

HEALTH CANADA	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS
		 <p>ADHESIVE Class 3 UN1133 P.G.: II</p>

## SECTION I: IDENTIFICATION

**Use:** Primer used to enhance adhesion of self-adhesive membranes on porous surfaces.

**Manufacturer:**

Soprema Canada  
1675 Haggerty Street  
Drummondville (Quebec) J2C 5P7  
CANADA  
Tel.: 819 478-8163

**Distributor:**

Division Resisto, Soprema Canada  
1675, rue Haggerty  
Drummondville (Quebec) J2C 5P7  
CANADA  
Tel.: 819 478-8408 – 1 877 478-8408

**In case of emergency:**

SOPREMA (8:00am to 5:00pm): 1 800 567-1492

CANUTEC (Canada) (24h.): 613 996-6666

CHEMTREC (USA) (24h.): 1 800 424-9300

## SECTION II: HAZARD(S) IDENTIFICATION

**DANGER**

Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. Harmful if swallowed. Harmful if inhaled. May cause drowsiness or dizziness. Causes skin irritation. Causes eye irritation. May cause damage to organs through prolonged or repeated exposure.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Use explosion proof electrical equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not eat or drink when using this product. Avoid breathing vapours. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear protective gloves, eye protection and an organic vapour respirator. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Dispose of container in accordance with local, regional and national regulations.

## SECTION III: COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

NAME	CAS #	% WEIGHT	EXPOSURE LIMIT (ACGIH)	
			TLV-TWA	TLV-STEL
Methyl acetate	79-20-9	15-40	200 ppm	250 ppm
tert-Butyl acetate	540-88-5	10-30	200 ppm	Not available

**Effects of Short-Term (Acute) Exposure****INHALATION**

**Methyl acetate:** The vapour can probably irritate the nose and throat. Exposure to 4 050 ppm for a short time was the lowest irritating level in humans. Exposure to 10 000 ppm produced persistent irritation. No further details are available. Based on animal information, severe exposures can probably produce signs of central nervous system (CNS) depression such as shortness of breath, headache, drowsiness and dizziness. (1)

**tert-Butyl acetate:** The vapour is probably irritating to the nose and throat. Exposures to high concentrations can probably cause signs of CNS depression including headache, dizziness, nausea and unconsciousness. There is no specific information available for tert-butyl acetate, but effects would probably be like those observed in animals and humans following exposure to other butyl acetates. (1)

**SKIN CONTACT**

**Methyl acetate:** There is no human information available. Based on animal data, the liquid is probably a mild irritant. Based on a dermal LD50, methyl acetate can be absorbed through the skin but is not expected to be toxic by this route of exposure. (1)

**tert-Butyl acetate:** The liquid may be a mild to moderate skin irritant, based on comparison to related butyl acetates. There is no human or animal information available for tert-butyl acetate. (1)

**EYE CONTACT**

**Methyl acetate:** There is no human information available. Animal evidence indicates that the liquid would cause moderate to severe irritation. Based on animal information, the vapour is probably irritating at high concentrations. If ingested, methyl acetate may form methanol in the body, which can cause severe damage to vision. There is one case report of eye damage following ingestion of methyl acetate. (1)

**tert-Butyl acetate:** The liquid can probably cause moderate to severe eye irritation, based on comparison to related acetates. The vapour can probably cause mild to severe eye irritation, depending on the concentration. There is no specific information available for tert-butyl acetate. (1)

**INGESTION**

**Methyl acetate:** Methyl acetate can probably irritate the mouth and throat. One drop of methyl acetate placed on the human tongue produced a burning sensation, followed by reddening and swelling. Ingestion of small quantities may cause shortness of breath, headache, drowsiness and dizziness; more severe exposures may lead to acidosis, vision impairment and possibly death. These severe effects may be caused by methanol and acetic acid which are formed when methyl acetate is broken down (hydrolyzed) in the body. Ingestion is not a typical route of occupational exposure. (1)

**tert-Butyl acetate:** Related butyl acetates are not very toxic by ingestion. Like other butyl acetates, tert-butyl acetate may be irritating to the mouth and throat. Ingestion of large amounts may produce signs of CNS depression, like those described for "Inhalation" above. Ingestion is not a typical route of occupational exposure. (1)

**Effects of Long-Term (Chronic) Exposure****CARCINOGENICITY**

**Methyl acetate:** No human or animal information available. Probably not carcinogenic. The metabolites of methyl acetate, methanol and acetic acid, have not been shown to be carcinogenic. The International Agency for Research on Cancer (IARC) has not evaluated the carcinogenicity of this chemical. The American Conference of Governmental Industrial Hygienists (ACGIH) has not assigned a carcinogenicity designation to this chemical. The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens. (1)

