

# Material Safety Data Sheet

## Section 1. Product Identification and Use

Product Name - Trade Name **151-267 PERMAGRAIN TAN**

Supplier - Manufacturer **Chemcraft International Inc.,**  
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### For Transport Emergency or After Hours

CANUTEC (613) 996-6666

Code 151-267

Synonym PERMAGRAIN TAN

Chemical Name Not applicable.

Chemical Family Synthetic polymer in organic solvent. (Polymer.)

Chemical Formula Not applicable.

Material Uses Coatings: Surface coatings and finishes.

Product Identification Number (PIN) 1263 PAINT

## Section 2. Hazardous Ingredients

### Exposure limits

Name	CAS #	% by Weight	LC <sub>50</sub> /LD <sub>50</sub>	TLV/PEL
Toluene	108-88-3	50 - 70	ORAL (LD50): Acute: 2600 mg/kg [Rat]. DERMAL (LD50): Acute: 12210 mg/kg [Rabbit].	<b>ACGIH (Canada, 1993).</b> TWA: 50 ppm TWA: 188 mg/m <sup>3</sup>
Methyl ethyl ketone	78-93-3	15 - 30	ORAL (LD50): Acute: 3400 mg/kg [Rat]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit].	TWA: 200 ppm 8 hour(s). STEL: 300 ppm 15 minute (s). CEIL: 300 ppm
Methyl alcohol	67-56-1	5 - 15	ORAL (LD50): Acute: 6200 mg/kg [Rat]. DERMAL (LD50): Acute: 5600 mg/kg [Rat]. DERMAL (LD50): Acute: 15800 mg/kg [Rabbit].	<b>OSHA (Canada).</b> TWA: 200 ppm <b>ACGIH (Canada, 2000).</b> TWA: 200 ppm STEL: 250 ppm
Ethyl Acetate	141-78-6	5 - 15	ORAL (LD50): Acute: 5600 mg/kg [Rat].	<b>ACGIH (Canada).</b> TWA: 400 ppm
Acetone	67-64-1	1 - 5	ORAL (LD50): Acute: 5800 mg/kg [Rat]. DERMAL (LD50): Acute: 20000 mg/kg [Rabbit].	<b>ACGIH (Canada, 1997).</b> TWA: 500 ppm STEL: 750 ppm TWA: 1188 mg/m <sup>3</sup> STEL: 1782 mg/m <sup>3</sup>
n-Butyl acetate	123-86-4	1 - 5	ORAL (LD50): Acute: 14130 mg/kg [Rat]. 7100 mg/kg [Mouse]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit]. 8770 mg/kg [Guinea pig].	<b>OSHA (Canada).</b> TWA: 150 ppm STEL: 200 ppm <b>ACGIH (Canada, 2000).</b> TWA: 150 ppm STEL: 200 ppm
Ethyl alcohol	64-17-5	0.1 - 1	ORAL (LD50): Acute: 7060 mg/kg [Rat].	<b>OSHA (Canada).</b> TWA: 1000 ppm <b>ACGIH (Canada).</b> TWA: 1000 ppm

Continued on Next Page

Trace impurities and additional material names not listed above may appear in other sections of this MSDS. These materials may be listed for toxicological concerns, local compliance, or other reasons.

### Section 3. Physical Data

<b>Physical State and Appearance</b>	Liquid.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Taste</b>	Not available.
<b>Molecular Weight</b>	Not applicable.
<b>pH (1% soln/water)</b>	Neutral.
<b>Boiling Point</b>	The lowest known value is 56.2°C (133.2°F) (2-Propanone). Weighted average: 96.89°C (206.4°F)
<b>Melting Point</b>	May start to solidify at -77.9°C (-108.2°F) based on data for: Acetic Acid, Butyl Ester. Weighted average: -92.22°C (-134°F)
<b>Critical Temperature</b>	Not available.
<b>Specific Gravity</b>	Weighted average: 0.85 (Water = 1)
<b>Vapor Pressure</b>	The highest known value is 24.1 kPa (181 mm Hg) (at 20°C) (2-Propanone). Weighted average: 6.59 kPa (49.43 mm Hg) (at 20°C)
<b>Vapor Density</b>	The highest known value is 4 (Air = 1) (Acetic Acid, Butyl Ester). Weighted average: 2.8 (Air = 1)
<b>Volatility</b>	Not available.
<b>Odor Threshold</b>	The lowest known value is 0.04 ppm (Acetic Acid, Butyl Ester) Weighted average: 0.58 ppm
<b>Water/Oil Dist. Coeff.</b>	The product is much more soluble in octanol.
<b>Ionicity (in Water)</b>	Not available.
<b>Dispersion Properties</b>	Partially dispersed in methanol, diethyl ether. Is not dispersed in cold water, hot water. See solubility in methanol, diethyl ether, n-octanol, acetone.
<b>Solubility</b>	Easily soluble in methanol, diethyl ether, acetone. Soluble in n-octanol. Insoluble in cold water, hot water.

