

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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Code 151-267

Synonym PERMAGRAIN TAN

Chemical Name Not applicable.

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

Chemical Formula Not applicable.

Material Uses Coatings: Surface coatings and finishes.

Product Identification Number (PIN) 1263 PAINT

Section 2. Hazardous Ingredients

Name	CAS #	% by Weight	<u>Exposure Limits</u>	
			LC ₅₀ /LD ₅₀	TLV/PEL
Toluene	108-88-3	30-60	ORAL (LD50): Acute: 2600 mg/kg [Rat]. DERMAL (LD50): Acute: 12210 mg/kg [Rabbit].	ACGIH (Canada, 1993). TWA: 50 ppm TWA: 188 mg/m ³
Methyl ethyl ketone	78-93-3	10-30	ORAL (LD50): Acute: 3400 mg/kg [Rat]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit].	ACGIH (Canada, 1993). TWA: 590 mg/m ³ STEL: 585 mg/m ³ CEIL: 885 mg/m ³
Ethyl Acetate	141-78-6	5-10	ORAL (LD50): Acute: 5600 mg/kg [Rat].	OSHA (Canada). TWA: 400 ACGIH (Canada). TWA: 400 ppm
Ethyl alcohol	64-17-5	0.1-1	ORAL (LD50): Acute: 7060 mg/kg [Rat].	OSHA (Canada). TWA: 1000 ppm ACGIH (Canada). TWA: 1000 ppm
Methyl alcohol	67-56-1	5-10	ORAL (LD50): Acute: 6200 mg/kg [Rat]. 5600 mg/kg [Rat]. DERMAL (LD50): Acute: 15800 mg/kg [Rabbit].	OSHA (Canada). TWA: 200 ppm ACGIH (Canada, 2000). TWA: 200 ppm STEL: 250 ppm
Acetone	67-64-1	1-5	ORAL (LD50): Acute: 5800 mg/kg [Rat]. DERMAL (LD50): Acute: 20000 mg/kg [Rabbit].	ACGIH (Canada, 1997). TWA: 500 ppm STEL: 750 ppm TWA: 1188 mg/m ³ STEL: 1782 mg/m ³
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].	OSHA (Canada). TWA: 150 ppm STEL: 200 ppm ACGIH (Canada, 2000). TWA: 150 ppm STEL: 200 ppm

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.

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Section 3. Physical Data

Physical State and Appearance	Liquid.
Color	Not available.
Odor	Not available.
Taste	Not available.
Molecular Weight	Not applicable.
pH (1% soln/water)	Neutral.
Boiling Point	The lowest known value is 56.2°C (133.2°F) (2-Propanone). Weighted average: 96.89°C (206.4°F)
Melting Point	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)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 0.85 (Water = 1)
Vapor Pressure	The highest known value is 24.8 kPa (186.2 mmHg) (at 20°C) (2-Propanone). Weighted average: 6.62 kPa (49.65 mmHg) (at 20°C)
Vapor Density	The highest known value is 4 (Air = 1) (Acetic Acid, Butyl Ester). Weighted average: 2.8 (Air = 1)
Volatility	Not available.
Odor Threshold	The lowest known value is 0.04 ppm (Acetic Acid, Butyl Ester) Weighted average: 0.58 ppm
Water/Oil Dist. Coeff.	The product is much more soluble in octanol.
Ionicity (in Water)	Not available.
Dispersion Properties	Partially dispersed in methanol, diethyl ether. Is not dispersed in cold water, hot water, n-octanol. See solubility in methanol, diethyl ether, n-octanol, acetone.
Solubility	Easily soluble in methanol, diethyl ether, acetone. Soluble in n-octanol. Insoluble in cold water, hot water.

