

DU PONT E I DE NEMOURS & CO INC -- IMRON POLYURETHANE ENAMEL  
-- 8010-00D030069

==== Product Identification =====

Product ID:IMRON POLYURETHANE ENAMEL  
MSDS Date:01/01/1993  
FSC:8010  
NIIN:00D030069  
MSDS Number: BTHYC  
=== Responsible Party ===  
Company Name:DU PONT E I DE NEMOURS & CO INC  
Address:1007 MARKET STREET  
Box:1635  
City:WILMINGTON  
State:DE  
ZIP:19899  
Country:US  
Info Phone Num:800-441-7515 & 800-441-9408  
Emergency Phone Num:800-441-3637 800-421-9300 CHEMTREC  
CAGE:18873  
=== Contractor Identification ===  
Company Name:E.I. DUPONT DE NEMOURS & CO  
Address:1007 MARKET STREET  
Box:City:WILMINGTON  
State:DE  
ZIP:19898  
Country:US  
Phone:800-441-7515;800-441-9442  
CAGE:18873

==== Composition/Information on Ingredients =====

Ingred Name:CARBON BLACK  
CAS:1333-86-4  
RTECS #:FF5800000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:3.5 MG/M3  
ACGIH TLV:3.5 MG/M3; 9394

Ingred Name:CELLULOSE ACETATE BUTYRATE  
Other REC Limits:NONE RECOMMENDED

Ingred Name:CHROME ANTIMONY TITANATE  
CAS:68186-90-3  
Other REC Limits:NONE RECOMMENDED

Ingred Name:ETHYL ACETATE (SARA III)  
CAS:141-78-6  
RTECS #:AH5425000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:400 PPM  
ACGIH TLV:400 PPM; 9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:IRON OXIDE FUME

CAS:1309-37-1  
RTECS #:NO7400000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:10 MG/M3 (FE)  
ACGIH TLV:5MG/M3 (FE) FUME, B2; 94

Ingred Name:LEAD CHROMATE  
CAS:18454-12-1  
RTECS #:OF9800000  
Other REC Limits:NONE RECOMMENDED

Ingred Name:LEAD CHROMATE, LEAD SULFATE, LEAD MOLYBDATE MIXTURE  
CAS:12656-85-8  
Other REC Limits:NONE RECOMMENDED

Ingred Name:NAPHTHA, MEDIUM ALIPHATIC  
CAS:64742-88-7  
Other REC Limits:NONE RECOMMENDED

Ingred Name:METHYL ETHYL KETONE (2-BUTANONE) (MEK) (SARA III)  
CAS:78-93-3  
RTECS #:EL6475000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:200 PPM  
ACGIH TLV:200 PPM/300STEL 9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:N-BUTYL ALCOHOL (SARA III)  
CAS:71-36-3  
RTECS #:EO1400000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:100 PPM  
ACGIH TLV:S, C 50 PPM; 9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:NICKEL, ANTIMONY, TITANIUM YELLOW PIGMENT  
CAS:8007-18-9  
Other REC Limits:NONE RECOMMENDED

Ingred Name:PROPYLENEGLYCOL MONOMETHYL ETHER ACETATE  
CAS:108-65-6  
RTECS #:AI8295000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:NOT ESTABLISHED.  
ACGIH TLV:NOT ESTABLISHED.

Ingred Name:TITANIUM DIOXIDE  
CAS:13463-67-7  
RTECS #:XR2275000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9394

Ingred Name:TOLUENE (SARA III)  
CAS:108-88-3

RTECS #:XS5250000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:100 PPM  
ACGIH TLV:S, 50 PPM; 9394  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:NAPHTHA, LIGHT ALIPHATIC/ALIPHATIC SOLVENT  
CAS:64742-89-8  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:NOT ESTABLISHED.  
ACGIH TLV:NOT ESTABLISHED.

Ingred Name:XYLENES (O-,M-,P- ISOMERS) (SARA III)  
CAS:1330-20-7  
RTECS #:ZE2100000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:100 PPM  
ACGIH TLV:100 PPM/150STEL;9394  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:BASIC NICKEL CARBONATE  
CAS:39430-27-8  
RTECS #:QR6260000  
Other REC Limits:NONE RECOMMENDED

Ingred Name:PIGMENTS  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:NOT ESTABLISHED.  
ACGIH TLV:NOT ESTABLISHED.