### Section 4. Fire and Explosion Hazard

<b>The Product is:</b>	Flammable.
<b>Fire Hazards in Presence of Various Substances</b>	Highly flammable in presence of open flames, sparks and static discharge. Flammable in presence of heat.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
<b>Special Remarks on Fire Hazards</b>	Vapor may travel considerable distance to source of ignition and flash back. (Benzene, methyl-)
<b>Flash Points</b>	The lowest known value is Closed cup: -18°C (-0.4°F). (T.C.C. ). (2-Propanone)
<b>Flammable Limits</b>	The greatest known range is Lower: 6% Upper: 36.5% (Methanol)
<b>Auto-Ignition Temperature</b>	The lowest known value is 407°C (764.6°F) (Acetic Acid, Butyl Ester).
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Explosion Hazards in Presence of Various Substances</b>	Explosive in presence of open flames, sparks and static discharge.
<b>Special Remarks on Explosion Hazards</b>	Not available.

## Section 5. Reactivity Data

<b>Stability</b>	The product is stable.
<b>Decomposition products</b>	Not available.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents. Slightly reactive to reactive with reducing agents, organic materials, metals, acids, alkalis.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	MnO <sub>2</sub> is a powerful oxidizer. (Manganese oxide (MnO <sub>2</sub> ))
<b>Special Remarks on Corrosivity</b>	Not available.

## Section 6. Toxicological Properties

<b>Routes of Entry</b>	Dermal contact. Eye contact. Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD <sub>50</sub> ): 2600 mg/kg [Rat]. (Benzene, methyl-). Acute dermal toxicity (LD <sub>50</sub> ): 5000 mg/kg [Rabbit]. (Acetic Acid, Butyl Ester). Acute toxicity of the gas (LC <sub>50</sub> ): 2000 ppm 4 hour(s) [Rat]. (2-Butanone). Acute toxicity of the vapor (LC <sub>50</sub> ): 16000 ppm 4 hour(s) [Rat]. (2-Propanone).
<b>Effects of Acute Exposure</b>	Very hazardous in case of skin contact (permeator), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).
<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [2-Butanone]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [Methanol]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC [Acetic Acid, Ethyl Ester]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [2-Propanone]. Classified D (Not classifiable for human or animal.) by EPA [2-Propanone]. Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethanol]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [2-Propanol, 2-methyl-]. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Classified None. for human [2-Propanone]. <b>DEVELOPMENTAL TOXICITY:</b> Not available. The substance is toxic to blood, kidneys, lungs, the nervous system, liver. Repeated or prolonged exposure to the substance can produce target organs damage.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation. (Benzene, methyl-)
<b>Special Remarks on Other Toxic Effects on Humans</b>	Exposure can cause lung irritation, chest pain and oedema which may be fatal. (Benzene, methyl-)
<b>Exposure Limits</b>	Not available.

## Section 7. Preventive Measures

<b>Personal Protection</b>	Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Small Spill</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Continued on Next Page

