

Volan Bonding Agent

Safety Data Sheet

SECTION 1: Identification

1.1. Product identifier

Product name : Volan Bonding Agent

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Manufacturing

1.3. Supplier

Zaclon LLC
2981 Independence Road
Cleveland, OH 44115
T 800-356-7327

1.4. Emergency telephone number

Emergency number : Chemtrec 1 800 424 9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

GHS-US/CAN classification

Flammable liquids Category 2	H225
Skin corrosion/irritation Category 2	H315
Serious eye damage/eye irritation Category 2A	H319
Specific target organ toxicity (single exposure) Category 3	H336
Specific target organ toxicity (single exposure) Category 3	H335

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS- US/CAN labeling

Hazard pictograms :



Signal word :

Danger

Hazard statements :

H225 - Highly flammable liquid and vapour
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness

Precautionary statements :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment
P242 - Use only non-sparking tools.
P243 - Take action to prevent static discharges.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up.

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P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity

No data available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-CAN classification	GHS-US classification
Isopropyl alcohol	(CAS-No.) 67-63-0	40 - 55	Flam. Liq. 2, H225	Flam. Liq. 2, H225
Water	(CAS-No.) 7732-18-5	16 - 30	Not classified	Not classified
Chromium, aqua chloro hydroxy methacrylate complexes	(CAS-No.) 111031-82-4	19 - 21	Not classified	Not classified
Acetone	(CAS-No.) 67-64-1	10	Flam. Liq. 2, H225	Flam. Liq. 2, H225
Chloroacetone	(CAS-No.) 78-95-5	0.3	Flam. Liq. 3, H226 Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400	Flam. Liq. 3, H226 Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400
2-Chloropropane	(CAS-No.) 75-29-6	< 0.1	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If large amounts are inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- First-aid measures after skin contact : Wash skin with soap and plenty of water while removing contaminated clothing. Wash clothing before reuse.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
- First-aid measures after ingestion : If swallowed, do not induce vomiting. Give two glasses of water or activated charcoal slurry. Call a physician. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Inhalation may cause irritation of the upper respiratory passages, with coughing and discomfort; and temporary central nervous system depression with dizziness, headache, confusion, incoordination, drowsiness, and loss of consciousness. Inhalation, ingestion or skin contact with Isopropyl Alcohol may include non-specific effects such as headache, nausea and weakness; flushing of the face; and low blood pressure. Single and repeated exposure by inhalation to high doses caused central nervous system depression, and decreased motor activity. Repeated exposures to higher concentrations caused incoordination and reduced weight gain.
- Symptoms/injuries after skin contact : Skin contact may cause irritation with itching, redness or rash. Significant skin permeation, and systemic toxicity, after contact appears unlikely. These products are eye corrosives and are skin irritants but not skin sensitizers in animals.
- Symptoms/injuries after eye contact : Eye contact may cause irritation or injury with tearing, pain or blurred vision; eye corrosion with corneal or conjunctival ulceration.
- Symptoms/injuries after ingestion : Ingestion may cause irritation of the digestive tract with stomach pain, heartburn, nausea, vomiting or diarrhea; however there may be no symptoms at all. A major ingestion hazard is aspiration (liquid entering the lungs during ingestion or vomiting) which may result in "chemical pneumonia".

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water, Foam, Dry Chemical, CO₂.
- Unsuitable extinguishing media : None.

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5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.
Explosion hazard : None known.

5.3. Advice for firefighters

Firefighting instructions : Evacuate personnel to a safe area. Cool tank/container with water spray.
Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Stop the flow of material, if this is without risk.
Methods for cleaning up : Confine spill and soak up with absorbent. Place in an approved container and dispose in accordance with local, state and federal regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes. Avoid breathing vapors or mist. Avoid contact with skin. Avoid contact with clothing. Wash thoroughly after handling. Use with adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, sparks, and flame. Keep containers tightly closed and in an upright position. Do not store or mix with oxidizing agents.

