August 1, 2006	Dave 2 est 2
	MATERIAL SAFETY DATA SHEET
	TERMIX EPOXY PRIMER - Colours Omponent A
SECTION 04: FIRST AIL	D MEASURES
Inhalation (acute):	GET IMMEDIATE MEDICAL HELP.  DO NOT INDUCE VOMITING. Seek medical help. Give 1 or 2 glasses water or milk, BUT ONLY IF VICTIM IS CONSCIOUS.  Check for and remove any contact tenses. Flush eyes IMMEDIATELY with water for 15 minutes and get immediate medical help.  Wash with soap and water. Clean contaminated clothing before reuse.
SECTION 05: FIRE FIGH	HTING MEASURES
Flash Point (°C) (TCC)	244 7 1
SECTION 06: ACCIDENT	TAL RELEASE MEASURES
Leak / Spill:	Remove all sources of ignition. The product should be contained and absorbed with inert materials and placed into a container. Do not seal the containers until any gas, which might form, has done so.
SECTION 07: HANDLING	3 AND STORAGE
Handling Procedures:	Avoid static charges, sparks, flames, ignition sources, excessive heat. Keep containers tightly closed and upright when not in use. Do not allow contact with skin or eyes, and don't breathe vapors. Electrical and mechanical equipment should be explosion-proof. Store in a cool, dry place.
SECTION 08: EXPOSUR	RE CONTROLS / PERSONAL PROTECTION
PROTECTIVE EQUIPMENT	
Eye/Type:	Personnel should wear liquid chemical goggles or a full-face shield. Personnel should wear a suitable air supplied respirator. Personnel should wear chemical-resistant clothing, gloves and footwear. A safety shower and eye wash facility should be available. Adequate ventilation must be assured to prevent the accumulation of dangerous amounts of vapor or mist.

August 1, 2006	Page 3 of 3
	MATERIAL SAFETY DATA SHEET
Product Name:	INTERMIX EPOXY PRIMER - Colours Component A
SECTION 09: PHYSIC	CAL AND CHEMICAL PROPERTIES
Physical State (appearance): Odor	Solvent 1.48 – 1.77 N/A 77 mm Hg Heavier than air N/A 80 N/A N/A
SECTION 10: STABILI	TY AND REACTIVITY
Reactivity Conditions:	Will react dangerously with oxidizing materials
SECTION 11: REGULA	ATORY INFORMATION
WHMIS Classification:	B-2, D-2A, D-2B
SECTION 12: DISPOS	AL CONSIDERATIONS
Waste Disposal:	Dispose of waste according to local, provincial and federal regulations. Utilize authorized centers for disposal of combustible chemical material.
SECTION 13: TRANSF	ORTINFORMATION
T.D.G. Classification:	Shipping name: Paint. UN 1263, CI 3, PG II.
SECTION 14: OTHER	NFORMATION
Note: Prepared By: Preparation Date:	Technical Department August 1, 2006

August 2, 2006

Page 1 of 3

## MATERIAL SAFETY DATA SHEET

Product Name:

INTERMIX EPOXY PRIMER 3:1 COMPONENT "B"

## SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer/Supplier:

Endura Manufacturing Co. Ltd.

12425 - 149 Street Edmonton, Alberta

T5L 2J6

Ph: (780) 451-4242 Fax: (780) 452-5079

24-Hour Emergency

Number:....

(613) 996-6666 (Canutec)

Product Name:....

INTÉRMIX EPOXY PRIMER 3:1 COMPONENT "B"

UN 1263 CI 3 PG II

Item Number:.... Chemical Family:.... Material Use:....

Aromatic Hydrocarbons, Alcohols, Glycol ethers. 2 component Epoxy Primer -intermix system.

## SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS ING	REDIENTS	C.A.S.	LD/50, ROUTE, SPECIE	ES	LC/50, ROUTE, SPECIES	TLV	% WT
nonylphenol tris(dimethylaminometh butanol xylene Ethylene glycol monobu acetate		84852-15-3 90-72-2 71-36-3 1330-20-7 112-07-2	.58 g/kg o-r 1.2 g/kg o-r 1.28 g/kg .79g/kg o-r 4.3 g/kg o-r >2 g/kg d 2400 mg/kg rat		N/A N/A 8000 ppm/8h i-r 5000 ppm/4h i-r 450 ppm rat	10 ppm N/A 50 ppm 100 ppm 20 ppm	5 - 15 1 - 5 5 - 10 10 - 20 5 - 10
toluene		108-88-3	636 mg/kg 0-r		8000ppm 4 hr. 1-r	50 ppm	25 - 35
legend:	o=oral	d=dermal	i=inhalation	rbt=rabbit	r=rat	p=intraperitoneal	g=guinea pig

See Sax, N.I. "Dangerous Properties of Industrial Materials" for more information.

#### SECTION 03: HAZARDS IDENTIFICATION

Eye Contact:.... Moderately imitating to eyes and can cause tissue damage. Can cause burning to eyes. Skin Contact:....

Low toxicity by skin absorption, but extended contact can cause irritation and dermatitis. Can cause burning to skin. Inhalation:....

Vapors are of low to moderate toxicity when inhaled and are irritating to nose, throat and other respiratory passages, especially in higher concentrations. Extended exposure can cause headaches, dizziness, nausea or even loss of muscular control and coordination, narcosis or

unconsciousness.

Ingestion:.... Liquid is of low to moderate toxicity when ingested, but can be hazardous if aspirated into lungs during swallowing or vomiting. Can cause

burning to gastrointestinal passages.

Additional Information:..... Chronic hazards include narcosis, specific organ damage, permanent brain and nervous system damage or coma if extensively abused.

August 2, 2006		
, rugues e, mar	Page 2 of 3  MATERIAL SAFETY DATA SHEET	
Product Name:	INTERMIX EPOXY PRIMER 3:1 COMPONENT "B"	
SECTION 04: FIRST	AID MEASURES	
Inhalation (acute): Ingestion: Eye Contact: Skin Contact: Notes to Physician:	GET IMMEDIATE MEDICAL HELP.  DO NOT INDUCE VOMITING. Seek medical help. Give 1 or 2 glasses water or milk, BUT ONLY IF VICTIM IS CONSCIOUS.  Check for and remove any contact lenses. Flush eyes IMMEDIATELY with water for 15 minutes and get immediate medical help.  Wash with soap and water. Clean contaminated clothing before reuse.	ty.
SECTION 05: FIRE F	IGHTING MEASURES	
Flash Point (°C) (TCC):	<ul><li>244</li><li>7</li><li>1</li></ul>	
Procedures:	wear self-contained breathing apparatus and full protective clothing. Extreme heat may cause pressure build-up in containers and possib explosion, therefore use water to keep containers cool.  Sparks, open flame, static discharge or extreme temperature. Vapors from this product are heavier than air and may travel or be moved by currents and be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition source at locations distant from the point of handling.	hv air
SECTION 06: ACCIDE	ENTAL RELEASE MEASURES	
Leak / Spilf:	Remove all sources of ignition. The product should be contained and absorbed with inert materials and placed into a container. Do not set the containers until any gas, which might form, has done so.	eal
SECTION 07: HANDL	ING AND STORAGE	Bright Brigh Bright Bright Bright Bright Brigh
Handling Procedures:	allow contact with skin or eyes, and don't breathe vapors. Electrical and mechanical equipment should be explosion-proof	1
SECTION 08: EXPOS	SURE CONTROLS / PERSONAL PROTECTION	
PROTECTIVE EQUIPMENT		<del></del>
Eye/Type: Respiratory/Type: Gloves/Clothing/Footwear/Type:. Other/Type: Ventilation Requirements:	Personnel should wear a suitable air supplied respirator. Personnel should wear chemical-resistant clothing, gloves and footwear. A safety shower and eye wash facility should be available	

