

1. Product and Company Identification

Product identifier	tb Minuteman
Other means of identification	Not available
Recommended use	Hard Surface Disinfectant
Recommended restrictions	None known.
Manufacturer information	maxill Inc. 80 Elm Street St. Thomas, ON N5R 6C8 CA Phone: 519-631-7370 Fax: 519-631-3388 Website: maxill.com CHEMTEL 1-800-255-3924 CHEMTEL (Emergency Response) +01-813-248-0585
Supplier	See above.
CANUTEC	613-996-6666

2. Hazards Identification

Physical hazards	Flammable liquids	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		



Signal word	Danger
Hazard statement	Extremely flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statement	
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Take action to prevent static discharges. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Ground and bond container and receiving equipment. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	In case of fire: Use appropriate media to extinguish. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) None known

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II). This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any pest control product as defined in subsection 2(1) of the Pest Control Products Act, any explosive as defined in section 2 of the Explosives Act, any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, any consumer product as defined in section 2 of the Canada Consumer Product Safety Act and any wood or product made of wood.

Exempt - Registered product - (DIN 02246644).

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Ethanol		64-17-5	79
Alkyl benzyl dimethyl ammonium chloride		68424-85-1	0.2
[1,1"-Biphenyl]-2-ol		90-43-7	0.1

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments Not applicable to DIN products. Refer to product label for active ingredient content.

4. First Aid Measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see information on this label).
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Coughing. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media	Water fog. Alcohol resistant foam. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Extremely flammable liquid and vapor.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing mist or vapor. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Avoid breathing mist or vapor. Avoid prolonged exposure. Observe good industrial hygiene practices. Wash thoroughly after handling. When handling, do not eat, drink or smoke.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Store locked up.

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1880 mg/m ³ 1000 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1880 mg/m ³ 1000 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethanol (CAS 64-17-5)	PEL	1900 mg/m ³ 1000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m ³ 1000 ppm

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Ensure adequate ventilation.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields.
Skin protection	
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Other	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).
Thermal hazards	Not applicable.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. Physical and Chemical Properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Colorless
Odor	Alcohol
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	174.2 °F (79 °C)
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	71.6 °F (22.0 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

Density	0.84 @ 25°C
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and Reactivity

Reactivity	May react with incompatible materials.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Do not mix with other chemicals.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Information on likely routes of exposure

Ingestion	May cause stomach distress, nausea or vomiting.
Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. May cause irritation to the respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause respiratory irritation. Coughing.

Information on toxicological effects

Acute toxicity Narcotic effects. May cause respiratory irritation.

Components	Species	Test Results
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[1,1'-Biphenyl]-2-ol (CAS 90-43-7)

Acute*Dermal*

LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
	Rat	> 2000 mg/kg, 24 Hours, ECHA

Inhalation

LC50	Rat	> 949 mg/m ³ , 1 Hours, ECHA > 36 mg/m ³ , 4 Hours, ECHA
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Oral

LD50	Guinea pig	3500 mg/kg, HSDB
	Mouse	2000 mg/kg, HSDB
	Rat	> 2500 mg/kg, ECHA > 1000 mg/kg, HSDB 2980 mg/kg, ECHA 2733 mg/kg, ECHA 2480 mg/kg, HSDB 1000 mg/kg, HSDB

Alkyl benzyl dimethyl ammonium chloride (CAS 68424-85-1)

Acute*Dermal*

LD50	Not available
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Inhalation