**tert-Butyl acetate:** No human or animal information available. Probably not carcinogenic. IARC has not evaluated the carcinogenicity of this chemical. ACGIH has not assigned a carcinogenicity designation to this chemical. NTP has not listed this chemical in its report on carcinogens. (1)

#### TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY

**Methyl acetate:** No human or animal information is available. (1)

**tert-Butyl acetate:** See section XI.

#### REPRODUCTIVE TOXICITY

**Methyl acetate:** No human or animal information is available. (1)

**tert-Butyl acetate:** See section XI.

#### MUTAGENICITY

**Methyl acetate:** No human or animal information is available. Methyl acetate was not mutagenic in one in vitro test with bacteria, but the vapour was mutagenic to yeast. (1)

**tert-Butyl acetate:** See section XI.

#### TOXICOLOGICALLY SYNERGISTIC MATERIALS

**Methyl acetate:** No information is available. (1)

**tert-Butyl acetate:** No information is available. (1)

#### POTENTIAL FOR ACCUMULATION

**Methyl acetate:** Does not accumulate. Methyl acetate is readily absorbed through the lungs and gastrointestinal tract. It is partly excreted in the expired air and in the urine. It has been shown in humans that methyl acetate is hydrolyzed in the body to acetic acid, which is naturally formed in the body, and methanol, which is excreted in urine. (1)

**tert-Butyl acetate:** Probably does not accumulate. Studies suggest that tert-butyl acetate is rapidly broken down in the body to acetic acid and tert-butanol and eliminated in the urine. Another study shows that tert-butyl acetate is more slowly eliminated from blood than n-butyl acetate. (1)

### SECTION IV: FIRST AID MEASURES

If exposed or concerned: Get medical advice.

#### SKIN CONTACT

Wash with plenty of water. If skin irritation occurs: Get medical advice. Take off immediately all contaminated clothing and wash it before reuse.

#### EYE CONTACT

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.

#### INHALATION

Remove person to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell.

#### SWALLOWING

Immediately call a poison center. Do NOT induce vomiting. Rinse mouth.

### SECTION V: FIRE FIGHTING MEASURES

**FLAMMABILITY:** Flammable liquid, Class 1B (NFPA)

**EXPLOSION DATA:** Sensitivity to mechanical impact: No  
Sensitivity to static charge: Probably will not accumulate static charge, since acetates have high electrical conductivities. Vapours in the flammable range may be ignited by a static discharge of sufficient energy.

**FLASH POINT:** - 10°C (Methyl acetate)

**AUTO-IGNITION TEMPERATURE:** Not available

**FLAMMABILITY LIMITS IN AIR:** (% en volume) Not available

#### FIRE AND EXPLOSION HAZARDS

This product and its vapours are easily ignited by heat, sparks or flames. Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel a considerable distance to a source of ignition and

flash back to a leak or open container. The product may ignite on contact with strong oxidizing agents, strong acids and strong bases. Do not cut, puncture or weld empty containers.

#### COMBUSTION PRODUCTS

Carbon oxides (CO, CO<sub>2</sub>). Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion.

#### FIRE FIGHTING INSTRUCTIONS

Evacuate area. Wear self-contained breathing apparatus and appropriate protective clothing in accordance with standards. Approach fire from upwind and fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Always stay away from containers because of the high risk of explosion. Stop leak before attempting to put out the fire. If leak cannot be stopped, and if there is no risk to the surrounding area, let the fire burn itself out. Move containers from fire area if this can be done without risk. Cool containers with flooding quantities of water until well after fire is out.

#### MEANS OF EXTINCTION

“Alcohol” foam or polymer foam, dry chemical powder, CO<sub>2</sub>, sand. Use of water spray when fighting fire may be inefficient because of the low flash point of the product.

### SECTION VI: ACCIDENTAL RELEASE MEASURES

#### RELEASE OR SPILL

Ventilate area. Wear appropriate protective equipment during cleanup. Eliminate all ignition sources. Shut off source of leak if it can be done without risk. Contain the spill. Absorb with inert material such as sand or earth. Sweep or shovel into containers with lids, use clean non-sparkling tools (sp.: plastic) to collect absorbed material. Cover and remove to appropriate well-ventilated area until disposal. Wash spill area with soap and water. Prevent entry into waterways, sewers or basements. Dispose of this product according to local environmental regulations.

### SECTION VII: HANDLING AND STORAGE

#### HANDLING

This product and its vapours are extremely flammable and toxic. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing mist, vapour or dust. Wash thoroughly after handling. Before handling, it is very important that ventilation controls are operating and protective equipment requirements are being followed. People working with this product would be properly trained regarding its hazards and its safe use. Eliminate all ignition sources (e.g. sparks, open flames, hot surfaces). Keep away from heat. Ground transfer containers to avoid static accumulation. Tightly reseal all partially used containers. Do not cut, puncture or weld containers.

