vomiting. Wash thoroughly with water. Seek immediate medical attention.
Inhalation:	If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.
Skin:	Remove all contaminated clothing immediately. Wash affected area with plenty of water followed by soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.
Eyes:	If in eyes, hold eyelids open and flush continuously with running water. Remove contact lenses. Continue flushing for at least 15 minutes. Seek medical attention.
First Aid Facilities:	Eyewash, safety shower and normal washroom facilities.
Advice to Doctor:	Treat symptomatically.
Other Information:	For advice for an emergency, contact a Poisons Information Centre or a doctor at once. (0800 764 766).

Section 5:	Fire Fighting Measures
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Flash Point: 12°C	Flammable Limits: LFL: 2% v/v	UFL: 12% v/v
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Suitable Extinguishing Media:	Use dry chemical, carbon dioxide or foam. Alcohol-resistant foam is preferred. DO NOT use water in a jet.
Unsuitable Extinguishing Media:	Do not use water jet.
Hazards from Combustion Products:	Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.
Specific Hazards Arising from the Chemical:	Highly flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard. Vapours are heavier than air and spread at floor level.
Decomposition Temperature:	Not available.
Precautions in connection with Fire:	Firefighters should wear self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering the drains and watercourses.

Section 6:	Accidental Release Measures
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Emergency Procedures:

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible to contain the spill place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Spills:

Highly flammable liquid. Vapour forms explosive mixture with air. Isolate hazard area and keep unnecessary and unprotected people away from area. Stay upwind and keep out of low lying areas.

Wear appropriate personal protective equipment. Avoid contact with skin and eyes.

Shut off leak if safe to do so. Remove or isolate ignition sources. Contain spill. Avoid run off into drains or sewers. Do not contaminate watercourses or the ground. Take precautions against static discharge. Bond or ground (earth) all equipment. Ventilate contaminated area.

For Large Spills (More than a drum):

Recover liquid and transfer by mechanical means to labeled salvage tank that can be sealed for recovery or disposal of product. Do not flush away any residues with water. Allow residues to evaporate. Remove any contaminated soil and dispose of safely by waste management company.

For Small Spills:

Absorb with appropriate material e.g vermiculite and dispose of waste safely in a labeled sealed container for recovery or disposal.

If contamination of drains, sewers or waterways occurs immediately notify Emergency Services (111).

Disposal:

Dispose of contaminated waste or product to an approved landfill in accordance with local regulations.

Section 7:	Handling and Storage
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Precautions for Safe Handling:

Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well ventilated areas away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers readily tightly closed. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product – that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

Conditions for Safe Storage, including any Incompatibilities:

Store in a cool dry and well-ventilated area away from sources of ignition, oxidizing agents, strong acids, foodstuffs and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity charges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 – the storage and handling of flammable and combustible liquids. Reference should also be made to all applicable local and national regulations.

Storage Temperatures:

5 – 25 °C

Section 8:	Exposure Controls/Personal Protection
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Exposure Guidelines:

NZ Workplace Exposure Standard (WES) have been set for components in this substance:

	WES-TWA	WES-STEL
Isopropyl alcohol	400 ppm (983 mg/m ₃)	500 ppm (1230 mg/m ₃)

Occupational Exposure Limit Values:

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
Propan-2-ol	NZ OELs List	TWA	400	ppm	
Propan-2-ol	NZ OELs List	TWA	983	mg/m ³	

Propan-2-ol	NZ OELs List	WES	500	ppm	
Propan-2-ol	NZ OELs List	WES	1230	mg/m3	

Biological Limit Values:

Name:	2-Propanol
Determinant:	Acetone in urine
BEI[®]:	40 mg/l
Sampling Time:	End of shift at end of work week

Source: American Conference of Industrial Hygienists (ACGIH)

Appropriate Engineering Controls:

This substance is hazardous and should be used with local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Refer to AS 1940 – The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1.2009 Explosive atmospheres – Classification of areas – Explosive gas atmospheres, for further information concerning ventilation requirements.

Use only in a well ventilated area. A half face filter mask suitable for organic gases and vapours (Boiling point <65 °C) is recommended. Where respiratory protective equipment is required use a full face mask. Where air filtering respirators are unsuitable (e.g. air-borne concentrations are high, risk of oxygen deficiency, confined space) use positive pressure breathing apparatus.

Respiratory Protection:

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapour/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection:

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform to Australian/New Zealand Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

Hand Protection:

Wear gloves of impervious material such as nitrile rubber, nitrile butadiene rubber, neoprene, PVC, and natural rubber.

Breakthrough time: >=480 minutes.

Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to

relevant regulations. Reference should be made to AS/NZS 2161:1: Occupational Protective Gloves – Selection, use and maintenance.

Body Protection:

Wear protective clothing. Safety shoes and boots need to be chemical resistant. Wear appropriate chemical resistant gloves e.g. butyl rubber and natural rubber. Neoprene rubber and Viton may be suitable for splash or incidental contact. Avoid contact with eyes. Wear chemical goggles if splash or aerosol/mist exposure risk.

