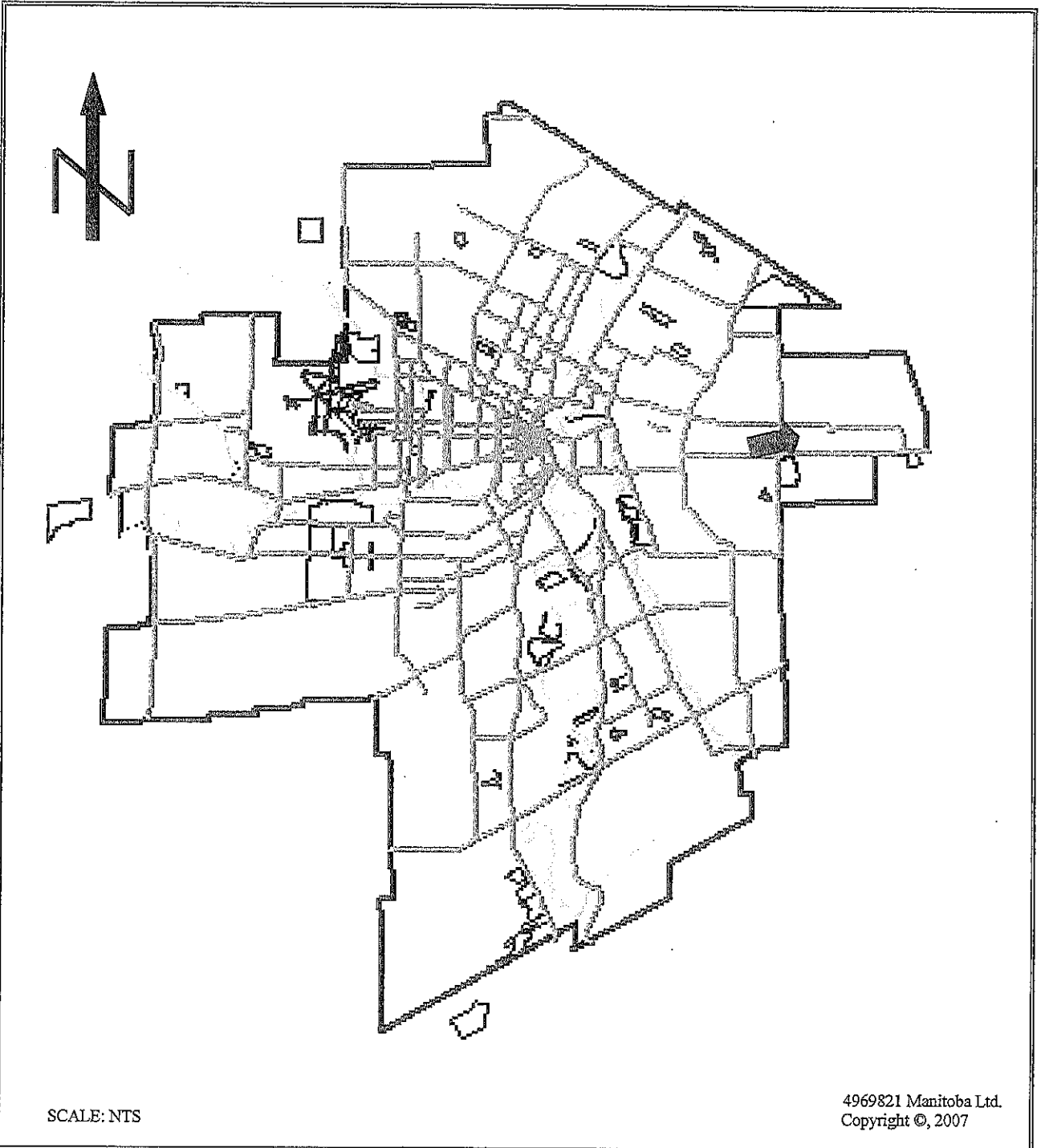


APPENDIX I

FIGURES



SCALE: NTS

4969821 Manitoba Ltd.
Copyright ©, 2007



PHASE I ENVIRONMENTAL SITE ASSESSMENT
100 HOKA STREET
