

ENAMEL PRIMERS, CHROMATE PRIMER VARIPRIME[®], CORLAR[®]

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: 215S, 329S, 615/616S, 824/825/826S, 1695S, 1696S,
1697S, LF 1697S, 3010S, 3011S, 3012S, 3055S, 1858S,
2085S

D.O.T. Hazard Class: Flammable Liquid
Paint UN 1263

Hazardous Materials Identification System:
H = 3, 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. Denatured ethyl alcohol	64-17-5	30	1000ppm-A,0
2. Butyl acetate	123-86-4	8	150ppm-A,0; 200ppm-A-(STEL)
3. N-Butyl alcohol	71-36-3	5.5	100ppm-O; 25ppm-D; 50ppm-C-A
4. Acetone	67-64-1	184	750ppm-A; 1000ppm-O; 1000ppm-A-(STEL)
5. Methyl ethyl ketone	78-93-3	71	200ppm-A,0; 300ppm-A-(STEL)
6. Methyl isobutyl ketone	108-10-1	15	50ppm-A; 150ppm-O; 75ppm-A-(STEL)
7. Methyl isobutyl carbinol	108-11-2	2.2	25ppm-A,0; 40ppm-A-(STEL)
8. Toluene	108-88-3	36.7	100ppm-A; 200ppm-O; 150ppm-A-(STEL); 300ppm-O-C; 500ppm-O Max 10 Min
9. Isopropyl alcohol	67-63-0	33	400ppm-A,0; 500ppm-A-(STEL)
10. Propylene glycol mono-methyl ether	107-98-2	10.9	100ppm-A
11. Propylene glycol monomethyl ether acetate	108-65-6	3.8	Unknown
12. Xylene	1330-20-7	25	100ppm-A,0; 150ppm-A-(STEL)

13. Aromatic hydro-carbons	64742-95-6	10	25ppm-O; 50ppm-D
14. Butyl benzyl phthalate	85-68-7	0.8	5 mg/m ³ -D
15. VM&P naphtha	64742-89-8	15	100ppm-D; 300ppm-A; 500ppm-O
16. Medium mineral spirits	64742-88-7	10	100ppm-A,D; 500ppm-O
17. Heavy naphtha	64742-48-9	None	100ppm-D
18. Phosphoric acid	7664-38-2	None	2.0 mg/m ³ -A,0
19. Calcium extender	None	None	10 mg/m ³ -A,D; 15 mg/m ³ -O
20. Lead oxide	1317-36-8	None	150 µg/m ³ -A; 50 µg/m ³ -O,D
21. Barium sulfate	7727-43-7	None	10 mg/m ³ -A
22. Lead	7439-92-1	None	150 µg/m ³ -A, 50 µg/m ³ -O
23. Epoxy type polymer	25068-38-6	None	Unknown
24. Crystalline silica	14808-60-7	None	0.1 mg/m ³ -A,0
25. Hydrous magnesium silicate	14807-96-6	None	2.0 mg/m ³ -A-D; 5 mg/m ³ -O
26. Titanium dioxide	13463-67-7	None	10 mg/m ³ -A; 15 mg/m ³ -O
27. Zinc chromate	13530-65-9	None	50 µg/m ³ -A, 100 µg/m ³ -O-Cr
28. Zinc oxide	1314-13-2	None	10 mg/m ³ -A

*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): 6.8-13.4
Solubility in water: Miscible Volume % volatile: 58.6-99.3%
Vapor density: Heavier than air Weight % volatile: 31.1-98.3%
Boiling Range: 54°F-190°F V.O.C. (#/gal): 3.5-8.0

Section IV — Fire & Explosion Data

Flash point (Closed Cup): 20-73°F
Approx. flammable limits: 0.2-19.0 %
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 & 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 the 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

Butyl Acetate: Extremely high concentrations have caused blood changes and weakness in laboratory animals. **N-Butyl Alcohol:**

Liquid splashes in the eye may result in chemical burns. **Methyl**

Ethyl Ketone: High concentrations have caused embryotoxic effects in laboratory animals. Methyl Ethyl Ketone (MEK) has

been demonstrated to potentiate (i.e., shorten the time of onset) the peripheral neuropathy caused by either N-Hexane or Methyl

N-Butyl Ketone. MEK by itself has not been demonstrated to

cause peripheral neuropathy. Liquid splashes in the eye may

result in chemical burns. **Methyl Isobutyl Ketone:** Recurrent

overexposure may result in liver and kidney injury. **Methyl**

Isobutyl Carbinol: Male rats exposed to very high airborne levels

showed an increase in kidney weights. These effects were not

seen in male rats exposed to lower concentrations, or in female

rats at the same level. Liquid splashes in the eye may result in

chemical burns. Extremely high concentrations have caused

blood changes and weakness in laboratory animals. **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.