Section 4. Fire and Explosion Hazard

The Product is:	Flammable.
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames, sparks and static discharge. Slightly flammable to flammable in presence of heat.
Fire Fighting Media and Instructions	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.
Special Remarks on Fire Hazards	Vapor may travel considerable distance to source of ignition and flash back. (Benzene, methyl-)
Flash Points	The lowest known value is Closed cup: -18°C (-0.4°F). (T.C.C.). (2-Propanone)
Flammable Limits	The greatest known range is LOWER: 6% UPPER: 36.5% (Methanol)
Auto-Ignition Temperature	The lowest known value is 407°C (764.6°F) (Acetic Acid, Butyl Ester).
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Highly explosive in presence of open flames, sparks and static discharge.
Special Remarks on Explosion Hazards	Not available.

Section 5. Reactivity Data

Stability	The product is stable.
Decomposition products	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Reactive with oxidizing agents. Slightly reactive to reactive with reducing agents, organic materials, metals, acids, alkalis.
Corrosivity	Not available.

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Special Remarks on Reactivity	MnO ₂ is a powerful oxidizer. (Manganese oxide (MnO ₂))
Special Remarks on Corrosivity	Not available.

Section 6. Toxicological Properties

Routes of Entry	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 2600 mg/kg [Rat]. (Benzene, methyl-). Acute dermal toxicity (LD50): 5000 mg/kg [Rabbit]. (Acetic Acid, Butyl Ester). Acute toxicity of the gas (LC50): 2000 ppm 4 hour(s) [Rat]. (2-Butanone). Acute toxicity of the vapor (LC50): >1800 ppm 4 hour(s) [Rat]. (Acetic Acid, Butyl Ester).
Effects of Acute Exposure	Very hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion. Hazardous in case of inhalation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Chronic Effects on Humans	CARCINOGENIC EFFECTS: 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 [2-Propanol, 2-methyl-]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC [Acetic Acid, Ethyl Ester]. 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 [Methanol]. 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]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Classified None. for human [2-Propanone]. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Ethanol]. The substance is toxic to blood, kidneys, lungs, the nervous system, liver. Repeated or prolonged exposure to the substance can produce target organs damage.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation. (Benzene, methyl-)
Special Remarks on Other Toxic Effects on Humans	Exposure can cause lung irritation, chest pain and oedema which may be fatal. (Benzene, methyl-)
Exposure Limits	Not available.

Section 7. Preventive Measures

Personal Protection	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	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.
Engineering Controls	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.
Small Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill	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.
Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Precautions	Keep locked up. 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. Wear suitable protective clothing. 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.
Storage	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).
TDG Classification	3
PIN	1263 PAINT
PG:	II

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Special Provisions for Transport**Federal and State Regulations**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Benzene, methyl-; Benzene, dimethyl-; Quartz (SiO₂); Isobutyl alcohol; Benzene, dimethyl-; 1-Propanol, 2-methyl-

California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Quartz (SiO₂); Isobutyl alcohol; 1-Propanol, 2-methyl-

California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Quartz (SiO₂); Isobutyl alcohol; Benzene; 1-Propanol, 2-methyl-

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Benzene, methyl-; Benzene

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Isobutyl alcohol; Benzene; 1-Propanol, 2-methyl-

Illinois toxic substances disclosure to employee act: Benzene, ethyl-

New York release reporting list: Acetic Acid, Ethyl Ester; Methanol; Acetic Acid, Butyl Ester; Benzene, 1,3-dimethyl-

New York acutely hazardous substances: Benzene, ethyl-

Rhode Island RTK hazardous substances: Acetic Acid, Ethyl Ester; Methanol; Benzene, ethyl-

Pennsylvania RTK: Acetic Acid, Ethyl Ester; Ethanol; Methanol: (environmental hazard); Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; Acetic acid, 2-methylpropyl ester

Florida: Acetic Acid, Ethyl Ester; Methanol; Acetic Acid, Butyl Ester; Benzene, ethyl-; Benzene, 1,3-dimethyl-