7.3. Specific end use(s)

Manufacturing

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Isopropyl alcohol (67-63-0)		
USA - ACGIH	ACGIH TWA (ppm)	200 ppm
USA - ACGIH	ACGIH STEL (ppm)	400 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	400 ppm
Canada (Quebec)	VECD (mg/m ³)	1230 mg/m ³
Canada (Quebec)	VECD (ppm)	500 ppm
Canada (Quebec)	VEMP (mg/m ³)	985 mg/m ³
Canada (Quebec)	VEMP (ppm)	400 ppm
Alberta	OEL STEL (mg/m ³)	984 mg/m ³
Alberta	OEL STEL (ppm)	400 ppm
Alberta	OEL TWA (mg/m ³)	492 mg/m ³
Alberta	OEL TWA (ppm)	200 ppm
British Columbia	OEL STEL (ppm)	400 ppm
British Columbia	OEL TWA (ppm)	200 ppm
Manitoba	OEL STEL (ppm)	400 ppm
Manitoba	OEL TWA (ppm)	200 ppm
New Brunswick	OEL STEL (mg/m ³)	1230 mg/m ³
New Brunswick	OEL STEL (ppm)	500 ppm
New Brunswick	OEL TWA (mg/m ³)	983 mg/m ³
New Brunswick	OEL TWA (ppm)	400 ppm

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Isopropyl alcohol (67-63-0)		
Newfoundland & Labrador	OEL STEL (ppm)	400 ppm
Newfoundland & Labrador	OEL TWA (ppm)	200 ppm
Nova Scotia	OEL STEL (ppm)	400 ppm
Nova Scotia	OEL TWA (ppm)	200 ppm
Nunavut	OEL STEL (ppm)	400 ppm
Nunavut	OEL TWA (ppm)	200 ppm
Northwest Territories	OEL STEL (ppm)	400 ppm
Northwest Territories	OEL TWA (ppm)	200 ppm
Ontario	OEL STEL (ppm)	400 ppm
Ontario	OEL TWA (ppm)	200 ppm
Prince Edward Island	OEL STEL (ppm)	400 ppm
Prince Edward Island	OEL TWA (ppm)	200 ppm
Saskatchewan	OEL STEL (ppm)	400 ppm
Saskatchewan	OEL TWA (ppm)	200 ppm
Yukon	OEL STEL (mg/m ³)	1225 mg/m ³
Yukon	OEL STEL (ppm)	500 ppm
Yukon	OEL TWA (mg/m ³)	980 mg/m ³
Yukon	OEL TWA (ppm)	400 ppm
Acetone (67-64-1)		
USA - ACGIH	ACGIH TWA (ppm)	250 ppm
USA - ACGIH	ACGIH STEL (ppm)	500 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	2400 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Canada (Quebec)	VECD (mg/m ³)	2380 mg/m ³
Canada (Quebec)	VECD (ppm)	1000 ppm
Canada (Quebec)	VEMP (mg/m ³)	1190 mg/m ³
Canada (Quebec)	VEMP (ppm)	500 ppm
Alberta	OEL STEL (mg/m ³)	1800 mg/m ³
Alberta	OEL STEL (ppm)	750 ppm
Alberta	OEL TWA (mg/m ³)	1200 mg/m ³
Alberta	OEL TWA (ppm)	500 ppm
British Columbia	OEL STEL (ppm)	500 ppm
British Columbia	OEL TWA (ppm)	250 ppm
Manitoba	OEL STEL (ppm)	500 ppm
Manitoba	OEL TWA (ppm)	250 ppm
New Brunswick	OEL STEL (mg/m ³)	1782 mg/m ³
New Brunswick	OEL STEL (ppm)	750 ppm
New Brunswick	OEL TWA (mg/m ³)	1188 mg/m ³
New Brunswick	OEL TWA (ppm)	500 ppm
Newfoundland & Labrador	OEL STEL (ppm)	500 ppm
Newfoundland & Labrador	OEL TWA (ppm)	250 ppm
Nova Scotia	OEL STEL (ppm)	500 ppm
Nova Scotia	OEL TWA (ppm)	250 ppm
Nunavut	OEL STEL (ppm)	750 ppm
Nunavut	OEL TWA (ppm)	500 ppm
Northwest Territories	OEL STEL (ppm)	750 ppm
Northwest Territories	OEL TWA (ppm)	500 ppm
Ontario	OEL STEL (ppm)	500 ppm
Ontario	OEL TWA (ppm)	250 ppm
Prince Edward Island	OEL STEL (ppm)	500 ppm

