

Material Safety Data Sheet

441-320 PLASTICOLOR N/Y WHITE 20-25

1. Product and company identification

Common name : 441-320 PLASTICOLOR N/Y WHITE 20-25
Synonym : PLASTICOLOR N/Y WHITE 20-25
Material uses : Coatings: Surface coatings and finishes.
Manufacturer : Chemcraft International, Inc.
155 Rose Glen Road North
Port Hope, Ontario, Canada L1A 3Z3
Ph:905-885-6388 Fax:905-885-7587

Code : 441-320
MSDS # : Not available.
Validation date : **1/3/2006.**
Print date : 1/18/2006.
Responsible name : **A. Davis**
In case of emergency : 1-613-996-6666

2. Hazards identification

Physical state : Liquid.
Odor : Not available.

OSHA: Standard for Occupational Exposure to Formaldehyde 29CFR 1910.1048 must be consulted before initial use of product.

Emergency overview : Danger!
MAY BE FATAL IF INHALED.
CANCER HAZARD.
CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
NERVOUS SYSTEM, REPRODUCTIVE SYSTEM, LIVER.
Do not ingest. Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist.
Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Risk of cancer depends on duration and level of exposure.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eyes : No known significant effects or critical hazards.

Skin : Toxic in contact with skin.

Inhalation : Very toxic by inhalation.

Ingestion : Toxic if swallowed.

Potential chronic health effects : **CARCINOGENIC EFFECTS:** Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Titanium dioxide (TiO₂)]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Ethanol]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [1-Butanol]. Classified 1 (Proven for humans.) by IARC [Formaldehyde]. Classified A2 (Suspected for humans.) by ACGIH [Formaldehyde].

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

2 . Hazards identification

Medical conditions aggravated by over-exposure : Repeated or prolonged exposure to the substance can produce target organs damage.

Over-exposure signs/symptoms : Not available.

See toxicological information (section 11)

3 . Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Benzene, dimethyl-	1330-20-7	5 - 15
Acetic acid, 2-methylpropyl ester	110-19-0	5 - 15
1-Propanol, 2-methyl-	78-83-1	5 - 15
Silica	7631-86-9	1 - 5
Benzene, ethyl-	100-41-4	1 - 5
Ethanol	64-17-5	1 - 5
Formaldehyde	50-00-0*	1 - 5
Formaldehyde	50-00-0	0.1 - 1

4 . First aid measures

Eye contact : Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.

Skin contact : Get medical attention immediately. Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation : Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion : Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Antidote information

<u>Product/ingredient name</u>	<u>Antidote information</u>
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Notes to physician : Not available.

5 . Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂ etc.). Some metallic oxides.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : Not available.
No specific hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Fire Hazards in Presence of Various Substances** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Flammable in the presence of the following materials or conditions: heat.
Slightly flammable in the presence of the following materials or conditions: oxidizing materials.
Non-flammable in the presence of the following materials or conditions: reducing materials, combustible materials and moisture.
- Explosion Hazards in Presence of Various Substances** : Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.

6 . Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7 . Handling and storage

- Handling** : Do not ingest. Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapor or mist. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

8 . Exposure controls/personal protection

Product name

Not available

Exposure limits

Consult local authorities for acceptable exposure limits.

- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection

8 . Exposure controls/personal protection

- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Other protection** : Not available.
- Personal protective equipment (Pictograms)** :
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : The lowest known value is Closed cup: 12.78°C (55°F). Open cup: 12.78°C (55°F). (Cleveland). (Ethanol)
- Auto-ignition temperature** : The lowest known value is 416°C (780.8°F) (1-Propanol, 2-methyl-).
- Flammable limits** : The greatest known range is Lower: 3.3% Upper: 19% (Ethanol)
- Color** : Not available.
- Odor** : Not available.
- Taste** : Not available.
- Molecular weight** : Not applicable.
- Molecular formula** : Not applicable.
- pH** : Neutral.
- Boiling/condensation point** : The lowest known value is 78.5°C (173.3°F) (Ethanol). Weighted average: 122.04°C (251.7°F)
- Melting/freezing point** : May start to solidify at -94.9°C (-138.8°F) based on data for: Benzene, ethyl-. Weighted average: -102.79°C (-153°F)
- Critical temperature** : Not available.
- Relative density** : Weighted average: 1.13 (Water = 1)
- Vapor pressure** : The highest known value is 5.7 kPa (43 mm Hg) (at 20°C) (Ethanol). Weighted average: 1.43 kPa (10.73 mm Hg) (at 20°C)
- Vapor density** : The highest known value is 4 (Air = 1) (Acetic acid, 2-methylpropyl ester). Weighted average: 3.4 (Air = 1)
- Volatility** : Not available.
- Odor threshold** : The lowest known value is 0.3 ppm (Benzene, dimethyl-) Weighted average: 16.67 ppm
- Evaporation rate** : The highest known value is 1.4 (Acetic acid, 2-methylpropyl ester) Weighted average: 1.11 compared with Butyl acetate.
- VOC** : Not available.

