

PAINT
ROOM

NR-9500A - Rev.0

MATERIAL SAFETY DATA SHEET

NORMAC ADHESIVE PRODUCTS**NR-9500 Part "A"**

SECTION I - SUPPLIER AND MATERIAL IDENTIFICATION

Supplier's Name: Normac Adhesive Products Inc.
 4390 Corporate Drive
 Burlington, Ontario L7L 5R3
 Tel: (905) 332-6455 Fax: (905) 332-6880
 Emergency Phone Number Only: (Canutec) (613) 996-6666

Product Class: Corrosion Resistant Metal Primer

Chemical Family: Epoxy

Trade Name: Normac NR-9500 Part "A"

Cas No.: Mixture

SECTION II - HAZARDOUS INGREDIENTS

	Cas No.	% W.W.	TLV (ACGIH) ppm
Methyl Ethyl Ketone	78-93-3	30-40	200 ppm TLV ACGIH

SECTION III - PHYSICAL DATA

Specific Gravity: 1.02

Viscosity: < 1 Poise

Boiling Point : 95°C

Vapour Pressure: 172 mm Hg @ 20°C

% Volatility: 30-40

Odour: Ether-like smell

Appearance: Grey and/or clear amber coloured liquid

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point: 2°C

Flammable Limits In Air: 1.3 LEL 8.5 UEL

Auto Ignition Temp: 340°C

Extinguishing Media: Dry Chemical, Carbon Dioxide, Halon 1211, Foam and Alcohol Foam.

Unusual Fire and Explosion Hazards: Closed container may explode if exposed to extreme heat.

Special Fire Fighting Procedure: Fire Fighters should wear self contained breathing apparatus and full protective clothing.

SECTION V - REACTIVITY DATA

Stability: Stable under normal conditions of use.

Conditions to Avoid: Elevated temperatures, pressures, sparks, open flames and all ignition sources.

Incompatibility: Water, strong oxidizing agents and active hydrogens.

Hazardous Decomposition Products: May produce phenol, vinyl chloride and oxides of nitrogen and carbon.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH RELATED DATA

Exposure Limits: See hazardous ingredients list

Effects of Overexposure: EYES: Causes redness and irritation. SKIN: May cause defatting, drying and cracking of the skin. Prolonged and repeated contact may lead to dermatitis. INHALATION: Irritating to the nose, throat and respiratory tract. May cause central nervous system depression, cardiac arrhythmia and carboxyhemoglobinemia. INGESTION: Causes irritation to the mouth and throat and abdominal pain. May cause symptoms similar to that of inhalation.

Animal Data: Oral LD50 (Rats): 5020 mg/kg
Inhalation (Rats): 8970 ppm

Carcinogenicity: Product is not classified as carcinogenic by ACGIH and IARC.

Mutagenicity: Product does not have mutagenic/reproductive/teratogenic and fetotoxic effects.

FIRST AID

Eyes: Immediately flush with water for at least 20 minutes. Hold eyelids open during flushing. Get medical attention.

Skin Contact: Clean exposed area with a clean cloth followed by Isopropanol, soap and water for 20 minutes. Get medical attention.

SECTION VI - HEALTH RELATED DATA (Continued)

FIRST AID (Continued)

Inhalation: Move victim to fresh air. Aid or restore breathing if necessary. Get medical attention.

Ingestion: DO NOT INDUCE VOMITING. If victim is alert rinse mouth and give 1 glass of water to dilute material. Get medical attention.

Special Precautions: This product may cause severe pneumonitis if aspirated. Carry out careful gastric lavage; use endotracheal cuff to prevent aspiration. Do not give vasopressor drugs as there may be the danger of cardiac arrhythmia.

SECTION VII - SPILL, LEAK PROCEDURES

Storage and Handling: Store in a cool, well ventilated area. Keep away from heat, sparks and flames. Use personal protective equipment.

Spills: Cover spills with inert absorbent material. Wear full protective equipment and then ventilate the area.

Waste Disposal: In accordance with local, provincial/state and federal regulations. Do not dispose in garbage or sewer systems.

SECTION VIII - CONTROL MEASURES

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator equipped with organic vapour cartridges up to 100 ppm and an air supplied respirator for > 100 ppm.

Protective Gloves: Impervious rubber gloves should be worn

Eye Protection: Wear chemical safety goggles

Skin Protection: Wear and impermeable apron and boots to cover exposed skin.

Ventilation: Local exhaust ventilation is required to prevent against over exposure to vapours.

SECTION IX - REGULATORY INFORMATION

WHMIS:	B.2 D-1B, D-2B
Proper Shipping Name:	FLAMMABLE LIQUID N.O.S. (Ethyl Methyl Ketone)
Product Label:	Normac NR-9500 Part "A"
UN Number:	UN 1993
Hazard Class:	3
TDG: (IATA)	UN 1993 Cl. 3 Pkg. II
(IMO)	UN 1993 Cl. 3.2 Pkg. II
Hazard Labelling:	Flammable

NR-9500A - Rev.0

Information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. No warranty of any kind is given or implied and Normac will not be liable for any damages, losses, injuries or consequential damages resulting from the use or reliance on information contained herein.