August 2, 2006		Page 3 of 3
	MATERIAL SAFETY DATA SHEET	Faye 3 01 3
Product Name:	INTERMIX EPOXY PRIMER 3:1 COMPONENT "B"	
SECTION 09: PHYSIC	CAL AND CHEMICAL PROPERTIES	
NOTE: Differences between Com	ponent "B" and the Mixture of A and B are specified as B and M	
Physical State (appearance): Odor:	Solvent 0.895 N/A 16 mm Hg Heavier than air N/A 118 N/A 1/A 1/A N/A N/A N/A	
SECTION 10: STABIL	ITY AND REACTIVITY	
Reactivity Conditions:		
	ATORY INFORMATION	
WHMIS Classification:	B-2, D-2A, D-2B, E	
SECTION 12: DISPOS	AL CONSIDERATIONS	
Waste Disposal:	Dispose of waste according to local, provincial and federal regulations. Utilize authorized centers for disposal of combus material.	stible chemical
SECTION 13: TRANSF	PORT INFORMATION	
T.D.G. Classification:	Shipping name: Paint. UN 1263, Cl 3, PG II.	
SECTION 14: OTHER	INFORMATION	
Note: Prepared By: Preparation Date:	Amanda Dixon . August 2, 2006	

endura manufacturing co. ltd.

July 26, 2006

Page 1 of 3

## MATERIAL SAFETY DATA SHEET

Product Name:

EX-2C TOPCOAT and CLEAR

Component A

## SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer/Supplier:

Endura Manufacturing Co. Ltd.

12425 - 149 Street Edmonton, Alberta

T5L 2J6

Ph: (780) 451-4242 Fax: (780) 452-5079

24-Hour Emergency

Number:....

(613) 996-6666 (Canutec)

Product Name:....

EX-2C TOPCOAT and CLEAR. Component A.

UN 1263 CI3 PG II

Ester, Aromatic Hydrocarbon, Ketone, Pigments

Material Use:....

2 Component Plastic Coating - EX-2C Component "A" must be mixed with an EX-2C Component "B"

## SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	C.A.S.	LD/50, ROUTE, SPECIES	LC/50, ROUTE, SPECIES	TLV	% WT
<u>Component A</u> - Polyester Solution					<u> </u>
n-butyl acetate xylene pm acetate ethyl 3-ethoxypropionate acetone	123-86-4 1330-20-7 108-65-6 763-69-9 67-64-1	14 g/kg o-r 4.3 g/kg o-r >2 g/kg d-rbt 8.5 g/kg o-fr >5 g/kg d-rbt 5 g/kg o-r 10 ml/kg d-rbt >9.7 g/kg o-r >20 ml/kg d-rbt	2000 ppm/4h i-r 5000 ppm/4h i-r N/A >1000 ppm/6h i-r >16000 ppm/4h i-r	150 ppm 100 ppm N/A N/A 500 ppm	20 - 40 1 - 5 1 - 5 1 - 5 1 - 5
Some colours contain	(*) these col-	ours may be reformulated with no lead co	ntent when required.		
chromium hydroxide lead chromate (*) lead sulphate (*) molybdenum compounds n.o.s. (*) mica aluminum flake carbon black tin oxide ferric oxide	1308-14-1 7758-97-6 7446-14-2  12001-26-2 7429-90-5 1333-86-4 18282-10-5 1309-37-1	N/A 12000 mg/kg o-r 2000 mg/kg o-r 2000 mg/kg o-r N/A N/A N/A >15.4 g/kg o-r >3 g/kg d-rbt >20000 mg/kg o-r >5000 mg/kg o-r	N/A N/A N/A N/A N/A N/A N/A N/A N/A	.05 mg/m³ .05 ppm .15 ppm N/A 3 mg/m³ 10 mg/m³ 3.5 mg/m³ 2 mg/m³ 10 mg/m³	0 - 1 0 - 50 0 - 15 0 - 5 0 - 15 0 - 15 0 - 5 0 - 1
antimony trioxide titanium dioxide titanium dioxide aromatic solvent stoddard solvent dichloro dimethyl silane silica-amorphous, precip.	1309-64-4 13463-67-7 1317-80-2 64742-95-6 8052-41-3 68611-44-9 112926-00-8	N/Å  >25 g/kg o-r >10 g/kg d-rbt  N/A  >5 g/kg o-r >3160 mg/kg d-rbt  >5 g/kg o-r >3160 mg/kg d-rbt  >5 g/kg o-r >3160 mg/kg o-rbt  >5000 mg/kg o-r  >10000 mg/kg o-r	N/A >6.82 mg/i/4h N/A N/A N/A N/A N/A	N/A 10 mg/m³/8h 10 mg/m³ N/A 100 ppm 10 mg/m³ 10 mg/m³	0-5 0-60 0-10 0-2 0-2 0-1 0-15
legend: o=oral	d=dermal See Sax,	i=inhalation rbt=rabt N.I. "Dangerous Properties of Industrial Mate		intraperitoneal	fr=female rat