Suitable protective workwear such as cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Refer to the relevant AS/NZ standards for appropriate personal protective equipment.

Section 9: Physical and Chemical Properties

Property	Unit of Measurement	Typical Value
Appearance:	-	Liquid
Colour:	-	Not available
Odour:	-	Slight alcoholic odour
Decomposition:	-	Not available
Boiling Point:	°C	82 °C
Solubility in Water:	100G/100ml	Fully miscible
pH:		Not available
Vapour Pressure:	60.2hPa	(25°C)
	43kPa	(20°C)
Vapour Density (Air=1) :	2	(at 20°C)
Evaporation Rate:	2.50	(n-Butyl acetate=1)
Odour Threshold:		Not available
Viscosity:	Refer to Section 9: Kinetic Viscosity and Dynamic Viscosity	
Volatile Component:		100%
Partition Coefficient:	n/octanol/water	Not available
Density	0.7855 g/cm ³	(20°C)
	791 kg/m ³	(Bulk Density)
Flash Point:	12°C	(Closed Cup)
Flammability:		Flammable
Auto ignition Temperature:		399-425°C
Flammable Limits – Lower:		2% By Volume
Flammable Limits – Upper:		12% By Volume
Explosion Properties:	Product is not explosive. Explosive gas-air vapours may form.	
Oxidising Properties:		Not available
Kinetic Viscosity:		Not available
Dynamic Viscosity:	2.5 nPas	(20°C)

Section 10: Stability and Activity

Reactivity:	Refer to Section 10: Possibility of hazardous reactions.
Chemical Stability:	Stable under normal conditions of storage and handling. Avoid heat, sparks, open flames and other ignition sources.
Incompatibility Materials:	Strong oxidizing agents and strong acids. Strong acids and bases. Aluminum and amines.
Hazardous Decomposition Products:	Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon dioxide and carbon monoxide. Dependent on conditions under which decomposition (combustion, thermal or oxidative degradation) occurs. A complex mixture of airborne solids, liquids and gases (carbon monoxide, carbon dioxide) will be evolved.
Possibility of Hazardous Reactions:	Reacts with strong acids, oxidizing agents.
Hazardous polymerization:	Will not occur.

Section 11:	Toxicological Information
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Toxicology Information:

Toxicology data for material given below.

Acute Toxicity – Oral	LD50 (Rat):	5045 – 5840 mg/kg
Acute Toxicity – Inhalation	LD50 (Rat):	16000 ppm/8h
	LD 50 (Rat):	>10000 ppm/6h
Acute Toxicity – Dermal	LD 50 (Rabbit):	12800 mg/kg

Potential Health Effects:

This section includes possible adverse effects which might occur if this product is not handled in the recommended manner.

Ingestion:

May be harmful if swallowed. Ingestion of this product may cause irritation of the nose, throat and respiratory system.

Inhalation:

Avoid inhalation of vapours, sprays and mists. May cause irritation to respiratory system. High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea. Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

Skin Contact:

Causes mild skin irritant. Prolonged or repeated contact may cause defatting of the skin which could then lead to dermatitis. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye Contact:

Irritating to the eyes. Symptoms can include burning sensation, redness, swelling and/or blurred vision. Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision and redness.

Respiratory Sensitisation:

Not expected to be a respiratory sensitizer.

Germ Cell Mutagenicity:

Not considered to be a mutagenic hazard.

Carcinogenicity:

Not considered to be a carcinogenic hazard. Propan-2-ol is listed as a Group 3: Not classified as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity:

Not considered to be toxic to reproduction.

STOT-Single Exposure:

Not expected to cause toxicity to a specific target organ.

STOT-Repeated Exposure:

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard:

Not expected to be an aspiration target.

Systemic (other target organ) effects:

No other effects noted.

Cancer Information:

Not classified as carcinogen.

Teratology (Birth Defects) and Reproductive effects:

Not classified as a 6.8 substance. Causes foetotoxicity in animals at doses which are maternally toxic.

Mutagenicity (Effects on genetic material):

Not a mutagen.

Toxicological Data:

Oral, mouse, LD₅₀ 3600 mg/kg b.w

Additional Information:

Not available.

Section 12:	Hazard Identification
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Eco-toxicity

The available ecological data is given below:

Persistence and Degradability:	95% Biodegradability in 21 days <i>Result:</i> Readily Biodegradable OECD test guideline 301E
Mobility:	Not available
Bio-accumulative Potential:	Not expected to bio-accumulate <i>Bio-concentration Factor (BCF):</i> >70%
Other Adverse Effects:	Not available
Environmental Protection:	Do not discharge this material into waterways, drains and sewers.
Acute Toxicity – Daphnia:	EC50 (Daphnia Magna): >100 mg/l/72h
Acute Toxicity – Algae:	EC50 (Scenedesmus subspicatus): >1000 mg/l/72hr
Acute Toxicity – Other Organisms:	EC50 (Activated Sludge): <1000 mg/l

Environmental Fate:

This product has not been classified as being ecotoxic.

Movement and Partitioning:

Product is miscible in water.

