


RELTON CORPORATION


MATERIAL SAFETY DATA SHEET

HMIS	
Health	3
Fire	1
Reactivity	1

Meets requirements of 29 CFR 1910.1200
(Federal Hazard Communication Standard)

SECTION I

Manufacturer's Name: Relton Corporation	Emergency Response for Spill, Leak, Fire, Exposure or Accident: CHEMTREC, Ph.# (800) 424-9300
Address: 317 Rolyn Place, Arcadia, CA 91007-2838	For non-emergency product information: RELTON CORP., Ph.# (213) 681-2551 (800) 423-1505
Chemical Name and Synonyms: mixture containing predominantly 1,1,1-Trichloroethane (methyl chloroform)	Trade Name and Synonyms: Original Rapid Tap®
Chemical Family: Inhibited Chlorinated Hydrocarbon	Formula: Mixture (See Section II)
DOT: Shipping Name: 1,1,1-Trichloroethane UN Number: UN2831 Hazard Class: 6.1 Packaging Group III	

SECTION II - INGREDIENTS

	CAS Registry No.	% Vol	OSHA PEL
1,1,1 -Trichloroethane (methyl chloroform)	71-55-6	< 80	350 ppm
Glycol Methylene Ether	646-06-0	< 2	NA
sec Butanol	78-92-2	< 1.5	150 PPM
Aliphatic Polyol - Trade Secret	--	< 10	NE
Cinamon Oil Perfume	--	Trace	NE

(See Section V for Health Data)

Data is based on testing mixture as a whole. Neither the mixture nor any of its ingredients is on the carcinogen or suspected-carcinogen list of the NTP, the IARC, or OSHA. Contains no Calif. Prop. 65 substance. Original Rapid Tap is subject to SARA Section 313 reporting.

SECTION III - PHYSICAL DATA

BOILING POINT (°): 72° C 162° F	SPECIFIC GRAVITY (H ₂ O=1) @ 25° C 1.17
VAPOR PRESSURE (mm Hg) @ 20° C: 100	
VAPOR DENSITY (AIR=1): 4.6	EVAPORATION RATE (1,1,1-Trichloroethane=1): 1.3
SOLUBILITY IN WATER: .07g/100g @25° C: Slight	Non-exempt VOC: 29.2g per liter (Rotovac Stripping @ 50° C)
APPEARANCE AND ODOR Liquid - clear, amber; cinnamon odor	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None to boiling(162° F) TCC (162° F) COC	Flammable Limits @ 25° C: in air (% by vol.)	LFL 8.	UFL 10.5
EXTINGUISHING MEDIA Water Fog			
Special Fire Fighting Procedures: Avoid exposure to open flame; use self-contained respiratory equipment. However, Rapid Tap is not considered a flammable-liquid hazard in normal use.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Products of combustion in open flame: CO ₂ , CO, HCl, COCl ₂			

(Continued on reverse side)

NE=not established NF=not found NA=not applicable ND=not determined

WARNING: Contains Methyl Chloroform, a substance which harms public health and environment by destroying ozone in the upper atmosphere.

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value (TLV) of Rapid Tap® as a mixture containing 1,1,1 -Trichloroethane: 350 ppm

Routes of Entry: inhalation (major potential route of entry), skin, eyes, ingestion (unlikely)

Effects of Overexposure:

Acute:

Inhalation: minimal anesthetic or narcotic effects in the range of 500 to 1,000 PPM 1,1,1- Trichloroethane. Progressively higher levels over 1,000 ppm may cause dizziness, drunkenness, and uncoordination. Concentrations as low as 10,000 ppm can cause unconsciousness, irregular heartbeats, and even death.

Skin: defatting, drying, and slight irritation. (Absorption is minimal in acute exposure; LD50 for rabbits is approximately 15,000 mg/kg.)

Eyes: temporary irritation from vapors; liquid can cause temporary irritation and slight corneal injury.