DATE OF ISSUE:

March 28, 1996

PREPARED BY:

G. MacGregor

MSDS Code: NR9500.A - 0

MATERIAL SAFETY DATA SHEET

NORMAC ADHESIVE PRODUCTS
NR-9500 Part "B"

SECTION I - SUPPLIER AND MATERIAL IDENTIFICATION

Supplier's Name: Normac Adhesive Products Inc.
 4390 Corporate Drive
 Burlington, Ontario L7L 5R3
 Tel: (905) 332-6455 Fax: (905) 332-6880
 Emergency Phone Number Only: (Canutec) (613) 996-6666

Product Class: Corrosion Resistant Metal Primer

Chemical Family: Polyurethane Resin

Trade Name: Normac NR-9500 Part "B"

Cas No.: Mixture

SECTION II - HAZARDOUS INGREDIENTS

	Cas No.	% W.W.	TLV (ACGIH) ppm
Methyl Ethyl Ketone	78-93-3	25-45	200 ppm TLV ACGIH
4,4-Methylene Bisphenyl Isocyanate	101-68-8	30-40	.005 ppm TLV ACGIH

SECTION III - PHYSICAL DATA

Specific Gravity: 1.03

Viscosity: < 1 Poise

Boiling Point : 75°C

Vapour Pressure: 72 mm Hg @ 20°C

% Volatility: 25-45

Odour: Acetone-like smell

Appearance: Clear amber coloured liquid

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point: -7°C (TCC)

Flammable Limits in Air: 1.8 LEL 11.5 UEL

Auto Ignition Temp: 514°C

Extinguishing Media: AFFF Foam, Carbon Dioxide, Alcohol Foam, Dry Chemical and water.

Unusual Fire and Explosion Hazards: Vapours may travel to a source of ignition some distance away and then flash back to the point of product release causing an explosion and fire.

Special Fire Fighting Procedure: Fire Fighters should wear self contained breathing apparatus and full protective clothing.

SECTION V - REACTIVITY DATA

Stability: Stable under normal conditions of use.

Conditions to Avoid: Elevated temperatures, pressures, sparks, open flames and all sources of ignition.

Incompatibility: Water, strong oxidizing agents and active hydrogens.

Hazardous Decomposition Products: May produce phenol, vinyl chloride and oxides of nitrogen and carbon.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH RELATED DATA

Exposure Limits: See hazardous ingredients list

Effects of Overexposure: EYES: Causes redness and irritation. SKIN: May cause defatting, drying and cracking of the skin. Prolonged and repeated contact may lead to dermatitis.

INHALATION: Irritating to the nose, throat and respiratory tract. May cause central nervous system depression, cardiac arrhythmia and carboxyhemoglobinemia. INGESTION: Causes irritation to the mouth and throat and abdominal pain. May cause symptoms similar to that of inhalation.

Animal Data:

Oral LD50 (Rats):	2737 mg/kg
Dermal LD50 (Rabbits):	13 g/kg
Inhalation (Mouse):	9610 ppm

Carcinogenicity: Product is not classified as carcinogenic by ACGIH and IARC.

Mutagenicity: Product does not have mutagenic/reproductive/teratogenic and fetotoxic effects.

FIRST AID

Eyes: Immediately flush with water for at least 20 minutes. Hold eyelids open during flushing. Get medical attention.

Skin Contact: Clean exposed area with a clean cloth followed by Isopropanol, soap and water for 20 minutes. Get medical attention.

SECTION VI - HEALTH RELATED DATA (Continued)

FIRST AID (Continued)

Inhalation: Move victim to fresh air. Aid or restore breathing if necessary. Get medical attention.

Ingestion: DO NOT INDUCE VOMITING. If victim is alert rinse mouth and give 1 glass of water to dilute material. Get medical attention.

Special Precautions: This product may cause severe pneumonitis if aspirated. Carry out careful gastric lavage; use endotracheal cuff to prevent aspiration. Do not give vasopressor drugs as there may be the danger of cardiac arrhythmia.

SECTION VII - SPILL, LEAK PROCEDURES

Storage and Handling: Store in a cool, well ventilated area. Keep away from heat, sparks and flames. Use personal protective equipment.

Spills: Cover spills with inert absorbent material. Wear full protective equipment and saturate spill with neutralizing solution (1% ammonia in water + 10% isopropanol in water) and then ventilate the area.

Waste Disposal: In accordance with local, provincial/state and federal regulations. Do not dispose in garbage or sewer systems.

SECTION VIII - CONTROL MEASURES

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator equipped with organic vapour cartridges up to 100 ppm and an air supplied respirator for > 100 ppm.

Protective Gloves: Impervious rubber gloves should be worn

Eye Protection: Wear chemical safety goggles

Skin Protection: Wear an impermeable apron and boots to cover exposed skin.

Ventilation: Local exhaust ventilation is required to prevent against over exposure to vapours.

SECTION IX - REGULATORY INFORMATION

WHMIS:	B.2, D-2B
Proper Shipping Name:	FLAMMABLE LIQUID N.O.S. (Ethyl Methyl Ketone)
Product Label:	Normac NR-9500 Part "B"
UN Number:	UN 1993
TDG: (IATA)	UN 1993 Cl. 3 Pkg. II
(IMO)	UN 1993 Cl. 3.2 Pkg. II
Hazard Labelling:	Flammable

Information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. No warranty of any kind is given or implied and Normac will not be liable for any damages, losses, injuries or consequential damages resulting from the use or reliance on information contained herein.

DATE OF ISSUE: March 28, 1996

PREPARED BY: G. MacGregor

MSDS Code: NR9500.B - 0