

**MATERIAL SAFETY  
DATA SHEET**



## METAL TREATMENTS, LACQUER REMOVER, PAINT REMOVER

**Section I**

## Manufacturer

E. I. du Pont de Nemours & Co. (Inc.)  
Automotive Products Department  
Wilmington, Delaware 19898  
Telephone: Product information (800) 441-7515  
Medical emergency (800) 441-3637  
Transportation emergency (800) 424-9300  
(CHEMTREC)

Product: 224S, 225S, 226S, 227S, 244S, 3907S, 5717S, 5662S

D.O.T. Hazard Class: Flammable Liquid

Paint Related Material NA 1263

## Hazardous Materials Identification Section:

H = 2, F = 3, R = 0.

**Section II — Hazardous Ingredients — See Section X for ingredients listed by product code**

Ingredients	CAS No.	Vapor Pressure (20°C mm Hg.)	Exposure Limits*
1. Acetone	67-64-1	184	750ppm-A; 1000ppm-O; 1000ppm-A-(STEL)
2. Methyl alcohol	67-56-1	100	200ppm-A,O,D; 250ppm-A-(STEL)
3. Methylene chloride	75-09-5	340	100ppm-A,D
4. Toluene	108-88-3	36.7	100ppm-A; 200ppm-O; 150ppm-A-(STEL); 300ppm-O-C 500ppm-O Max 10 Min
5. Isopropyl alcohol	67-63-0	33	400ppm-A,O; 500ppm-A-(STEL)
6. VM&P naphtha	64742-89-8	15	100ppm-D; 300ppm-A; 500ppm-O
7. Ethylene glycol monobutyl ether acetate	112-07-2	0.3	225ppm-S; 20ppm-D
8. Zinc dihydrogen phosphate	13598-37-3	None	25ppm-S; 20ppm-D
9. Monosodium phosphate	7588-80-7	None	Unknown
10. Phosphoric acid	7664-38-2	None	1 mg/m <sup>3</sup>
11. Potassium fluoride	7789-23-3	None	2.5 mg/m <sup>3</sup> -A-F

\*A = ACGIH TLV, O = OSHA, D = Du Pont Internal Limit,  
S = Supplier Furnished Limit, STEL = Short Term Exposure  
Limit (15 mins.), C = Ceiling

**Section III — Physical Data**

Evaporation rate: Slower than ether Gal. wt. (#/gal): 6.90-9.7  
Solubility in water: Miscible Volume % Volatile: 80-100%  
Vapor density: Heavier than air V.O.C. (#/gal): 6.0-9.7  
Boiling range: 103°F-545°F

**Section IV — Fire & Explosion Data**Flash point (Closed Cup): Below 20°F: 225S, 244S, 3907S, 5717S;  
20-73°F: 224S, 226S, 227S, 5662S

Approx. flammable limits: 1.1-14 %

Extinguishing media: Water spray, foam, carbon dioxide, dry chemical

Special fire fighting procedures: Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to cool closed containers to prevent pressure build up.

Unusual fire &amp; explosion hazards: When heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

**Section V — Health Hazard Data**

## General effects

Ingestion: Gastro-intestinal distress.

In the unlikely event of ingestion, call a physician immediately and have names of ingredients available.

Inhalation: May cause nose and throat irritation. Repeated and prolonged overexposure to solvents may lead to permanent brain and nervous system damage. Eye watering, headaches, nausea, dizziness and loss of coordination are signs that solvent levels are too high.

If affected by inhalation of vapor or spray mist, remove to fresh air. If breathing difficulty persists, or occurs later, consult a physician.

Skin or eye contact: May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician.

In case of skin contact, wash with soap and water. If irritation occurs, contact a physician.

## Specific effects

**Methyl Alcohol:** Excessive human exposure to methanol may lead to fatigue, headache, anaesthetic, neurologic effects, and visual difficulties including blindness or death. Recurrent overexposure may result in liver and kidney injury. Can be absorbed through the skin in harmful amounts. **Methylene Chloride:** Is an extreme irritant to the eyes and may cause an increase in carboxyhemoglobin levels which may result in a reduced level of oxygen in the blood. Heavy smokers and those with heart disease may experience increased risk of heart problems and based on tests with laboratory animals, overexposure may create cancer risk. Methylene chloride is classified by NTP as a carcinogen. Contact may cause skin burns. Can be absorbed through the skin in harmful amounts. **Toluene:** Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. **Isopropyl Alcohol:** Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights. High oral doses have caused anemia in laboratory animals.

**VM&P Naphtha:** Laboratory studies with rats have shown that petroleum distillates cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating

## Section V — Health Hazard Data — Continued

petroleum workers have not shown significant increases of kidney damage nor kidney or liver tumors. *Ethylene Glycol Monobutyl Ether Acetate*: Can be absorbed through the skin in harmful amounts. May destroy red blood cells. May cause abnormal kidney function.

## Section VI — Reactivity Data

Stability: stable

Incompatibility (materials to avoid): none reasonably foreseeable

Hazardous decomposition products: CO, CO<sub>2</sub>, smoke, oxides of heavy metals reported in Section II

Hazardous polymerization: will not occur

## Section VII — Spill or Leak Procedures

Steps to be taken in case material is released or spilled: Ventilate area. Remove sources of ignition. Prevent skin contact and breathing of vapor. Wear a properly fitted vapor/particulate respirator (NIOSH/MSHA TC-23C). Confine and remove with inert absorbant.

Waste disposal method: Do not allow material to contaminate ground water systems. Incinerate absorbed material in accordance with federal, state, and local requirements. Do not incinerate in closed containers.

## Section VIII — Special Protection Information

Respiratory: Do not breathe vapors or mists.

Wear a properly fitted vapor/particulate respirator approved by NIOSH/MSHA (TC-23C) for use with paints during application and until all vapors and spray mists are exhausted. In confined spaces or in situations where continuous spray operations are typical or if proper respiratory fit is not possible, wear a positive pressure, supplied-air respirator (TC-19C). In all cases, follow the respirator manufacturer's directions for respirator use; do not

permit anyone without protection in the painting area.

Ventilation: Provide sufficient ventilation in volume and pattern to keep contaminants below applicable OSHA requirements.

Protective clothing: Neoprene gloves and coveralls are recommended.

Eye protection: Desirable in all industrial situations. Include splash guards or side shields.

## Section IX — Special Precautions

Precautions to be taken in handling and storing: Observe label precautions. Keep away from heat, sparks and flame. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120°F.

## Section X — Hazardous Ingredients by Product Code

Product Code	Ingredients (See Section II)
224S	8, 9
225S	7, 10, 11
226S	*
227S	8, 10
244S	5, 10
3907S	1, 2, 3
5717S	7, 10
5662S	3, 4, 5, 6

\*Contains trace amounts of hydrofluoric acid and chromic acid.

Notice: The data in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or in any process.

"The following notice is required by California Proposition 65.  
'Warning: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.'"

Product Manager  
Refinish Sales