## SECTION 03: HAZARDS IDENTIFICATION

Eye Contact:	Moderately irritating to eyes and can cause tissue damage.
Skin Contact:	Low toxicity by skin absorption, but extended contact can cause irritation and dermatitis. Skin sensitization or reddening, swelling or blistering can occur.
Inhalation:	Vapors are of low to moderate toxicity when inhaled and are irritating to nose, throat and other respiratory passages, especially in higher concentrations. Extended exposure can cause headaches, dizziness, nausea or even loss of muscular control and coordination, narcosis or unconsciousness.
Ingestion:	Liquid is of low to moderate toxicity when ingested, but can be hazardous if aspirated into lungs during swallowing or vomiting.  Chronic hazards include narcosis, specific organ damage, permanent brain and nervous system damage or coma if extensively abused. Lead chromate and carbon black are possible carcinogens.

Lul. 00 0000	
July 26, 2006	MATERIAL CAPETY DATA CHEET
	MATERIAL SAFETY DATA SHEET
	EX-2C TOPCOAT and CLEAR omponent A
SECTION 04: FIRST A	ID MÉASURES
Inhalation (acute):	GET IMMEDIATE MEDICAL HELP.  DO NOT INDUCE VOMITING. Seek medical help. Give 1 or 2 glasses water or milk, BUT ONLY IF VICTIM IS CONSCIOUS.  Check for and remove any contact lenses. Flush eyes IMMEDIATELY with water for 15 minutes and get immediate medical help.  Wash with soap and water. Clean contaminated clothing before reuse.
SECTION 05: FIRE FIG	SHTING MEASURES
Flash Point (°C), (TCC):	N/A  N/A  CO <sub>2</sub> , foam, dry chemical. Avoid using water except as a fog.  CO, CO <sub>2</sub> . Possibly Oxides of Nitrogen, Sulphur, Lead, Chromium, Antimony or Aluminum.  None  Can ignite vapors  Wear self-contained breathing apparatus and full protective clothing. Extreme heat may cause pressure build-up in containers and possibly explosion, therefore use water to keep containers cool.  Sparks, open flame, static discharge or extreme temperature.
SECTION 06: ACCIDEN	ITAL RELEASE MEASURES
Clean up:	Remove all sources of ignition. The product should be contained and absorbed with inert materials and placed into a container. Do not seal the containers until any gas, which might form, has done so.
SECTION 07: HANDLIN	IG AND STORAGE
Handling Procedures:	with skin or eyes, and don't breathe vanors
SECTION 08: EXPOSU	RE CONTROLS / PERSONAL PROTECTION
PROTECTIVE EQUIPMENT	
Eye/Type: Respiratory/Type:	Personnel should wear liquid chemical goggles or a full-face shield.  Personnel should wear a suitable air supplied respirator.
Gloves/Clothing/Footwear/Type: Other/Type: Ventilation Requirements:	A safety shower and eye wash facility should be available

July 26, 2006	Po. 2 / 2	
	MATERIAL SAFETY DATA SHEET	
i i i oddol Name.	EX-2C TOPCOAT and CLEAR Component A	
SECTION 09: PHYSIC	AL AND CHEMICAL PROPERTIES	
Physical State (appearance): Odor: Density (g/ml): Odor Threshold (ppm): Vapor Pressure (@20°C): Vapor Density (Air=1): Evaporation Rate: Boiling Point (°C): pH: Solubility in Water (% WW): Coefficient of Water/Oil Distribution: Freezing Point (°C): Melting Point (°C):	Solvent like 1 – 1.6 N/A 180 mm Hg Heavier than air 5.7 57 N/A N/A N/A	
SECTION 10: STABILIT	Y AND REACTIVITY	
Reactivity Conditions:	Will react with oxidizing materials.	
SECTION 11: REGULA	TORY INFORMATION	Control of the contro
WHMIS Classification:	B-2, D-2A, D-2B	
SECTION 12: DISPOSA	AL CONSIDERATIONS	
Waste Disposal:	Dispose of waste according to local, provincial and federal regulations. Utilize authorized centers for disposal of combustible chemical material.	
SECTION 13: TRANSPO	DRTINFORMATION	
T.D.G. Classification:	Shipping name: Paint. UN 1263, Cl 3, PG II.	, paren
SECTION 14: OTHER IN	NFORMATION	
Note: Prepared By: Revision Date:	Technical Department July 26, 2006	

Page 1 of 3

## **MATERIAL SAFETY DATA SHEET**

Product Name:

**EX-2C COMPONENT B** 

## SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer/Supplier:....

Endura Manufacturing Co. Ltd.

