

***** SECTION I *****

Manufacturer: E.I. DuPont de Nemours & Co., (Inc.)
Automotive
Wilmington, Delaware 19898

Telephone: Product Information (800) 441-7515
Medical emergency (800) 441-3637
Transportation emergency (800) 424-9300 (CHEMTRAC)

IDENTITY: ENAMEL REDUCER

PRODUCT CODE: Y-3812S FORMULA DATE: 960820

OSHA NAME: FLAMMABLE LIQUID

HMIS: H=2, F=3, R=0

***** SECTION II - INGREDIENTS *****

INGI	CAS NO.	SEC. 313	INGREDIENT
001	67-64-1		ACETONE
002	67-63-0		ISOPROPYL ALCOHOL
003	100-41-4	0-2 %	ETHYLBENZENE
004	1330-20-7	6-7 %	XYLENE
005	108-88-3	8-12 %	TOLUENE
006	64742-89-8		PETROLEUM NAPHTHA
007	110-82-7	0-1 %	CYCLOHEXANE

Section 313 Supplier Notification
The chemicals listed above with percentages are subject to the reporting requirements of Section 313 of the Emergency Planning and Right-To-Know Act of 1986 and of 40 CFR 372.

INGI	PRESSURE MM HG	EXPOSURE LIMITS	
001	184.00	ACGIH 500.0 PPM OSHA 1000.0 PPM ACGIH 750.0 PPM DUPONT 500.0 PPM	8 HR. TWA 8 HR. TWA 15 MIN(STEL) 8 & 12 HR. TWA
002	33.00	ACGIH 400.0 PPM OSHA 400.0 PPM ACGIH 500.0 PPM DUPONT 400.0 PPM	15 MIN(STEL) 8 & 12 HR TWA
003	7.00	ACGIH 100.0 PPM OSHA 100.0 PPM ACGIH 125.0 PPM DUPONT 25.0 PPM	15 MIN(STEL) 8 & 12 HR. TWA

*****SECTION II CONTINUED*****

004	7.00	ACGIH	100.0 PPM		
	25 DEG (C)	OSHA	100.0 PPM		
		ACGIH	150.0 PPM		STEL
		DUPONT	100.0 PPM		(8 & 12 HR.)
		DUPONT	150.0 PPM		15 MIN. TWA
005	36.70	ACGIH	50.0 PPM	SKIN	
	20 DEG (C)	OSHA	200.0 PPM		
		OSHA	300.0 PPM	CELLING	
		OSHA	500.0 PPM		10 MIN MAX
		DUPONT	50.0 PPM		8&12 HR TWA
006	50.00	ACGIH	300.0 PPM		
	25 DEG (C)	OSHA	300.0 PPM		
		OSHA	400.0 PPM		15MIN(STEL)
		DUPONT	100.0 PPM		
007	NONE	ACGIH	300.0 PPM		
		OSHA	300.0 PPM		
		DUPONT	150.0 PPM		12 HR. TWA

***** SECTION III - PHYSICAL DATA *****

EVAPORATION RATE SLOWER THAN ETHER	VAPOR DENSITY HEAVIER THAN AIR	SOLUBILITY OF SOLVENT SYSTEM IN WATER
PERCENT VOLATILE BY VOLUME 100.0	APPROX. BOILING RANGE 54-142 DEG (C)	WEIGHT PER GALLON 6.23
PERCENT VOLATILE BY WEIGHT 100.0	PERCENT SOLIDS 0.0	VOC LESS EXEMPT 6.2
		VOC AS PACKAGED 5.6

***** SECTION IV - FIRE & EXPLOSION DATA *****

FLASH POINT (METHOD) APPROX. FLAMMABLE LIMITS
BELOW 20 F (CC) LEL 1.0 % UEL 13.0 %

Extinguishing media: foam , carbon dioxide, dry chemical

Special fire fighting procedures: full protective equip-
ment, including self-contained breathing apparatus, is
recommended. Water from fog nozzles may be used to prevent
pressure build-up.

Unusual fire & explosion hazards: when heated above the
flashpoint, emits flammable vapors which, when mixed with

***** SECTION IV CONTINUED *****

air, can burn or be explosive. Fine mist or sprays may be flammable at temperatures below the flash point.

***** SECTION V - HEALTH HAZARD DATA *****

ROUTE OF ENTRY SYMPTOMS/EFFECTS AND FIRST AID

Inhalation: May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

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.

OTHER POTENTIAL HAZARDS INCLUDE:

ISOPROPYL ALCOHOL

Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

ETHYLBENZENE

Recurrent overexposure may result in liver and kidney injury.

Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

Has shown mutagenic activity in laboratory cell culture tests.

Tests in some laboratory animals demonstrate carcinogenic activity.

Individuals with preexisting diseases of the central nervous system, lungs, liver, or kidneys may have increased susceptibility to the toxicity of excessive exposures.

XYLENE

Recurrent overexposure may result in liver and kidney injury.

Can be absorbed through the skin in harmful amounts. Individuals with pre-existing disease of the central nervous system, kidneys, liver, cardiovascular system,

lungs, or bone marrow may have increased susceptibility to the toxicity of excessive exposures.

Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to

***** SECTION V CONTINUED *****

the adult animal. The significance of these effects to humans is not known.

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.

Chromosomal changes in the circulating blood of exposed workers have been reported. The significance of these reports is unclear because of exposure to other substances.

Individuals with preexisting diseases of the central nervous system may have increased susceptibility to the toxicity of excessive exposures.

WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

PETROLEUM NAPHTHA

Laboratory studies with rats have shown that petroleum distillates can 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 a significant increase of kidney damage or an increase in kidney or liver tumors.

First Aid:

Inhalation: If affected by inhalation of vapor or spray mist, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Skin or eye: In case of 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.

Ingestion: Gastro-intestinal distress.

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

Skin or eye contact: May cause irritation of the eyes. Repeated or prolonged skin contact may cause irritation.

In case of eye contact, flush with plenty of water for at least 15 minutes, call a physician. For skin contact, wash with soap and water.

***** 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 V.

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. Confine and remove with inert absorbent.

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 air purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. Follow the respirator manufacturer's directions for respirator use. Ventilation: Provide sufficient ventilation in volume and pattern to keep contaminants below applicable OSHA requirements and other applicable exposure limits.

Protective clothing: Neoprene gloves and coveralls are recommended.

Eye protection: Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Protective creams: Do not use for protection. May be used for ease of clean up.

***** SECTION IX - SPECIAL PRECAUTIONS *****

Precautions to be taken in handling and storing: Observe label precautions. Keep away from heat, sparks and flame.

*****SECTION IX CONTINUED*****

Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F.

Other precautions: Do not sand, flame cut, braze or weld dry coating without a NIOSH approved respirator or appropriate ventilation.

***** SECTION X - NOTES *****

NOTICE FROM DUPONT

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 any process.

Product Manager
Automotive Regulatory Affairs Consultant
(302)992-6421