LC50	Not available
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Oral

LD50	Rat	426 mg/kg, LOLI
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Components	Species	Test Results
Ethanol (CAS 64-17-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 15800 mg/kg, SIDS initial assessment report
<i>Inhalation</i>		
LC50	Cat	85.4 mg/L, 4.5 Hours, ECHA 43.7 mg/L, 6 Hours, ECHA
	Mouse	> 60000 ppm, 60 Minutes, ECHA 79.4 mg/L, 134 Minutes, ECHA
	Rat	> 115.9 mg/L, 4 Hours, ECHA 31623 ppm, 4 Hours, HMIRA 20000 ppm, 10 Hours, HSDB 51.3 mg/L, 6 Hours, ECHA
<i>Oral</i>		
LD50	Dog	5.5 g/kg, HSDB
	Guinea pig	5600 mg/kg, HSDB
	Monkey	6000 mg/kg
	Mouse	10500 ml/kg, ECHA 3450 mg/kg, SAX
	Pig	> 5000 mg/kg, ECHA
	Rat	1187 - 2769 mg/kg, ECHA 12400 mg/kg, ECHA 10470 mg/kg, ECHA 7800 ml/kg, ECHA
Skin corrosion/irritation	Causes skin irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	See below.	
Canada - Manitoba OELs: carcinogenicity		
ETHANOL (CAS 64-17-5)	Confirmed animal carcinogen with unknown relevance to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
[1,1"-Biphenyl]-2-ol (CAS 90-43-7)	Volume 73 - 3 Not classifiable as to carcinogenicity to humans.	
Ethanol (CAS 64-17-5)	Volume 44, Volume 96, Volume 100E Volume 96, Volume 100E	
US - California Proposition 65 - CRT: Listed date/Carcinogenic substance		
[1,1"-Biphenyl]-2-ol (CAS 90-43-7)		
Ethanol (CAS 64-17-5)		
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Teratogenicity	Not available.
Specific target organ toxicity - single exposure	May cause respiratory irritation. May cause drowsiness and dizziness.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
[1,1"-Biphenyl]-2-ol (CAS 90-43-7)			
Algae	IC50	Algae	0.85 mg/L, 72 Hours
Crustacea	EC50	Daphnia	1.75 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1 - 2.4 mg/L, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	3.4 mg/L, 96 hours
Alkyl benzyl dimethyl ammonium chloride (CAS 68424-85-1)			
Aquatic			
Fish	LC50	Striped bass (Morone saxatilis)	10.4 - 19.1 mg/L, 96 hours
Ethanol (CAS 64-17-5)			
Crustacea	EC50	Daphnia	11744.5 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7.7 - 11.2 mg/L, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/L, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential			
Mobility in soil	No data available.		
Mobility in general	Not available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation)		

13. Disposal Considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.

U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number	UN1993
Proper shipping name	Flammable liquids, n.o.s.
Technical name	Ethanol
Hazard class	3
Packing group	II
Special provisions	IB2, T7, TP1, TP8, TP28

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Technical name	Ethanol
Hazard class	3
Packing group	II
Special provisions	16, 150

DOT



TDG



15. Regulatory Information

Canadian federal regulations

This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II).

This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any pest control product as defined in subsection 2(1) of the Pest Control Products Act, any explosive as defined in section 2 of the Explosives Act, any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, any consumer product as defined in section 2 of the Canada Consumer Product Safety Act and any wood or product made of wood.

Exempt - Registered product - (DIN 02246644).

Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Ethanol (CAS 64-17-5)

1 TONNES

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions

Exempt

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

[1,1'-Biphenyl]-2-ol (CAS 90-43-7)

Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No
SARA 311/312 Hazardous chemical No
SARA 313 (TRI reporting)
 Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

[1,1"-Biphenyl]-2-ol (CAS 90-43-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Ethanol (CAS 64-17-5) Listed.

US - Illinois Chemical Safety Act: Listed substance

[1,1"-Biphenyl]-2-ol (CAS 90-43-7)

Ethanol (CAS 64-17-5)

US - Louisiana Spill Reporting: Listed substance

[1,1"-Biphenyl]-2-ol (CAS 90-43-7) Listed.

Ethanol (CAS 64-17-5) Listed.

US - Minnesota Haz Subs: Listed substance

Ethanol (CAS 64-17-5) Listed.

US - New Jersey RTK - Substances: Listed substance

[1,1"-Biphenyl]-2-ol (CAS 90-43-7)

Ethanol (CAS 64-17-5)

US - Texas Effects Screening Levels: Listed substance

Alkyl benzyl dimethyl ammonium chloride (CAS 68424-85-1) Listed.

Ethanol (CAS 64-17-5) Listed.

US. Massachusetts RTK - Substance List

[1,1"-Biphenyl]-2-ol (CAS 90-43-7)

Ethanol (CAS 64-17-5)

US. New Jersey Worker and Community Right-to-Know Act

[1,1"-Biphenyl]-2-ol (CAS 90-43-7)

US. Pennsylvania Worker and Community Right-to-Know Law

[1,1"-Biphenyl]-2-ol (CAS 90-43-7)

Ethanol (CAS 64-17-5)

US. Rhode Island RTK

Ethanol (CAS 64-17-5)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

[1,1"-Biphenyl]-2-ol (CAS 90-43-7) Listed: August 4, 2000

Ethanol (CAS 64-17-5) Listed: April 29, 2011

Listed: July 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Ethanol (CAS 64-17-5) Listed: October 1, 1987

Inventory status

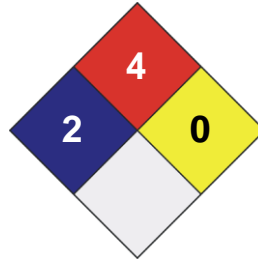
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	*	2
FLAMMABILITY		4
PHYSICAL HAZARD		0
PERSONAL PROTECTION		X



Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

08-August-2017

Version

01

Effective date

08-August-2017

Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.