#### STORAGE

Store in a cool well-ventilated area out of direct sunlight and away from heat and ignition sources. Keep storage areas clear of combustible materials. No smoking near storage area. Store away from incompatible materials. Store the product according to occupational health and safety regulations and fire and building codes. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Have appropriate fire extinguishers and spill clean-up equipment near storage area. Inspect all containers to make sure they are properly labelled.

### SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

**HANDS:** Wear gloves in polyethylene or ethylene vinyl alcohol. For short periods of time, you can use butyl rubber, natural rubber, neoprene rubber, nitril rubber, polyvinyl alcohol, polyvinyl chloride and Viton.

**RESPIRATORY:** If the TLV is exceeded, if use is performed in a poorly ventilated confined area, use an approved respirator in accordance with standards (chemical cartridge respirator with organic vapour cartridge(s)).

**EYES:** Wear chemical safety goggles in accordance with standards.

**OTHERS:** Eye bath and safety shower.

**CONTROL OF VAPOURS:** Local exhaust is needed to control vapour and dust level to below recommended limits

## SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL STATE:</b>	Liquid
<b>ODOUR AND APPEARANCE:</b>	Red liquid with solvent-like odour similar to camphor odour
<b>ODOUR THRESHOLD:</b>	Not available
<b>VAPOUR DENSITY (air = 1):</b>	Heavier than air
<b>EVAPORATION RATE (Butyl acetate = 1):</b>	Not available
<b>BOILING POINT (760 mm Hg):</b>	Not available
<b>FREEZING POINT:</b>	Not available
<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1):</b>	0.94 kg/L
<b>SOLUBILITY IN WATER (20°C):</b>	Not soluble
<b>VOLATILE ORGANIC COMPOUND:</b>	0 g/L (according to EPA rules) / 240 g/l (according to SCAQMD rules)
<b>VISCOSITY:</b>	400 centipoises (Visco Brookfield RV)

## SECTION X: STABILITY AND REACTIVITY

**STABILITY:** This material is stable.

**CONDITIONS OF REACTIVITY:** Avoid excessive heat.

**INCOMPATIBILITY:** Strong acids, strong bases, strong oxidizing agents and potassium tert-butoxide.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Acetic acid, tert-butanol and methanol. During a fire, irritating/toxic gases, such as carbon monoxide, carbon dioxide and other toxic may be formed, depending on fire conditions

**CONDITIONS TO AVOID:** Open flames, sparks, electrostatic discharge, heat and other ignition sources; prolonged exposure to direct sunlight and moisture.

**HAZARDOUS POLYMERISATION:** None.

## SECTION XI: TOXICOLOGICAL INFORMATION

### TOXICOLOGICAL DATA

#### *Methyl acetate:* (1)

LC <sub>50</sub> (rat):	16 000 – 32 000 ppm (4-hour exposure)
LD <sub>50</sub> (oral, rat):	Greater than 5 000 mg/kg
LD <sub>50</sub> (dermal, rabbit):	Greater than 5 000 mg/kg

#### *tert-Butyl acetate:* (2)

LC <sub>50</sub> (male rat):	4 211 ppm (6-hour exposure)
LD <sub>50</sub> (oral, rat):	4 500 mg/kg
LD <sub>50</sub> (dermal, rabbit):	2 000 mg/kg

### *Effects of Short-Term (Acute) Exposure*

#### INHALATION

*Methyl acetate:* Cats and mice exposed to 18 500 ppm or less for short periods (up to 6 hours) experienced eye irritation, difficulty in breathing and CNS depression. Exposures up to 55 440 ppm for 10-20 minutes (mice) and 53 790 ppm for 14-18 minutes (cats) caused fluid accumulation in the lungs and deaths. No effects were noted in mice exposed to 5 000 ppm for 20 minutes. While, similar exposure produced eye irritation and salivation in cats. Cats exposed to 6 600 ppm, 6 hours/day for 7 days showed eye irritation, CNS depression, weight loss and some minor effects. Four of 5 cats survived and recovered slowly. (1)

*tert-Butyl acetate:* High vapour concentrations may cause CNS stimulation (increased activity, shaking, tremors) and/or depression (fatigue, dizziness, and possibly loss of concentration, with collapse, coma and death in case of severe over-exposure). (2)

#### EYE IRRITATION

*Methyl acetate:* Application of 100 mg in a standard Draize test produced moderate irritation in rabbits. Application of 0.005 ml produced severe injury to the corneas of rabbits. (1)

*tert-Butyl acetate:* Moderate eye irritant. Effects of eye irritation are reversible. (2)

#### SKIN CONTACT

*Methyl acetate:* In two studies, application of 500 mg or 0.01 ml produced mild irritation in rabbits in standard Draize tests. In another study, application of 20 mg produced moderate irritation in rabbits in a standard Draize test. (1)