12425 - 149 Street Edmonton, Alberta

T5L 2J6

Ph: (780) 451-4242 Fax: (780) 452-5079

24-Hour Emergency Number:..... Product Name:....

(613) 996-6666 (Canutec) EX-2C COMPONENT B UN 1263 CI 3 PG II Ester, Ketone, HDI

2 component plastic coating - mix 1 part Component "A" and 1 part Component "B" by volume

## SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	C.A.S.	LD/50, ROUTE, SPECIES	LC/50, ROUTE, SPECIES	TLV	% WT
Methyl Amyl Ketone Ethyl Acetate n-butyl acetate hexamethylene diisocyanate homopolymer of HDI	110-43-0 141-78-6 123-86-4 822-06-0 28182-81-2	1.67 g/kg o-r 12.6 ml/kg d-rbt 5.6 g/kg o-r 20 ml/kg d-rbt 14 g/kg o-r 710 mg/kg o-r 570 mg/kg d-rbt >10 g/kg o-r	4000 ppm/4h i-r 16000 ppm/6h i-r 2000 ppm/4h i-r 310-350 mg/m³/1-4 h i-r	100 ppm 400 ppm 150 ppm .005 ppm N/A	10-15 10-15 20 – 30 **

<sup>\*\*</sup> Free HDI monomer <0.15% of mixed solution (comp. A & comp. B) at time of manufacture. The monomer content may rise to 0.35% after 3-6 months storage. legend: o=oral d=demail i=inhalation rbt=rabbit r=rat fr=female rat

nt g=guinea pig

See Sax, N.I. "Dangerous Properties of Industrial Materials" for more information.

#### SECTION 03: HAZARDS IDENTIFICATION

Eye Contact:.... Moderately irritating to eyes and can cause tissue damage. Skin Contact:.... Low toxicity by skin absorption, but extended contact can cause irritation and dermatitis. Skin sensitization or reddening, swelling or blistering can occur. Inhalation:.... Vapors are of low to moderate toxicity when inhaled and are irritating to nose, throat and other respiratory passages, especially in higher concentrations. Extended exposure can cause headaches, dizziness, nausea or even loss of muscular control and coordination, narcosis or unconsciousness. In addition to causing lung irritation, coughing, breathlessness and chest discomfort, isocyanates can cause a reduction in lung function or even bronchitis, bronchial spasm or pulmonary edema in extreme concentrations. Any of these effects can be immediate or delayed. Any pre-existing impairment in lung function will be magnified or sensitization of the lungs can occur, and those in either condition should not be exposed to any level of isocyanate vapor. Ingestion:.... Liquid is of low to moderate toxicity when ingested, but can be hazardous if aspirated into lungs during swallowing or vomiting. Additional Information:.... Chronic hazards include narcosis, specific organ damage, permanent brain and nervous system damage or coma if extensively abused. Component B (and therefore the mixture) contains an isocyanate compound, which carries additional hazards. The vapor's odor is not detectable until dangerous levels have already been reached.

June 8, 2007	
	MATERIAL SAFETY DATA SHEET
Product Name:	EX-2C COMPONENT B
SECTION 04: FIRST	AID MEASURES
Inhalation (acute):	GET IMMEDIATE MEDICAL HELP.  DO NOT INDUCE VOMITING. Seek medical help. Give 1 or 2 glasses water or milk, BUT ONLY IF VICTIM IS CONSCIOUS.  Check for and remove any contact lenses. Flush eyes IMMEDIATELY with water for 15 minutes and get immediate medical help.  Wash with soan and water. Clean contaminated clothing before reuse.  Wash with soan and water.
SECTION 05: FIRE	FIGHTING MEASURES
Flash Point (°C) (TCC):	N/A N/A N/A N/A CO <sub>2</sub> , dry chemical, foam. Avoid using water except as a fog. CO, CO <sub>2</sub> . Oxides of Nitrogen. Hydrogen Cyanide. HDI None Can ignite vapors Wear self-contained breathing apparatus and full protective clothing. Extreme heat may cause pressure build-up in containers and possibly explosion, therefore use water to keep containers cool.
SECTION 06: ACCID	ENTAL RELEASE MEASURES
Leak / Spili:	Remove all sources of ignition. The product should be contained and absorbed with inert materials and placed into a container. Do not seal the containers until any gas, which might form, has done so.
SECTION 07: HAND	LING AND STORAGE