Ingred Name:ACRYLIC RESIN  
CAS:26299-47-8  
Other REC Limits:NONE RECOMMENDED

Ingred Name:ALUMINUM (SARA III)  
CAS:7429-90-5  
RTECS #:BD0330000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 DUST  
ACGIH TLV:10 MG/M3 DUST; 9394

Ingred Name:NAPHTHA, LIGHT AROMATIC  
CAS:64742-95-6  
Other REC Limits:NONE RECOMMENDED

Ingred Name:N-BUTYL ACETATE (SARA III)  
CAS:123-86-4  
RTECS #:AF7350000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:150 PPM  
ACGIH TLV:150 PPM/200STEL;9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

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===== Hazards Identification =====

LD50 LC50 Mixture:LD50 (ORAL, RAT) IS UNKNOWN.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:TARGET ORGANS:EYES, SKIN, CNS,  
RESPIRATORY TRACT. ACUTE- IRRITATION OF EYES, SKIN & RESPIRATORY  
SYSTEM. MAY CAUSE NERVOUS SYSTEM DEPRESSION. OVEREXPOSURE MAY CAUSE  
UNCONSCIOUSNESS. HARMFUL IF INGESTED , CAUSING GASTRO-INTESTINAL  
DISTRESS. CHRONIC- MAY CAUSE LIVER, KIDNEY, BLOOD & BRAIN DAMAGE.  
Explanation of Carcinogenicity:CONTAINS LEAD AND CHROMIUM.  
Effects of Overexposure:HEADACHE, DIZZINESS, NAUSEA, LOSS OF  
COORDINATION, IRRITATION OF EYES, SKIN AND RESPIRATORY TRACT,  
REDNESS AND ITCHING OR BURNING SENSATION OF EYES OR SKIN, ABDOMINAL  
PAIN, METALLIC TASTE, INSOMNIA, WEAKNESS, MUSCLE AND JOINT PAINS,  
TEARING

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===== First Aid Measures =====

First Aid:GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. INHALED: REMOVE TO  
FRESH AIR. PROVIDE OXYGEN IF NEEDED. EYES: FLUSH WITH WATER FOR 15  
MINUTES. KEEP EYELIDS OPEN. SKIN: WASH WITH SOAP & WATER.  
INGESTION: DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY  
AND HAVE NAMES OF INGREDIENTS AVAILABLE.

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===== Fire Fighting Measures =====

Flash Point Method:CC  
Flash Point:<100F,<38C  
Lower Limits:0.9  
Upper Limits:23  
Extinguishing Media:USE WATER SPRAY, CARBON DIOXIDE, FOAM, OR DRY  
CHEMICAL.  
Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A  
FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED  
CONTAINERS WITH WATER SPRAY.  
Unusual Fire/Explosion Hazard:VAPOR IS HEAVIER THAN AIR AND CAN TRAVEL  
CONSIDERABLE DISTANCE OR BE MOVED BY VENTILATION TO A SOURCE OF  
IGNITION AND FLASH BACK. CONTAINER MAY EXPLODE.

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===== Accidental Release Measures =====

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENTS. VENTILATE AREA.  
REMOVE WITH INERT ABSORBENT.  
Neutralizing Agent:NOT RELEVANT

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===== Handling and Storage =====

Handling and Storage Precautions:OBSERVE LABEL PRECAUTIONS. KEEP AWAY  
FROM HEAT, SPARKS & FLAME. GROUND CONTAINERS WHEN POURING. DO NOT  
STORE ABOVE 120F. KEEP CONTAINER CLOSED.  
Other Precautions:DON'T SAND, FLAME CUT, BRAZE/WELD DRY COATING WITHOUT  
APPROVED RESPIRATOR OR ADEQUATE VENTILATION. WASH THOROUGHLY AFTER  
HANDLING. DON'T GET IN EYES, ON SKIN OR ON CLOTHING. DON'T BREATHE  
VAPOR OR SPRAY MIST. KEEP OUT OF REACH OF CHILDREN.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:FOR SPRAY PAINTING, A POSITIVE PRESSURE SUPPLIED AIR RESPIRATOR (NIOSH TC-19C) IS REQUIRED UNLESS MONITORING DATA CONFIRMS EXPOSURES TO SOLVENTS WILL BE BELOW THE TLV.

Ventilation:MECHANICAL (GENERAL) ROOM VENTILATION IS NORMALLY ADEQUATE. LOCAL EXHAUST MAY BE REQUIRED IF WORK AREA NOT VENTED.

Protective Gloves:NEOPRENE

Eye Protection:GOGGLES/SAFETY GLASSES PLUS SPLASH GUARD

Other Protective Equipment:EYE WASH STATION, SAFETY SHOWER, INDUSTRIAL-TYPE WORK CLOTHING, APRON AND BARRIER CREAM FOR EXPOSED SKIN

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR COVERALLS WHILE SOLVENT ODOR IS RETAINED

Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:F3

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:169F - 374F

Vapor Density:>1

Spec Gravity:0.990 - 1.341

Evaporation Rate & Reference:<1 (ETHER=1)

Solubility in Water:MISCIBLE

Appearance and Odor:LIQUID WITH SOLVENT ODOR

Percent Volatiles by Volume:61- 69

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

NONE REASONABLY FORESEEABLE.

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE, SMOKE AND OXIDES OF METALS (SEE INGREDIENT SECTION).

===== Disposal Considerations =====

Waste Disposal Methods:DO NOT ALLOW MATERIAL TO CONTAMINATE GROUND WATER SYSTEMS. INCINERATE ABSORBED MATERIAL IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

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