*tert-Butyl acetate:* No systemic toxicity is expected from acute dermal exposure. There is no data to indicate whether this substance is absorbed through the skin. Slight skin irritant. (2)

#### INGESTION

*Methyl acetate:* No relevant animal toxicity information was located. (1)

*tert-Butyl acetate:* High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure). (2)

### *Effects of Long-Term (Chronic) Exposure*

#### CARCINOGENICITY

*Methyl acetate:* No relevant animal toxicity information was located. (1)

*tert-Butyl acetate:* Specific data not available. Tert-Butanol, the primary metabolite of tert-butyl acetate, is an animal carcinogen. In a drinking water study, tert-butanol induced benign kidney tumours in male rats via a  $\alpha$ -2u-globulin mode of action, a tumour mechanism not relevant to humans. In female mice, there was an increase incidence of benign thyroids tumours, a tumour mechanism that most likely is not relevant to humans. (2)

#### TERATOGENOCITY, EMBRYOTOXICITY, FETOTOXICITY

*Methyl acetate:* No relevant animal toxicity information was located. (1)

*tert-Butyl acetate:* This substance is not a developmental toxicant. It did not cause maternal toxicity and no embryo/foetal toxicity or developmental abnormalities were observed in the offspring of animals following inhalation exposures of 1 600 ppm. (2)

#### MUTAGENICITY

*Methyl acetate:* No relevant animal toxicity information was located. (1)

*tert-Butyl acetate:* Negative for mutagenicity both in vitro and in vivo tests. (2)

#### SKIN SENSITIZATION

*Methyl acetate:* No relevant animal toxicity information was located. (1)

*tert-Butyl acetate:* Not expected to cause sensitization by skin contact. (2)

#### REPRODUCTIVE TOXICITY

*Methyl acetate:* No relevant animal toxicity information was located. (1)

*tert-Butyl acetate:* This substance is not toxic to reproduction. The reproductive toxicity of tert-butyl acetate has been investigated in rats via the inhalation route. There were no adverse effects on reproductive performance or sperm number or quality at 1 600 ppm, the highest exposure level tested. In addition, no gross or histopathologic effects were observed in the reproductive organs of male and female rats or mice exposed at 1 600 ppm for 90 days in a repeat-exposure toxicity study conducted via inhalation and there was no adverse effect on estrous cycle length in mice. (2)

## SECTION XII: ECOLOGICAL INFORMATION

### ENVIRONMENTAL EFFECTS

Do not allow product or runoff from fire control to enter grounds, basements, storm or sanitary sewers, lakes, rivers, streams or public waterways. Block off drains and ditches. Provincial and federal regulations may require that environmental and / or agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities. May be harmful to aquatic life.

## SECTION XIII: DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL

This product is considered as dangerous material. Consult local, state, provincial or territory authorities to know disposal methods. This material is also known as dangerous waste by RCRA (USA); disposal should follow EPA regulations.

#### SECTION XIV: TRANSPORT INFORMATION

**CLASSIFICATION (TDG and DOT):** Class 3  
**IDENTIFICATION NUMBER:** UN 1133  
**SHIPPING NAME:** Adhesives  
**PACKING GROUP:** II  
**CONTAINERS FOLLOW THE STANDARDS.**

Classification based on Section V of this document.

#### SECTION XV: REGULATORY INFORMATION

**DSL:** All constituents of this product are included in the Domestic Substances List (DSL – Canada).  
**TSCA:** All constituents of this product are included in the Toxic Substances Control Act Inventory (TSCA – USA).  
**Prop. 65:** This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

#### SECTION XVI: OTHER INFORMATION

##### GLOSSARY

**ASTM:** American Society for Testing and Materials (United States)  
**CAS:** Chemical Abstract Services  
**CSA:** Canadian Standardization Association  
**DOT:** Department of Transportation (United States)  
**EPA:** Environmental Protection Agency (United States)  
**GHS** Globally Harmonized System  
**LD<sub>50</sub>/LC<sub>50</sub>:** Less high lethal dose and lethal concentration published  
**NIOSH:** National Institute for Occupational Safety and Health (United States)  
**RCRA:** Resource Conservation and Recovery Act (United States)  
**TDG:** Transportation of Dangerous Goods (Canada)  
**TLV-TWA:** Threshold Limit Value – Time-Weighted Average

##### **Reference:**

- (1) CHEMINFO (2015) Canadian Centre for Occupational Health and Safety, Hamilton (Ontario) Canada
- (2) Manufacturer's SDS

**Code of the SDS:**

CA U DRU SS FS 154

**For more information:**

1 800 567-1492

The Safety Data Sheets of RESISTO Canada are available on Internet at the following site: [www.resisto.ca](http://www.resisto.ca)

##### **Justification of the update:**

- Section II

**To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**