

<b>SECTION 1 – PRODUCT IDENTIFICATION AND USE</b>				
Material <b>Denso Protal 7200 "B"</b> Amines, Liquid, Corrosive, N.O.S.(N-Aminoethylpiperazine) UN2735, Class 8, PGIII		TDG Classification		
Manufacturer's Name Denso North America Inc.		Supplier's Name Denso North America Inc.		
Street Address 90 Ironside Crescent, Unit 12		Street Address 90 Ironside Crescent, Unit 12		
City Toronto	Province/Country Ontario	City Toronto	Province/Country Ontario	
Postal Code M1X 1M3	Emergency Telephone No. (613) 996-6666	Postal Code M1X 1M3	Emergency Telephone # (613) 996-6666	
Product Class Amine	Chemical Family Not Available	Manufacturer's Code 2072-3191		
WHMIS Classification Class D, Division 2, Sub.A Class E	Trade Name & Synonyms Denso Protal 7200 "B"	Material Use On-site Liquid Coating for Metal Pipes		
<b>SECTION 2 – HAZARDOUS INGREDIENTS</b>				
Ingredients	%	CAS Number	LD50 of Material (Specific Species & Route)	LC50 of Material (Specific Species)
N-Aminoethylpiperazine	40-70	140-31-8	Oral> 2150mg/kg Rat	N/A = Not Available
Epoxy Novolac Resin	10-30	28064-14-4	Oral> 4000mg/kg Rabbit	N/A
Nonyl Phenol	10-30	25154-52-3	Oral> 580mg/kg Rat	N/A
Bisphenol "A"	3-7	60-05-7	Oral> 4100mg/kg Rat	N/A
Yellow Lead Chromate Pigment	3-7	1344-37-2	Oral> 2000mg/kg Rat	N/A
Amino Silane	3-7	1760-24-3	N/A	N/A
Salicylic Acid	3-7	59-72-7	Oral> 891mg/kg Rat	N/A
Fumed Silica	3-7	67762-90-7	Oral> 5mg/kg Rat	N/A
Phthalocyanine Tinter	1-5	147-14-7	N/A	N/A
<b>SECTION 3 – PHYSICAL DATA</b>				
Physical State Gas <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid <input type="checkbox"/>		Odour and Appearance Ammoniacal Odour, Green Liquid		Odour Threshold (PPM) Not Available
Vapour Pressure (mm Hg) Not Available	Vapour Density (air = 1) Not Available	Evaporation Rate Not Available	Boiling Point (° C) Not Available	Freezing Point (° C) Not Available
% Volatile (by volume) 0.00	Solubility in Water (20° C) Slight	pH Not Available	Specific Gravity 1.08	Coeff Water/Oil Dist Not Available
<b>SECTION 4 – FIRE AND EXPLOSION DATA</b>				
Flammability Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
If Yes, Under What Conditions?				
Means of Extinction Water Spray, Water Fog, Foam, Dry Chemical, Foam				
Special Procedures				
Flashpoint (° C) and Method 95°C Setafash Closed Cup	Upper Explosion Limit (% by volume) Not Available		Lower Explosion Limit (% by volume) Not Available	
Auto Ignition Temperature (° C) Not Available	TDG Flammability Classification Not Applicable		Hazardous Combustion Products CO, CO2, Phenolics, Oxides of Nitrogen	
Sensitivity to Mechanical Impact Not Applicable	Rate of Burning Not Applicable	Explosive Power Not Applicable	Sensitivity to Static Discharge Not Applicable	