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Acetone (67-64-1)		
Prince Edward Island	OEL TWA (ppm)	250 ppm
Saskatchewan	OEL STEL (ppm)	750 ppm
Saskatchewan	OEL TWA (ppm)	500 ppm
Yukon	OEL STEL (mg/m ³)	3000 mg/m ³
Yukon	OEL STEL (ppm)	1250 ppm
Yukon	OEL TWA (mg/m ³)	2400 mg/m ³
Yukon	OEL TWA (ppm)	1000 ppm

Chloroacetone (78-95-5)		
USA - ACGIH	ACGIH Ceiling (ppm)	1 ppm
Canada (Quebec)	PLAFOND (mg/m ³)	3.8 mg/m ³
Canada (Quebec)	PLAFOND (ppm)	1 ppm
Alberta	OEL Ceiling (mg/m ³)	3.8 mg/m ³
Alberta	OEL Ceiling (ppm)	1 ppm
British Columbia	OEL Ceiling (ppm)	1 ppm
Manitoba	OEL Ceiling (ppm)	1 ppm
New Brunswick	OEL Ceiling (mg/m ³)	3.8 mg/m ³
New Brunswick	OEL Ceiling (ppm)	1 ppm
Newfoundland & Labrador	OEL Ceiling (ppm)	1 ppm
Nova Scotia	OEL Ceiling (ppm)	1 ppm
Nunavut	OEL Ceiling (ppm)	1 ppm
Northwest Territories	OEL Ceiling (ppm)	1 ppm
Ontario	OEL Ceiling (ppm)	1 ppm
Prince Edward Island	OEL Ceiling (ppm)	1 ppm
Saskatchewan	OEL Ceiling (ppm)	1 ppm

8.2. Exposure controls

Appropriate engineering controls	: Good general ventilation should be provided to keep component concentrations below the recommended exposure limits and avoid flammable mixtures with air. Use explosion-proof motors, electrical fittings, and nonsparking tools and equipment. Containers should be grounded.
Hand protection	: Neoprene, polyvinylchloride, or nitrile gloves.
Eye protection	: Wear safety glasses; chemical goggles (if splashing is possible).
Skin and body protection	: Wear flame resistant clothing.
Respiratory protection	: If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Blue green
Odour	: Alcohol
Odour threshold	: No data available
pH	: 3
Relative evaporation rate (butylacetate=1)	: > 1
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 77 - 79 °C (171-174 °F) @760 mm Hg
Flash point	: 2 °C (36 °F)
Self ignition temperature	: > 399 °C (>750 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Specific gravity	: 1.02
Vapor density	: 2 (Air=1)
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available

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Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 2 - 12 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Polymerization will not occur.

10.4. Conditions to avoid

Avoid sources of ignition.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Decomposes with heat; solvent vapors and gaseous hydrogen chloride will be emitted.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Isopropyl alcohol (67-63-0)	
LD50 oral rat	1870 mg/kg
LD50 dermal rabbit	4059 mg/kg
LC50 inhalation rat (mg/l)	72600 mg/m ³ (Exposure time: 4 h)
Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg
LD50 dermal rabbit	> 15700 mg/kg
LC50 inhalation rat (mg/l)	50100 mg/m ³ (Exposure time: 8 h)
Chloroacetone (78-95-5)	
LD50 oral rat	100 mg/kg
LD50 dermal rabbit	141 mg/kg
LC50 inhalation rat (ppm)	262 ppm/1h
Water (7732-18-5)	
LD50 oral rat	> 90 ml/kg
2-Chloropropane (75-29-6)	
LD50 oral rat	5 g/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness. May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Aquatic acute : Not classified
Aquatic chronic : Not classified

Isopropyl alcohol (67-63-0)	
LC50 fish 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h algae [mg/l] 1	> 1000 mg/l (Species: Desmodesmus subspicatus)
EC50 96h algae (1)	> 1000 mg/l (Species: Desmodesmus subspicatus)
Log Pow	0.05 (at 25 °C)