Propylene Glycol Monomethyl Ether: May cause temporary

upper respiratory and/or lung irritation with cough, difficulty

breathing, or shortness of breath. Can be absorbed through the

skin in harmful amounts. **Propylene Glycol Monomethyl Ether**

Acetate: May cause moderate eye burning. Recurrent

overexposure may result in liver and kidney injury. **Xylene:** High

concentrations have caused embryotoxic effects in laboratory

animals. Recurrent overexposure may result in liver and kidney

injury. Can be absorbed through the skin in harmful amounts.

Butyl Benzyl Phthalate: Extremely high oral doses have caused

tissue changes in the liver and testes of laboratory animals.

Extremely high vapor aerosol doses have caused atrophy of the

spleen and reproductive organs. Mice and rats were fed diets

containing 0.6% and 1.2% butyl benzyl phthalate. At the highest

dose, leukemias of the blood forming system were seen in

female rats. No leukemia effect was seen in the female rats fed

the lower level or in any of the mice. **VM&P Naphtha, Medium**

Mineral Spirits and Heavy 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 petroleum workers have not shown significant

increases of kidney damage nor kidney or liver tumors.

Phosphoric Acid: Prolonged skin contact may cause chemical

burns. Liquid splashes in the eye may result

in chemical burns. **Lead Oxide and Lead:** Overexposure to lead

may cause adverse effects to the blood forming, nervous,

urinary, reproductive systems including embryotoxic effects.

Symptoms may include loss of appetite, anemia, disturbance of

sleep and fatigue. See OSHA Lead Standard 29CFR1910.1025

for exposures longer than 8 hours. The OSHA exposure limit is

reduced by this formula — limit (in $\mu\text{g}/\text{m}^3$) = $400/\text{hours worked}$

in the day. Lead can be absorbed through the skin in harmful

amounts. **Epoxy Type Polymer:** Repeated exposure may cause

allergic skin rash, itching, swelling. Has shown mutagenic activity

in laboratory cell culture tests. **Crystalline Silica:** Repeated

overexposure to crystalline silica may lead to typical X-ray

changes and chronic lung disease. **Hydrated Magnesium Silicate:**

Repeated and prolonged overexposure to talc may lead to

typical X-ray changes and chronic lung disease. **Titanium**

Dioxide: In a lifetime inhalation test, lung cancers were found in

some rats exposed to $250 \text{ mg}/\text{m}^3$ respirable titanium dust.

Analysis of the titanium dioxide concentrations in the rat's lungs

showed that the lung clearance mechanism was overwhelmed

and that the results at the massive $250 \text{ mg}/\text{m}^3$ level are not

relevant to the workplace. **Zinc Chromate:** Health studies have

shown that zinc chromate pigment manufacturing may be

associated with an increased risk of lung cancer. Is an IARC,

NTP or OSHA carcinogen.

Section VI — Reactivity Data

Stability: stable

Incompatibility (materials to avoid): none reasonably foreseeable

Hazardous decomposition products: CO, CO₂, 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) 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 respirator 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.

Other precautions: Do not sand, flame cut, braze or weld dry

coating without a NIOSH/MSHA approved respirator or

appropriate ventilation.

Section X — Hazardous Ingredients by Product Code

Product Code	Ingredients (See Section II)
215S	4, 5, 8, 12, 14, 25, 26, 27, 28
329S	8, 13
615S/616S	1, 2, 3, 4, 6, 8, 9, 11, 12, 15, 18, 21, 25, 26, 27, 28
824S/826S	2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 16, 19, 21, 23, 25, 26
825S/826S	3, 5, 7, 8, 9, 10, 12, 13, 16, 23, 24, 25, 27
1695S	12, 13, 16, 17, 21, 22, 25, 26, 28
1696S	12, 13, 16, 17, 21, 22, 25, 26, 28
1697S	12, 13, 16, 17, 21, 22, 25, 28
LF1697S	12, 13, 16, 17, 21, 25, 28
1858S	3, 12, 13, 16, 17, 21, 22, 25, 26, 28
2085S	12, 13, 16, 17, 25, 27, 28

Product Code

3010S	12, 13, 16, 20, 21, 22, 25, 26, 28
3011S	8, 9, 12, 13, 15, 16, 20, 21, 22, 25, 26, 28
3012S	8, 9, 12, 13, 15, 16, 20, 21, 22, 25, 28
3055S	8, 9, 12, 13, 15, 16, 20, 21, 22, 25, 28

Ingredients (See Section II)

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