WINNIPEG, MANITOBA

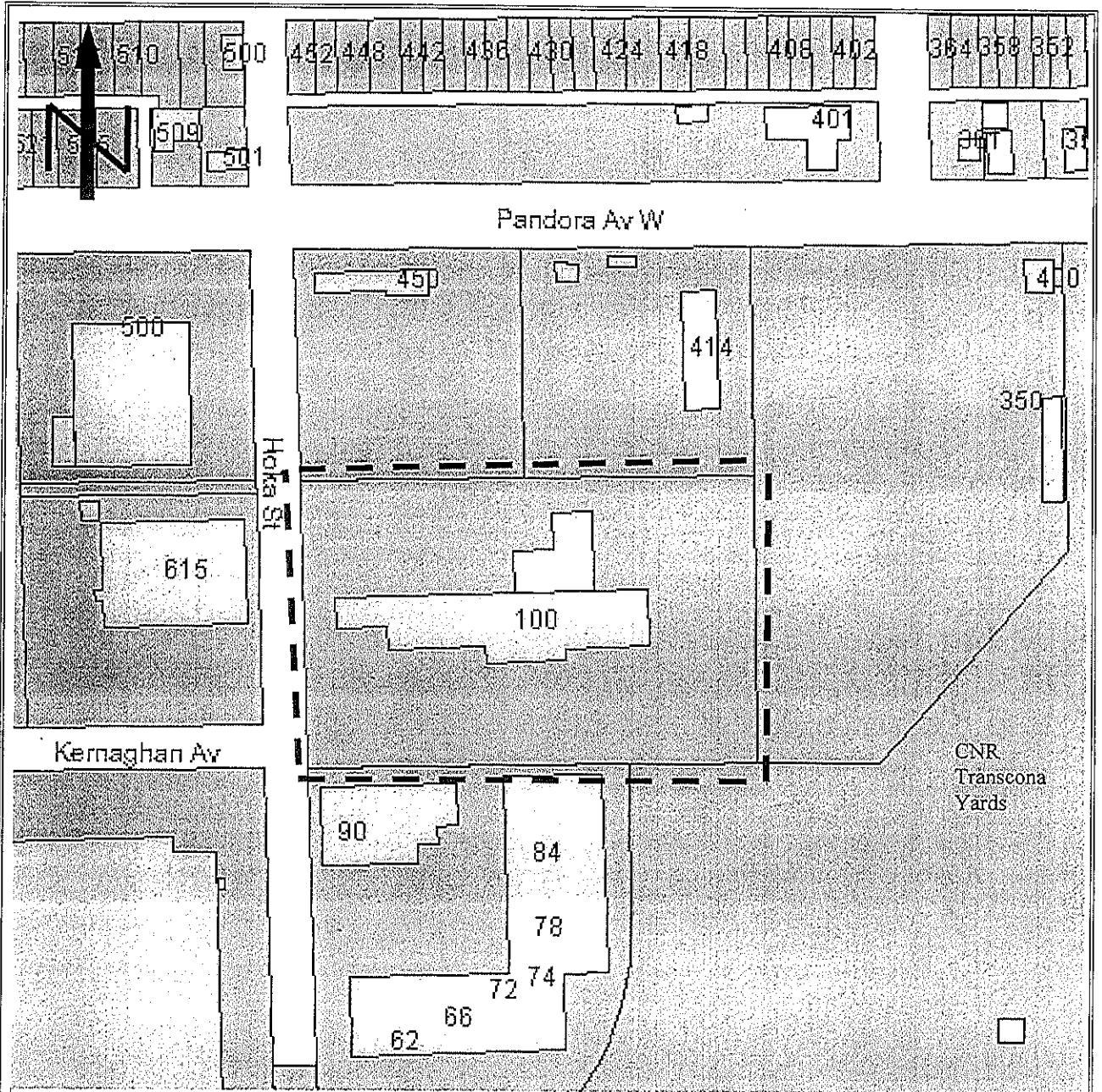
CITY OF WINNIPEG - SITE LOCATION PLAN

FIGURE NO. 1

LEGEND

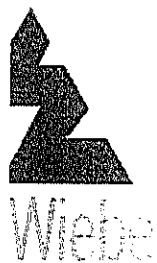
SITE:

Date: October 2007
Drawn by: MPW



SCALE: NTS

4969821 Manitoba Ltd.
Copyright ©, 2007



PHASE I ENVIRONMENTAL SITE ASSESSMENT
100 HOKA STREET
WINNIPEG, MANITOBA

SITE PLAN

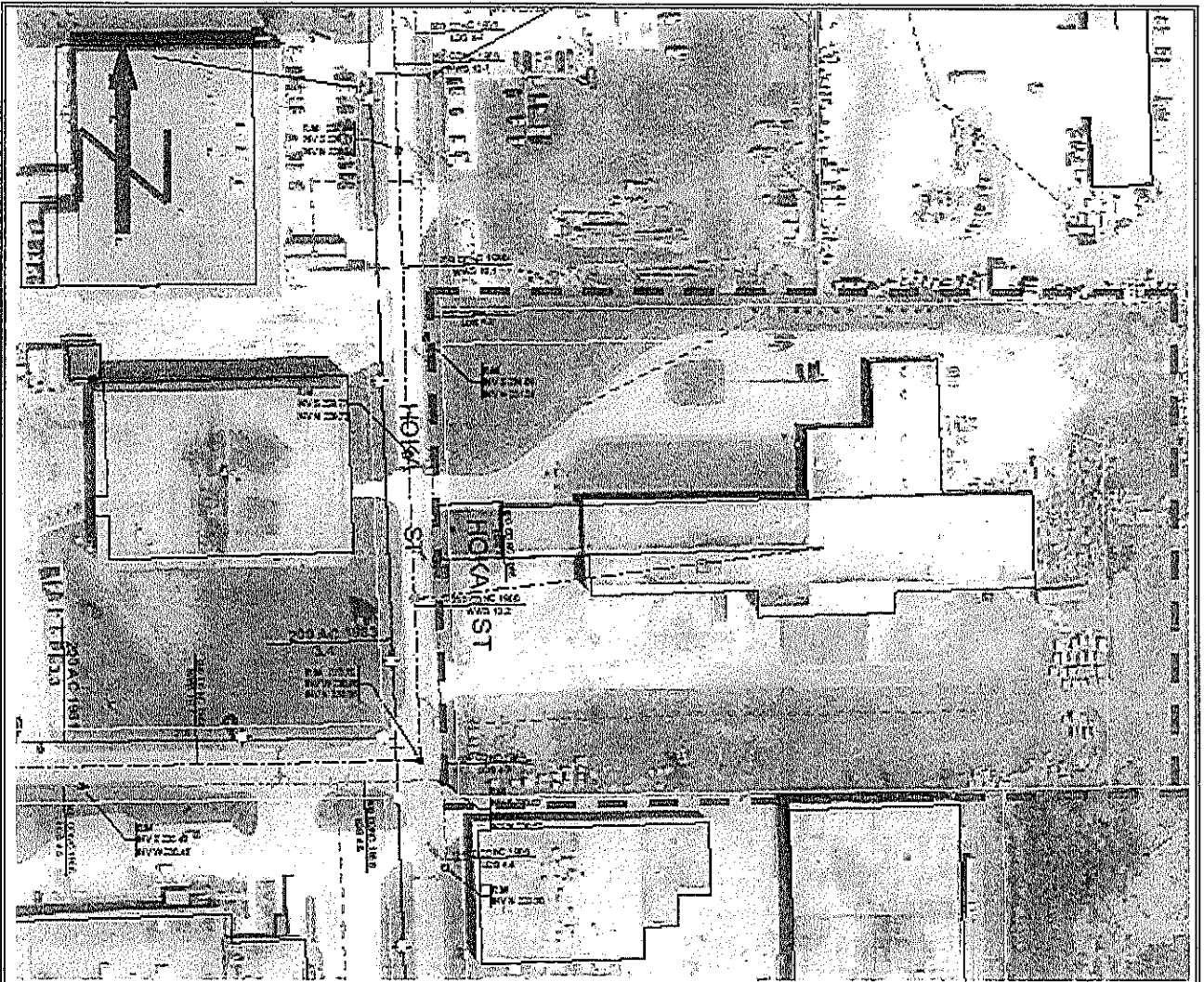
FIGURE NO. 2

LEGEND

Site

Date: October 2007
Drawn by: MPW

APPENDIX II
AERIAL PHOTOGRAPHS



SCALE: NTS

4969821 Manitoba Ltd.
Copyright ©, 2007