Ingestion: unlikely route of entry; single-dose toxicity is low. LD50 for rats ranges from 7,950 to 15,800 mg/kg. If aspirated (liquid enters the lung), liquid may be rapidly absorbed through the lungs and may cause chemical pneumonia and liver damage. Nausea, vomiting, diarrhea, and fatigue are signs of poisoning through ingestion of 1,1,1-Trichloroethane.

Chronic:

Inhalation: Chronic overexposure has caused liver toxic effects in experimental animals and congestion of bronchial vessels and passive congestion throughout the lungs of a human. 1,1,1 -Trichloroethane did not cause cancer in long-term animal studies, and is not on the OSHA, IARC, or NTP carcinogen lists. Two of three studies of 1,1,1 -Trichloroethane indicated no reproductive toxicity; the third study noted delays in normal development, but these delays did not affect later life.

Skin: Contact: Prolonged or repeated exposure may cause irritation, drying, or flaking of skin.

Absorption: Absorption is unlikely and would occur only as a result of such contact as prolonged immersion of the hand, etc. Alveolar traces of 1,1,1 -Trichloroethane were found after 10 minutes of such (experimental) immersion. (The LD50 for rabbits is approximately 15,000 mg/kg for 1,1,1-Trichloroethane.)

Eye: Initial irritation may become corneal injury with prolonged or repeated exposure.

Ingestion: Ingestion (swallowing) is likely to occur only on an acute basis; chronic ingestion problems are improbable. The primary problem could occur from aspiration of 1,1,1- Trichloroethane if vomiting occurs. (See Acute effects of Ingestion, above.)

First Aid:

Inhalation: remove to fresh air

Skin: wash with soap and water

Eye: flush with water and call doctor

Ingestion: do not induce vomiting; call doctor; (Doctor: maintain adequate oxygenation; do not give sympathomimetic amines such as epinephrine, which may cause arrhythmia's.)

☐ SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID: Exposure to high temperature sources (open flame, welding arcs, etc.), which induce thermal decomposition
	STABLE	X	
INCOMPATIBILITY (materials to avoid): Avoid mixing with water (forms HCl) Avoid use with aluminum. Avoid contact with caustic soda or other strong alkali.			
HAZARDOUS DECOMPOSITION PRODUCTS.CO ₂ CO, HCl, COCl ₂			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID: NA
	WILL NOT OCCUR	X	

☐ SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED.

Prevent contact with open flame. Small leaks: mop, wipe, or soak up immediately and remove absorbent material outdoors.
Large spills: evacuate area; contain liquid and transfer to closed metal containers. Keep out of water supply.

WASTE DISPOSAL METHOD

For small amounts: none needed; material will evaporate, leaving very slight oily coating. For large amounts: considered a toxic waste #U226 under RCRA 40 CFR 261.33; incinerate or landfill in permitted hazardous waste facility.

☐ SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type) Below 350 ppm - none** Normal ventilation: Limit concentration to TLV.	
Ventilation: Local exhaust: At point of cutting-tool contact. Mechanical (General): NA	Special: NA Other : NA
PROTECTIVE GLOVES: Not under normal use, when skin contact is minimal.	EYE PROTECTION: Protective goggles to guard against splashing.
OTHER PROTECTIVE EQUIPMENT: None Needed	

☐ SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

None necessary-except to store away from open flame and in a cool, dry place. Do not torch-cut drums which contain or have contained Rapid Tap until the fluid and vapors have been completely expelled.

OTHER PRECAUTIONS Use with adequate ventilation

** If no environmental control exists, use full face mask with organic canister for levels up to 2% for 1/2 hr. or less. Above 2% and for emergencies, use a self-contained breathing apparatus.

RELTON

CORPORATION



317 ROLYN PLACE ARCADIA, CALIFORNIA 91007-2838

Phone: (213) 681-2551 (800) 423-1505

Emerg: Chemtrec - (800) 424-9300

Prepared: 12/23/85

Updated: 08/01/86

Updated: 01/01/89

Updated: 01/01/92

Updated: 11/12/93

Updated: 10/09/95

Updated: 11/25/96

Updated: 07/22/05

by Dr. Robert E. Pratt,
consulting chemist