Handling Procedures:.... Avoid static charges, sparks, flames and excessive heat. Keep containers tightly closed and upright when not in use. Do not allow contact

with skin or eyes, and don't breathe vapors. Storage Needs:....

Store in a cool, dry place.

## SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

#### PROTECTIVE EQUIPMENT

Eye/Type:.... Personnel should wear liquid chemical goggles or a full-face shield. Personnel should wear a suitable air supplied respirator.

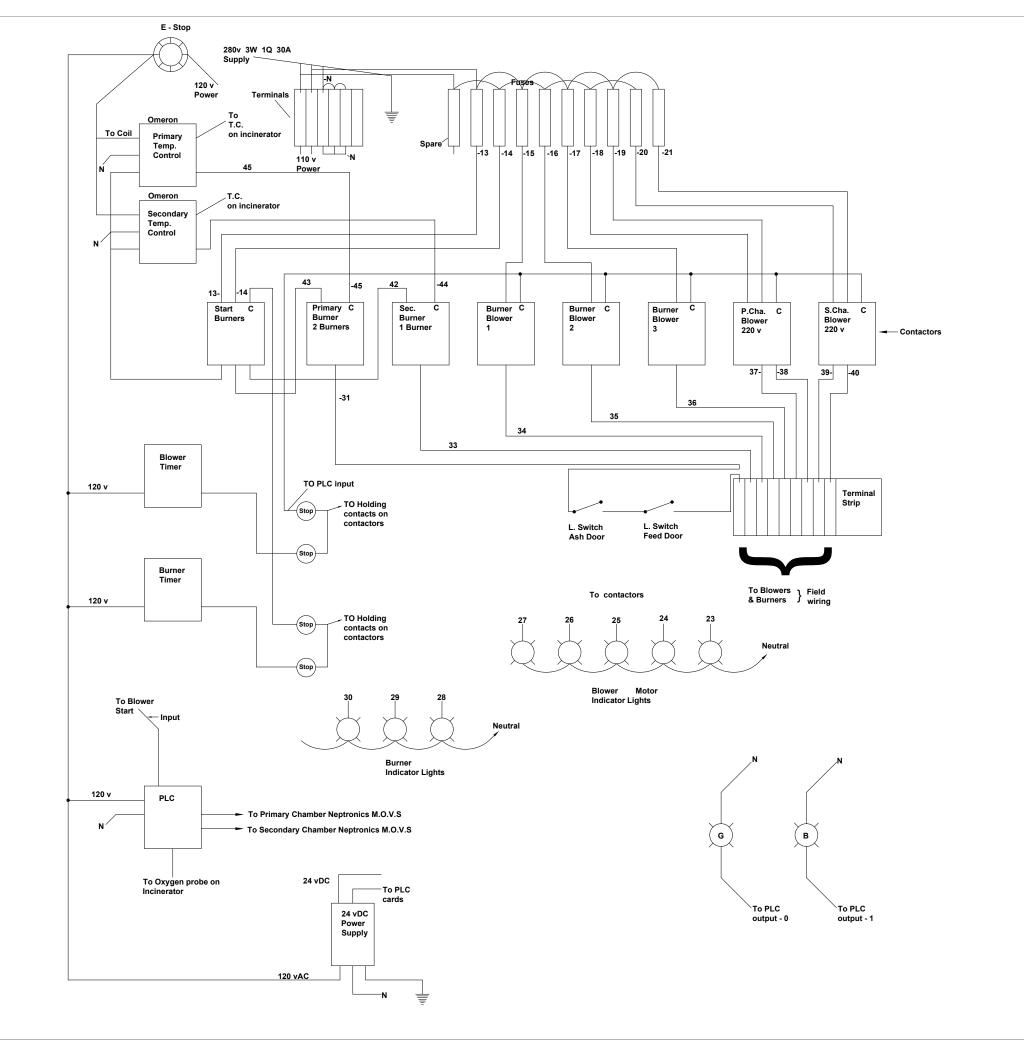
Respiratory/Type:....