PHASE I ENVIRONMENTAL SITE ASSESSMENT
100 HOKA STREET
WINNIPEG, MANITOBA

AERIAL PHOTOGRAPH OF SITE

CIRCA 2005

AIR PHOTO NO. 1

LEGEND

- Site 
- Water Line 
- Building Perimeter 

Date: October 2007
Drawn by: MPW



SCALE: NTS

4969821 Manitoba Ltd.
Copyright ©, 2007



PHASE I ENVIRONMENTAL SITE ASSESSMENT
100 HOKA STREET
WINNIPEG, MANITOBA

AERIAL PHOTOGRAPH OF SITE

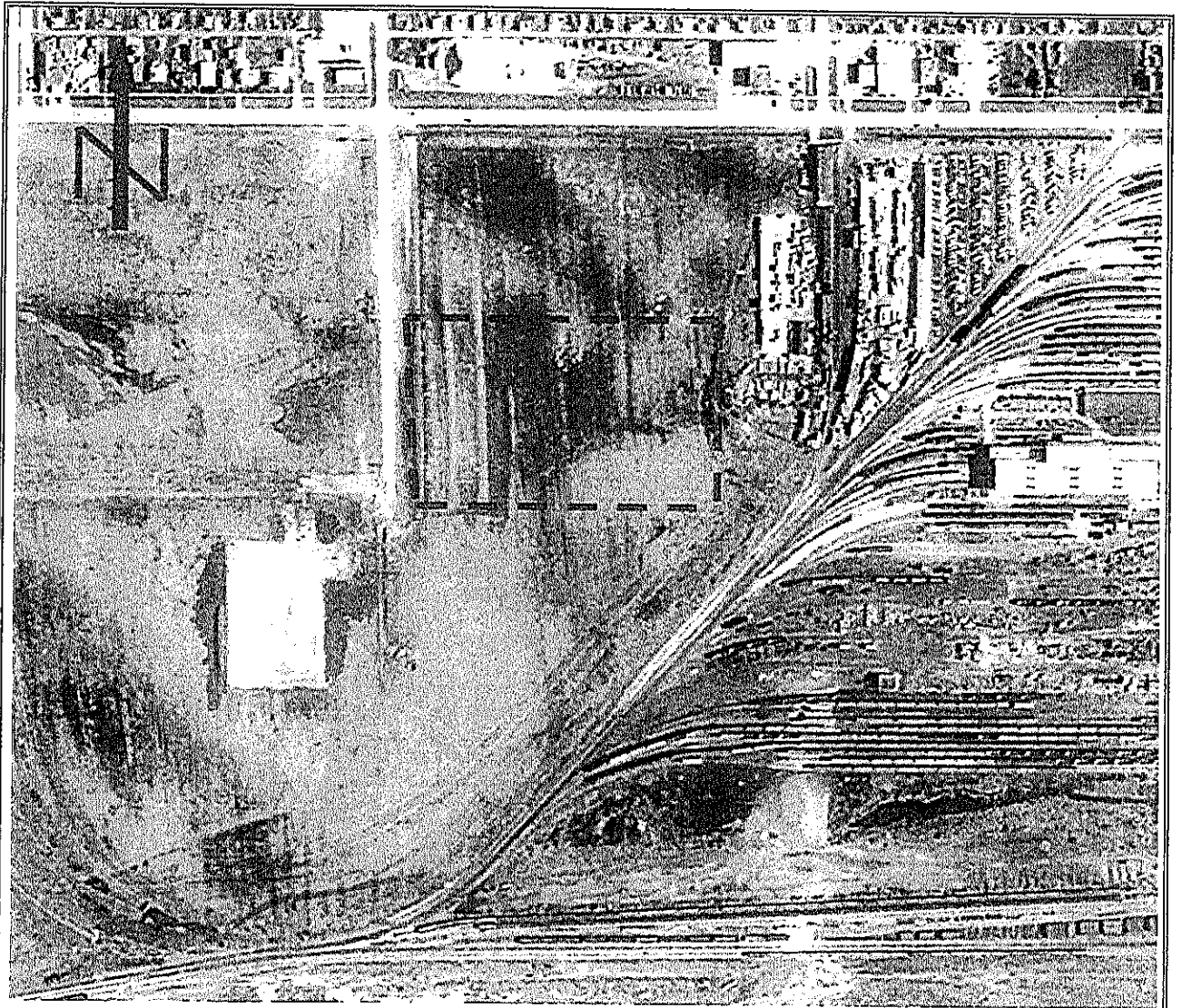
CIRCA 1988

AIR PHOTO NO. 2

LEGEND

Site

Date: October 2007
Drawn by: MPW



SCALE: NTS

4969821 Manitoba Ltd.
Copyright ©, 2007



PHASE I ENVIRONMENTAL SITE ASSESSMENT
100 HOKA STREET
WINNIPEG, MANITOBA

AERIAL PHOTOGRAPH OF SITE

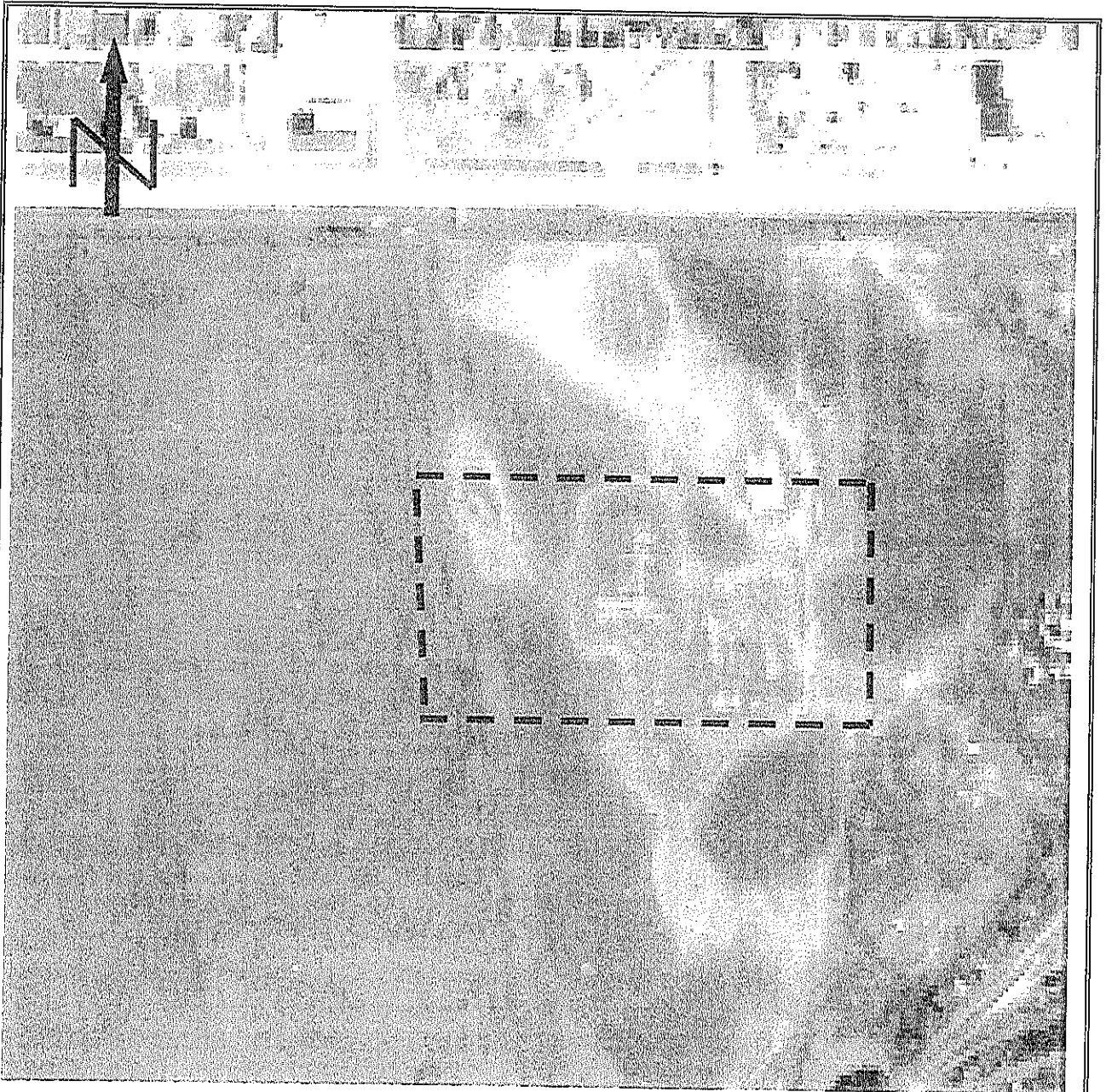
CIRCA 1968

AIR PHOTO NO. 3

LEGEND

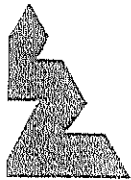