9 . Physical and chemical properties

- Viscosity** : Dynamic: The highest known value is 0.7 cP (Acetic acid, 2-methylpropyl ester)
- Ionicity (in water)** : Not available.
- Dispersibility properties** : Not dispersible in cold water, hot water, methanol.
See solubility in methanol, diethyl ether, n-octanol, acetone.
- Solubility** : Easily soluble in methanol, diethyl ether, n-octanol, acetone.
Insoluble in cold water, hot water.
- Physical/chemical properties comments** : Not available.

10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Conditions of instability** : Not available.
- Incompatibility with various substances** : Highly reactive or incompatible with the following materials: oxidizing materials.
Reactive or incompatible with the following materials: reducing materials, organic materials, metals, acids and alkalis.
- Hazardous decomposition products** : Not available.
- Hazardous polymerization** : Not available.
- Conditions of reactivity** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Flammable in the presence of the following materials or conditions: heat.
Slightly flammable in the presence of the following materials or conditions: oxidizing materials.
Non-flammable in the presence of the following materials or conditions: reducing materials, combustible materials and moisture.
Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.

11 . Toxicological information

Toxicity data

- Chronic effects on humans** : **CARCINOGENIC EFFECTS:** Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Titanium dioxide (TiO₂)]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Ethanol]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [1-Butanol]. Classified 1 (Proven for humans.) by IARC [Formaldehyde]. Classified A2 (Suspected for humans.) by ACGIH [Formaldehyde].
Contains material which causes damage to the following organs: the nervous system, the reproductive system, liver.
- Other toxic effects on humans** : Hazardous in case of skin contact (permeator), of ingestion, of inhalation.
- Special remarks on toxicity to animals** : Formaldehyde has caused cancer in test animals at high concentrations (5-15 ppm). (Formaldehyde)

11 . Toxicological information

- Special remarks on chronic effects on humans** : Prolonged or repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis. Prolonged exposure to high vapour concentration can cause headache, dizziness, nausea and central nervous system depression.
High level exposure to Xylene in laboratory animals, often at levels which are toxic to the mother, have affected the development of the fetus. The relevance of this to humans is not known. (Benzene, dimethyl-)
- Special remarks on other toxic effects on humans** : Material is irritating to mucous membranes and upper respiratory tract. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death. (Benzene, dimethyl-)
- Specific effects**
- Carcinogenic effects** : Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenic effects** : No known significant effects or critical hazards.
- Teratogenicity / Reproductive toxicity** : No known significant effects or critical hazards.
- Sensitization**
- Ingestion** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Eyes** : No known significant effects or critical hazards.
- Skin** : No known significant effects or critical hazards.
- Synergistic products** : Not available.

12 . Ecological information

Ecotoxicity data

<u>Product/ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
Environmental precautions			: No known significant effects or critical hazards.
Octanol/water partition coefficient			: The product is much more soluble in octanol.
Bioconcentration factor			: Not available.
BOD and COD			: Not available.
Biodegradable/OECD			: Not available.
Mobility			: Not available.
Products of degradation			: These products are carbon oxides (CO, CO ₂) and water, nitrogen oxides (NO, NO ₂ etc.). Some metallic oxides.
Toxicity of the products of biodegradation			: The products of degradation are less toxic than the product itself.
Special remarks on the products of biodegradation			: Not available.

13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
- Waste stream** : Not available.
- RCRA classification** : Not available.


13. Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Class	PG*	Label	Additional information
TDG Classification	1263 PAINT	3	II		-

PG* : Packing group

15. Regulatory information

WHMIS (Canada)

: Class B-2: Flammable liquid

Canadian Environmental Protection Act (CEPA): This product is on the Domestic Substances List (DSL) and is acceptable for use under the provisions of CEPA.: Acetic acid, 2-methylpropyl ester; Benzene, dimethyl-; Resamin HF 480

CEPA DSL: CR2245; Benzene, dimethyl-; Benzene, ethyl-; Isobutyl alcohol; Cymel UI-27-EI; Cymel MB-98; Resamin HF 480; Syloid C906; Non-hazardous liquid resin

Canadian NPRI: Benzene, ethyl-

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU regulations

Hazard symbol/symbols :

Risk phrases : This product is not classified according to EU legislation.

Safety phrases : Not applicable.

International regulations

International lists : No products were found.

16. Other information

References : Manufacturer's Material Safety Data Sheet

Other special considerations : Not available.

Date of printing : 1/18/2006.

Date of issue : 1/3/2006.

Version : 7

Notice to reader

16 . Other information

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.