Gloves/Clothing/Footwear/Type:..... Personnel should wear chemical-resistant clothing, gloves and footwear. Other/Type:....

A safety shower and eye wash facility should be available.

Ventilation Requirements:.... Adequate ventilation must be assured to prevent the accumulation of dangerous amounts of vapor or mist.

June 8, 2007	Po
	MATERIAL SAFETY DATA SHEET
Product Name:	EX-2C COMPONENT B
SECTION 09: PHYSICAL	AND CHEMICAL PROPERTIES
Physical State (appearance):	Solvent like 0.964 570 g/l 4.74 lbs/gal  N/A 76 mm Hg Heavier than air 4.0 77 N/A N/A N/A
SECTION 10: STABILITY  Incompatibility:	
SECTION 11: REGULATO	DRY INFORMATION
WHMIS:	B-2, B-3,D-1A, ,D-1A , D-2B
SECTION 12: DISPOSAL	CONSIDERATIONS
Waste Disposał:	Dispose of waste according to local, provincial and federal regulations. Utilize authorized centers for disposal of combustible chemical material.
SECTION 13: TRANSPOR	TINFORMATION
T.D.G. Classification:	Shipping name: Paint. UN 1263, Cl 3, PG II.
SECTION 14: OTHER INF	ORMATION
Note: Prepared By: Revision Date:	Technical Department June 8, 2007



Approved by Shop:
Date:
Signature:

WESTLAND  ENVIRONMENTAL  SERVICES INC.						
Model:	Incinerator CY-100-CA-'D'-'O'					
Date:	11-09-07	Electrical Wiring Diagram				
Drawn By:	YP					
Rev.:	Ø					
Scale:		Dwg-No:	9 - 3			



# STANDARD OPERATING PROCEDURE (SOP) INCINERATOR

MODEL CY-100-CA-D-O



#### HISTORY OF SOP REVISIONS

Revision Number	Revision Date	Description of Revisions	Revised By	Approved By
0	June 2009	Initial issuance of Model CY-100-CA-D-O Standard Operating Procedure	SRK Consulting	



# STANDARD OPERATING PROCEDURE INCINERATOR MODEL CY-100-CA-D-O

## **Table of Contents**

1	Introduction	4
	1.1 Purpose	4
	1.2 Scope4	
	1.3 Responsibilities	4
	1.4 Document Control	
2	Description of Model CY-100-CA-D-O Incinerator	6
3	Operator Training & Safety	9
	3.1 Operator Training	9
	3.2 Personal Protective Equipment	9
	3.3 Specific Health and Safety Requirements for the Model CY-100-CA-D-O Incinerato	r10
4	Model CY-100-CA-D-O Incinerator Operations	
	4.1.1 Introduction	
	4.1.2 Operational Procedures	
	4.1.3 Waste Batch Preparation	
	4.1.4 Pre-operational Checks	
	4.1.5 Ash Removal	
	4.1.6 Incinerator Start-up	
	4.1.7 Waste Charging of incinerator	
	4.1.9 Incinerator Cool-Down	
	1.1.0 Homorator Coor Down	
5	Residuals (Ash) Management	17
_	· , , , , , , , , , , , , , , , , , , ,	
6	Model CY-100-CA-D-O Incinerator Maintenance	
	6.1.2 Additional Maintenance and Inspection	
	6.2 Emissions Monitoring	
	6.3 Quality Assurance/Quality Control during Monitoring	
	6.4 Off-Specification Emissions Quality	
	0.4 On-opeomeation Emissions Quality	
7	Incinerator Fuel Storage	21
8	Spill Response	21
9	Record Keeping	
10	Conclusion	22