Degradation and persistence:

Not expected to bio accumulate significantly and is readily biodegradable. Product is mobile in soil and may contaminate groundwater. Avoid contamination of drains and waterways. Oxidizes rapidly by photo-chemical reactions in air.

Ecotoxicology:

No EEL has been set for this substance.

Section 13:	Disposal Considerations
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Disposal Considerations:

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain flammable residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Advise flammable nature.

Product Waste:

Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. In this specific case the product is a flammable substance and therefore can be sent to an approved high temperature incineration plant for disposal. Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose into the

sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected. In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substance (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under Specific Group Standards.

The container or packaging must be cleaned and rendered incapable of holding any substance. It can be then disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service. Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous. In New Zealand, the packaging (that may or may not hold any residue substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

Section 14:	Transport Information
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This product is classified as a Dangerous Goods Class 3 Flammable Liquids. Packing Group II. Please consult the Land Transport Rule: Dangerous Goods 2005 and NZS 5433-2012 Transport of Dangerous Goods on Land for information.

Must not be loaded in the same freight container or on the same vehicle with:

Class 1:	Explosives
Division 2.1:	Flammable Gases
Division 2.3:	Toxic Gases
Division 4.2:	Spontaneously Combustible Substances
Division 5.1:	Oxidizing Substances
Division 5.2:	Organic Peroxides
Class 7:	Radioactive materials unless specifically exempted

Must not be loaded in the same freight container, and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

Division 4.3:	Dangerous when wet substances
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Goods of Packing Group II or III may be loaded in the same freight container or on the same vehicle if transported by segregation devices with:

Division 4.2:	Spontaneously Combustible Substances
Division 4.3:	Dangerous when wet substances
Division 5.1:	Oxidizing Substances
Division 5.2:	Organic Peroxides

Special Precautions for User:

Not available

Transport Information:

UN No	1219
Proper Shipping Name:	ISOPROPANOL
DG Class:	3
Sub Risk:	-
Packing Group:	II
Hazchem:	2YE
Marine Pollutant:	No
Transport Hazard Class(es):	3
UN Number (Air Transport, ICAO):	1219
IATA/ICAO Proper Shipping Name:	ISOPROPANOL
IATA/ICAO Hazard Class:	3
IATA/ICAO Symbol:	Flammable Liquid
IMDG UN No:	1219
IMDG Proper Shipping Name:	ISOPROPANOL
IMDG Hazard Class:	3
IMDG Packing Group:	3
IMDG Marine Pollutant:	No
IMDG EMS:	F-E, S-D
Transport in Bulk:	Not available



Section 15: Regulatory Information

Regulatory Information:

Classified as hazardous under the HSNO Act 1996 according to criteria of Minimum Degrees of Hazard (Threshold) Regulations 2001.

EPA New Zealand Approval Code: HZSR001180; 2-Propanol.

Refer to Section 2 for hazardous classifications and to www.epa.govt.nz for Controls and Conditions.

Section 16: Other Information

Issue Date: March 2019
Replaces: Not applicable
Reasons for issue: NZ Format SDS

References:

- ✚ Workplace Exposure Standards and Biological Exposure Indices
- ✚ Transport of Dangerous Goods on Land NZS 5433
- ✚ Preparation of Safety Data Sheets – Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1-09-06)
- ✚ Assigning a hazardous substance to a group standard

 Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH)

Contact Person/Point:

IMPORTANT ADVICE: An SDS summarizes our best knowledge of health and safety hazard information of the product and how to safely handle and use the product in the workplace. The information contained in this SDS is believed to be correct but is not guaranteed. Prior to using the product(s) referred to in this SDS, each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the supplier listed in section 1 of the SDS. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request. Solvent Supplies Limited does not accept any liability either directly or indirectly for any losses suffered in connection with the use and application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

Abbreviations:

AICS:	Australian Inventory of Chemical Substances
BEI:	Biological Exposure Index
b.w:	Body Weight
CAS Number:	Chemical Abstracts Number
HSNO:	Hazardous Substance & New Organisms
IARC:	International Agency for Research on Cancer
NIOSH:	National Institute of Occupational Safety & Health
NOHSC:	National Occupational Health & Safety Commission
NZIoC:	New Zealand Inventory of Chemicals
P.P.M:	Parts per million of vapour or gas in air (by volume) at 25 OC @ atmospheric pressure
REL:	Recommended Exposure Limits
STEL:	Short Term Exposure Limit (15 minute exposure period)
TWA:	Time Weighted Average
WES:	Workplace Exposure Standard

Safety data sheets are updated frequently. Please ensure you have a current copy.

Disclaimer:

The information contained herein is based on data considered accurate and reliable to the best of our knowledge and belief of the date compiled. However no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use hereof. Solvent Supplies Limited assumes no responsibility for personal injury or property damage to vendors, users or third parties caused by the material. Such users or vendor assume all risks associated with the use of the material. It is the user's responsibility to satisfy themselves as to the suitability and completeness of the information for their own particular use. The users must determine whether the use of the information and data is in accordance with local laws and regulations.