Acetone (67-64-1)	
LC50 fish 1	4.74 - 6.33 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 fish 2	6210 - 8120 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	10294 - 17704 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Daphnia 2	12600 - 12700 mg/l (Exposure time: 48 h - Species: Daphnia magna)
BCF fish 1	0.69
Log Pow	-0.24

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Isopropyl alcohol (67-63-0)	
Log Pow	0.05 (at 25 °C)

Acetone (67-64-1)	
BCF fish 1	0.69
Log Pow	-0.24

12.4. Mobility in soil

Isopropyl alcohol (67-63-0)	
Log Pow	0.05 (at 25 °C)

Acetone (67-64-1)	
Log Pow	-0.24

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods	
UN-No. (TDG)	: UN1993
Packing group	: II - Medium Danger
TDG Primary Hazard Classes	: 3 - Class 3 - Flammable Liquids
Transport document description	: UN1993 FLAMMABLE LIQUID, N.O.S. (Isopropanol and Acetone), 3, II
Proper Shipping Name (Transportation of Dangerous Goods)	: FLAMMABLE LIQUID, N.O.S. Isopropanol and Acetone

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Hazard labels (TDG) : 3 - Flammable liquids



TDG Special Provisions : 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a)UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b)UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c)UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d)UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e)UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act". (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a)UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b)UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS. SOR/2014-306
150 - An emergency response assistance plan (ERAP) is required for these dangerous goods under subsection 7.1(6) of Part 7 (Emergency Response Assistance Plan).

Explosive Limit and Limited Quantity Index : 1 L

Excepted quantities (TDG) : E2

Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 5 L

Marine pollutant : Yes (IMDG only)



14.2. Transport information/DOT

Department of Transport

DOT NA No : UN1993
 UN-No.(DOT) : 1993
 Packing group (DOT) : II - Medium Danger
 DOT Symbols : G - Identifies PSN requiring a technical name
 Transport document description : UN1993 Flammable liquids, n.o.s. (Isopropanol and Acetone), 3, II
 Proper Shipping Name (DOT) : Flammable liquids, n.o.s. (Isopropanol and Acetone)
 Contains Statement Field Selection (DOT) :
 Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
 Division (DOT) : 3
 Hazard labels (DOT) : 3 - Flammable liquid



Marine pollutant : YES

Dangerous for the environment : No

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DOT Special Provisions (49 CFR 172.102)	: IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F). TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
Other information	: No supplementary information available.

14.3. Air and sea transport

IMDG

UN-No. (IMDG)	: 1993
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, N.O.S.
Transport document description (IMDG)	: UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger

IATA

UN-No. (IATA)	: 1993
Proper Shipping Name (IATA)	: Flammable liquid, n.o.s.
Transport document description (IATA)	: UN 1993 Flammable liquid, n.o.s., 3, II
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: II - Medium Danger

SECTION 15: Regulatory information

15.1. Canada National regulations

Isopropyl alcohol (67-63-0)

Listed on the Canadian DSL (Domestic Substances List)

Acetone (67-64-1)

Listed on the Canadian DSL (Domestic Substances List)

Chloroacetone (78-95-5)

Listed on the Canadian DSL (Domestic Substances List)

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

Chromium, aqua chloro hydroxy methacrylate complexes (111031-82-4)

Listed on the Canadian DSL (Domestic Substances List)

2-Chloropropane (75-29-6)

Listed on the Canadian DSL (Domestic Substances List)

15.2. US Federal regulations

Isopropyl alcohol (67-63-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on SARA Section 313 (Specific toxic chemical listings)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 % (only if manufactured by the strong acid process, no supplier notification)

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Acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

Chloroacetone (78-95-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Chromium, aqua chloro hydroxy methacrylate complexes (111031-82-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Chloropropane (75-29-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.3. US State regulations

Isopropyl alcohol (67-63-0)

U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Acetone (67-64-1)

U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Chloroacetone (78-95-5)

U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

2-Chloropropane (75-29-6)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — AcuteHazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H301	Toxic if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H332	Harmful if inhaled

Volan Bonding Agent

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H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.