<b>SECTION 5 – REACTIVITY DATA</b>			
Chemical Stability		If No, Under What Conditions?	
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Hazardous Polymerization		Will Not Occur	
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Reactivity, and Under What Conditions?		Not Applicable	
Hazardous Decomposition Products		Not Available	
<b>SECTION 6 – TOXICOLOGICAL PROPERTIES</b>			
Route of Entry			
Skin Contact <input checked="" type="checkbox"/> Skin Absorption <input checked="" type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation Acute <input checked="" type="checkbox"/> Inhalation Chronic <input type="checkbox"/> Ingestion <input checked="" type="checkbox"/>			
Effects of Acute Exposure to Material			
Contact of Material with Eyes will Result in Eye Irritation and Burns, Contact with Skin may Cause Irritation and Burns, Ingestion may Lead to Gastrointestinal Irritation or Ulceration, Inhalation may Result in Respiratory Tract Irritation and Burns.			
Effects of Chronic Exposure to Material			
Some Individuals may become Sensitized to the Material over Time. (See Below)			
LD50 of Material Specify Species and Route	LC50 of Material Specify Species	Teratogenicity of Material	Mutagenicity of Material
Not Available	Not Available	Not Applicable	Not Applicable
Sensitization Capability of Material	Carcinogenicity of Material	Reproductive Toxicity of Material	Synergistic Materials
Skin and Respiratory	Not Applicable	Not Applicable	None Known
Exposure Limits of Material (TLV)			
Phthalocyanine Tinter – TWA 10ppm (ACGIH)			
<b>SECTION 7 – PREVENTATIVE MEASURES</b>			
Personal Protective Equipment			
Wear Clean Long Sleeved, Body Covering Clothing, Use Impervious Gloves and Protective Clothing. Use Goggles and Full Face Shield. When Respiratory Protection is Required, Use an Approved Air Purifying Respirator. (See Below)			
Gloves (Specify)	Respiratory (Specify)	Eye (Specify)	
Impervious Type (Neoprene, PVC, Butyl)	Approved Air Purifying Respirator (Organic Vapour Cartridge)	Chemical Goggles	
Footwear (Specify)	Clothing (Specify)	Other (Specify)	
Work Boots	Clean Long Sleeved, Body Covering (Overalls, Tyvek Suit)	Full Face Shield	
Engineering Controls (Specify e.g. Ventilation Enclosed Process)			
Provide General Dilution of Local Exhaust in Volume and Pattern to Keep TLV of Hazardous Ingredients in Section 6 Below Acceptable Limits.			
Leak and Spill Procedure			
Remove All Sources of Ignition, Provide Adequate Ventilation. Avoid Prolonged Breathing of Vapours. Remove to a Container or Absorb with Clay, Diatomaceous Earth or Other Inert Absorbent.			
Waste Disposal     **DO NOT INCINERATE CLOSED CONTAINERS**			
Incineration or Landfill in an Approved Site in Accordance with Local and Federal Regulations.			
Handling Procedure and Equipment			
Avoid Inhalation, Skin and Eye Contact. Practice Good Personal Hygiene. Wash Repeatedly with Soap and Water After Use and Before Work Breaks.			
Storage Requirements			
Keep Containers Closed and in a Cool Dry Place.			
Special Shipping Information			

<b>SECTION 8 – FIRST AID MEASURES</b>		
<p><b>EYE CONTACT</b> – Flush Thoroughly with Water for at Least 15 Minutes. Get Immediate Medical Attention.</p> <p><b>SKIN CONTACT</b> – Wash the Exposed Areas with Soap and Water. Call a Physician if Irritation Persists.</p> <p><b>INHALATION</b> – Remove to Fresh Air. If Breathing is Difficult Administer Oxygen.</p> <p><b>INGESTION</b> – Do Not Induce Vomiting. Administer Large Amounts of Milk or Water if Available. Transport to a Medical Facility.</p>		
Sources Used		
H & S Data from Raw Material Suppliers.		
Additional Information		
<b>DISCLAIMER AND LIMITATION OF LIABILITY</b>		
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<b>SECTION 9 – PREPARATION OF THE MSDS</b>		
Prepared by (Group, Department, etc.) Denso North America Inc.	Phone Number (416) 291-3435	Date January 1, 2005