## **List of Tables**

Table 1:	Model CY-100-CA-D-O Inspections	18
List of	Figures	
	Schematic of Incineration System - Model CY-100-CA-D-O Incinerator	
	Overview of Model CY-100-CA-D-O Incinerator	
Figure 4:	Incinerator  Model CY-100-CA-D-O Incinerator Operations Sequence	
	Model CY-100-CA-D-O Incinerator Procedures for Start-Up	
	Model CY-100-CA-D-O Incinerator Procedures for Waste Charging	
•	Model CY-100-CA-D-O Incinerator Procedures for Burn Down	

## **List of Attachments**

Attachment A: Westland Model CY-100-CA-D-O Operating and Maintenance Manual



## 1 Introduction

## 1.1 Purpose

This *Standard Operating Procedure – Incinerator Model CY-100-CA-D-O* has been developed to ensure the operation of the Westland Model CY-100-CA-D-O incinerator located at the Robert Bay site, Hope Bay Project is undertaken in a safe, environmentally responsible and efficient manner.

The objectives of managing and the appropriate incineration of wastes are numerous. Consistent with HBML's intent to be a responsible operator, these objectives are described as:

- Prevention of public health risks
- Protection of the operator(s)
- Protection of surface waters
- Protection of groundwaters
- Protection of lands
- Protection of local species
- Conservation of resources
- Compliance with regulatory and permit requirements

This Standard Operating Procedure has been developed to ensure that, to the maximum extent possible, these objectives are foremost in HBML'S operational approach to activities at the Hope Bay project.

## 1.2 Scope

This Standard Operating Procedure – Incinerator Model CY-100-CA-D-O applies to the management and operation of the Model CY-100-CA-D-O incinerator to ensure that the incinerator is operated in a manner that effectively and efficiently incinerates appropriate waste streams generated at the Hope Bay project. Wastes suitable for incineration generally include food wastes, paper wastes and unusable or waste wood.

## 1.3 Responsibilities

The Exploration Manager has overall responsibility for this SOP and will be the party to providing the resources necessary to operate and maintain the Westland Model CY-100-CA-D-O Incinerator.

The Exploration Site Superintendent will have site responsibility to provide the on-site resources to manage operate and maintain the incinerator in accordance with the manual; conduct regular inspections of the incinerators; and provide input on modifications in operational procedures to



improve operational performance of the facility. The Exploration Site Superintendent, through his foremen, will provide daily supervision to site operational personnel on the operation of the incinerator.

The site Environmental Coordinator has responsibility to regularly review and keep this Standard Operating Procedure up-to-date; provide technical expertise to the site operational personnel, reporting on the performance of the incinerator, residuals (ash) management; conduct annual audits of the waste management stream and incineration operations; and provide an annual audit report to the Exploration Site Superintendent and Exploration Manager.

#### 1.4 Document Control

The site Environmental Coordinator will complete a review of this procedure at least once every three years; will update the document as required and submit the updated SOP for review and approval by the Exploration Site Superintendent.



## 2 Description of Model CY-100-CA-D-O Incinerator

The Westland Model CY-100-CA-D-O incinerator has a manufacturer's stated capacity of 100 kg/h using diesel as the auxiliary fuel. Figure 1, 2 and 3 provides an overview of major components of the Westland Model CY-100-CA-D-O incinerator. Appendix A provides a more detailed discussion of individual components, features and functions of the incinerator.

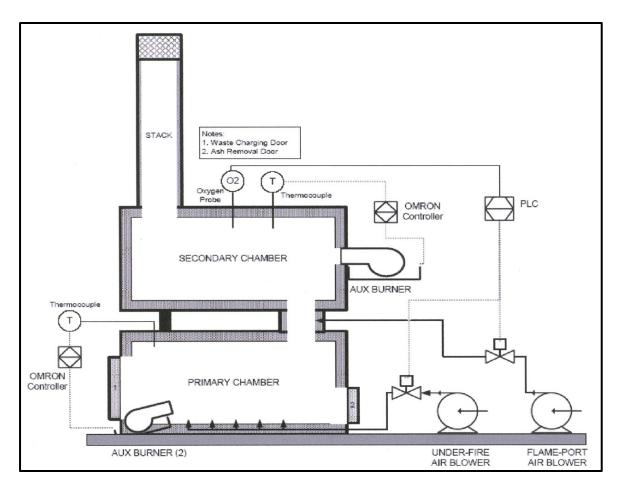


Figure 1: Schematic of Incineration System - Model CY-100-CA-D-O Incinerator