<b>Large Spill</b>	Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.
<b>Waste Disposal</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Precautions</b>	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.
<b>Storage</b>	Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
<b>TDG Classification</b>	3
<b>PIN</b>	1263 PAINT <b>PG: II</b>
<b>Special Provisions for Transport</b>	-
<b>Federal and State Regulations</b>	<p><b>WARNING:</b> This product contains chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm: Benzene, methyl-; Quartz (SiO<sub>2</sub>)</p> <p><b>WARNING:</b> This product contains chemical(s) known to the State of California to cause birth defects or other reproductive harm.: Benzene, methyl-</p> <p><b>WARNING:</b> This product contains chemical(s) known to the State of California to cause cancer.: Quartz (SiO<sub>2</sub>)</p> <p>Illinois toxic substances disclosure to employee act: Benzene, ethyl-</p> <p>New York release reporting list: Acetic Acid, Ethyl Ester; Methanol; Acetic Acid, Butyl Ester</p> <p>New York acutely hazardous substances: Benzene, ethyl-</p> <p>Rhode Island RTK hazardous substances: Acetic Acid, Ethyl Ester; Methanol; Benzene, ethyl-</p> <p>Pennsylvania RTK: Benzene, methyl-; Acetic Acid, Ethyl Ester; Ethanol; Methanol: (environmental hazard); Acetic Acid, Butyl Ester; Benzene, dimethyl-; Acetic acid, 2-methylpropyl ester; Benzene, ethyl-; Acetic acid, 2-methylpropyl ester</p> <p>Florida: Acetic Acid, Ethyl Ester; Methanol; Acetic Acid, Butyl Ester; Benzene, ethyl-</p> <p>Minnesota: Acetic Acid, Ethyl Ester; Ethanol; Methanol; Acetic Acid, Butyl Ester; Benzene, ethyl-</p> <p>Massachusetts RTK: Acetic Acid, Ethyl Ester; Ethanol; Methanol; Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; Benzene, ethyl-; Acetic acid, 2-methylpropyl ester</p> <p>New Jersey: Benzene, methyl-; Acetic Acid, Ethyl Ester; Ethanol; Methanol; Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; Benzene, ethyl-; Acetic acid, 2-methylpropyl ester</p> <p>TSCA 8(b) inventory: Benzene, methyl-; Acetic Acid, Ethyl Ester; Ethanol; Acetic Acid, Butyl Ester; Benzene, dimethyl-; N-Butyl Alcohol; Acetic acid, 2-methylpropyl ester; Benzene, ethyl-; 1-Butanol; Acetic acid, 2-methylpropyl ester</p> <p>TSCA 5(e) substance consent order: Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester</p> <p>TSCA 8(d) H and S data reporting: Benzene, ethyl-</p> <p>TSCA 12(b) annual export notification: Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester</p> <p>SARA 302/304/311/312 hazardous chemicals: Methanol</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Benzene, methyl-: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Methyl ethyl ketone: Fire hazard, Immediate (Acute) Health Hazard; Acetic Acid, Ethyl Ester: Fire hazard, Immediate (Acute) Health Hazard; Acetic Acid, Butyl Ester</p> <p>CERCLA: Hazardous substances.: Benzene, methyl-: 1000 lbs. (453.6 kg); Methyl ethyl ketone; Acetic Acid, Ethyl Ester; Methanol; 2-Propanone: 5000 lbs. (2268 kg); Acetic Acid, Butyl Ester; Benzene, dimethyl-: 100 lbs. (45.36 kg); N-Butyl Alcohol; Isobutyl alcohol; Acetic acid, 2-methylpropyl ester; Benzene, ethyl-: 1000 lbs. (453.6 kg); 1-Propanol, 2-methyl-; 1-Butanol; Acetic acid, 2-methylpropyl ester;</p>
<b>Other Regulations</b>	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
<b>Other Classifications</b>	<p><b>WHMIS (Canada)</b></p> <p><b>Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).</b></p> <p><b>Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).</b></p> <p><b>Class D-2A: Material causing other toxic effects (VERY TOXIC).</b></p> <p><b>Class D-2B: Material causing other toxic effects (TOXIC).</b></p>

HCS (U.S.A.) Flammable liquid  
Irritating material  
Target organ effects

<b>Hazardous Material Information System (U.S.A.)</b>	<b>Health Hazard</b>	* 1
	<b>Fire Hazard</b>	3
	<b>Reactivity</b>	0
	<b>Personal Protection</b>	G
<b>National Fire Protection Association (U.S.A.)</b>	<b>Health</b>	0
	<b>Fire Hazard</b>	0
	<b>Reactivity</b>	0
	<b>Specific Hazard</b>	

## Section 8. First Aid Measures

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
<b>Hazardous Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Hazardous Inhalation</b>	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. <b>WARNING:</b> It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.
<b>Ingestion</b>	Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
<b>Hazardous Ingestion</b>	Not available.

## Section 9. Preparation Information

<b>References</b>	-Manufacturers Material Safety Data Sheets.
<b>Other Special Considerations</b>	Not available.
<b>Related Information</b>	This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.
<b>Preparation Information</b>	<b>Validated by Florendo Tarnate on 9/16/2005.</b> <b>Verified by Florendo Tarnate.</b> <b>Printed 9/16/2005.</b>
<b>Information Contact</b>	Prepared by the Health, Safety and Environment Department, Chemcraft International Inc., P.O. Box 458, 155, Rose Glen Road North, Port Hope, ON. Canada. Phone: 905 885-6388 Fax: 905 885-5097

### Notice to Reader

*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 or 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.*