Minnesota: Acetic Acid, Ethyl Ester; Ethanol; Methanol; Acetic Acid, Butyl Ester; Benzene, ethyl-

Massachusetts RTK: Acetic Acid, Ethyl Ester; Ethanol; Methanol; Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; Benzene, ethyl-; Benzene, 1,3-dimethyl-; Acetic acid, 2-methylpropyl ester

New Jersey: Acetic Acid, Ethyl Ester; Ethanol; Methanol; Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; Benzene, ethyl-; Acetic acid, 2-methylpropyl ester

TSCA 8(b) inventory: Benzene, methyl-; Acetic Acid, Ethyl Ester; Ethanol; Acetic Acid, Butyl Ester; Benzene, dimethyl-; Aluminum oxide (Al₂O₃); N-Butyl Alcohol; Acetic acid, 2-methylpropyl ester; Benzene, dimethyl-; 1-Butanol; Acetic acid, 2-methylpropyl ester

TSCA 5(e) substance consent order: Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester

TSCA 8(d) H and S data reporting: Benzene, ethyl-

TSCA 12(b) annual export notification: Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester

SARA 302/304/311/312 extremely hazardous substances: N-Butyl Alcohol; 1-Butanol

SARA 302/304/311/312 hazardous chemicals: Methanol

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Methyl ethyl ketone: Fire Hazard, Immediate (Acute) Health Hazard; Acetic Acid, Ethyl Ester: Fire Hazard, Immediate (Acute) Health Hazard; Acetic Acid, Butyl Ester; Benzene, dimethyl-: Fire Hazard, Immediate (Acute) Health Hazard; Quartz (SiO₂): Delayed (Chronic) Health Hazard; Isobutyl alcohol: Fire Hazard, Immediate (Acute) Health Hazard; Acetic acid, 2-methylpropyl ester: Fire Hazard, Immediate (Acute) Health Hazard; Benzene, dimethyl-: Fire Hazard, Immediate (Acute) Health Hazard; 1-Propanol, 2-methyl-: Fire Hazard, Immediate (Acute) Health Hazard

SARA 313 toxic chemical notification and release reporting: Benzene, methyl- 59.6806%; Methyl ethyl ketone 16.1909%; 2-Propanol, 2-methyl- 0.109398%; Methanol 9.9453%; 2-Propanone 4.97265%

CERCLA: Hazardous substances.: Benzene, methyl-; Methyl ethyl ketone; Acetic Acid, Ethyl Ester; Methanol; 2-Propanone; Acetic Acid, Butyl Ester; Benzene, dimethyl-; N-Butyl Alcohol; Isobutyl alcohol; Acetic acid, 2-methylpropyl ester; Benzene, dimethyl-; 1-Propanol, 2-methyl-; 1-Butanol; Acetic acid, 2-methylpropyl ester;

Other Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications

WHMIS (Canada)

Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).

Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).

Class D-2A: Material causing other toxic effects (VERY TOXIC).

Class D-2B: Material causing other toxic effects (TOXIC).

HCS (U.S.A.)

Class: Highly toxic.

Class: Flammable liquid having a flash point lower than 37.8°C (100°F).

Class: Irritating substance.

Class: Target organ effects.

Hazardous Material Information System (U.S.A.)	Health Hazard	* 2
	Fire Hazard	3
	Reactivity	0
	Personal Protection	H
National Fire Protection Association (U.S.A.)	Health	2
	Fire Hazard	3
	Reactivity	0
	Specific Hazard	

Section 8. First Aid Measures

Eye Contact	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 immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Hazardous Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Hazardous Inhalation	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. WARNING: 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.
Ingestion	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.
Hazardous Ingestion	Not available.

Section 9. Preparation Information

References	-Manufacturers Material Safety Data Sheets.
Other Special Considerations	Not available.
Related Information	This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.
Preparation Information	Validated by C.M. Kelly on 9/18/2002. Verified by C.M. Kelly. Printed 9/18/2002.
Information Contact	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

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