Site 

Date: October 2007
Drawn by: MPW



SCALE: NTS

4969821 Manitoba Ltd.
Copyright ©, 2007



PHASE I ENVIRONMENTAL SITE ASSESSMENT
100 HOKA STREET
WINNIPEG, MANITOBA

AERIAL PHOTOGRAPH OF SITE

CIRCA 1959

AIR PHOTO NO. 4

LEGEND

Site 

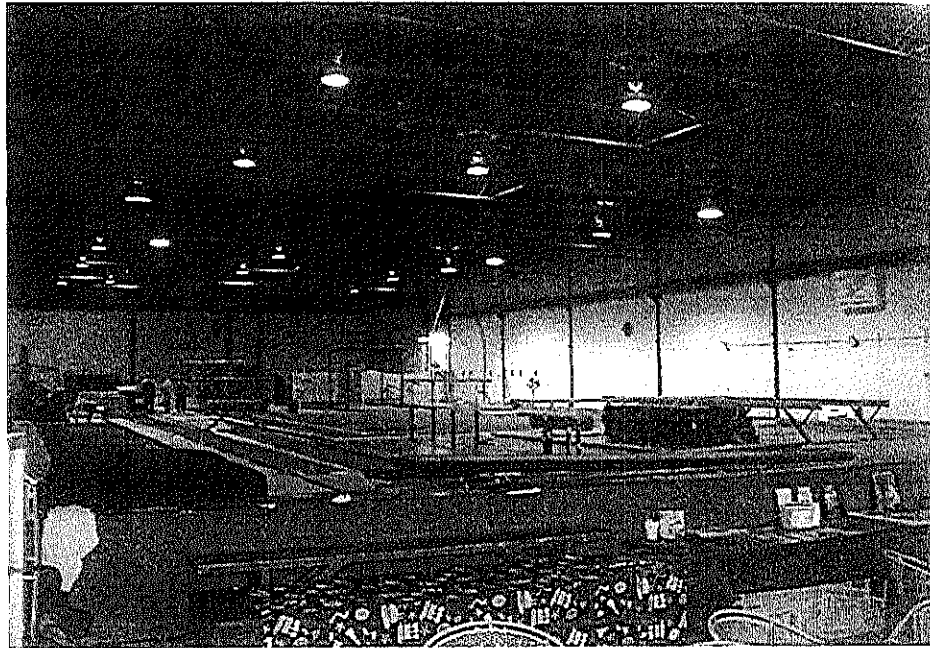
Date: October 2007
Drawn by: MPW

APPENDIX III
REGULATORY INFORMATION

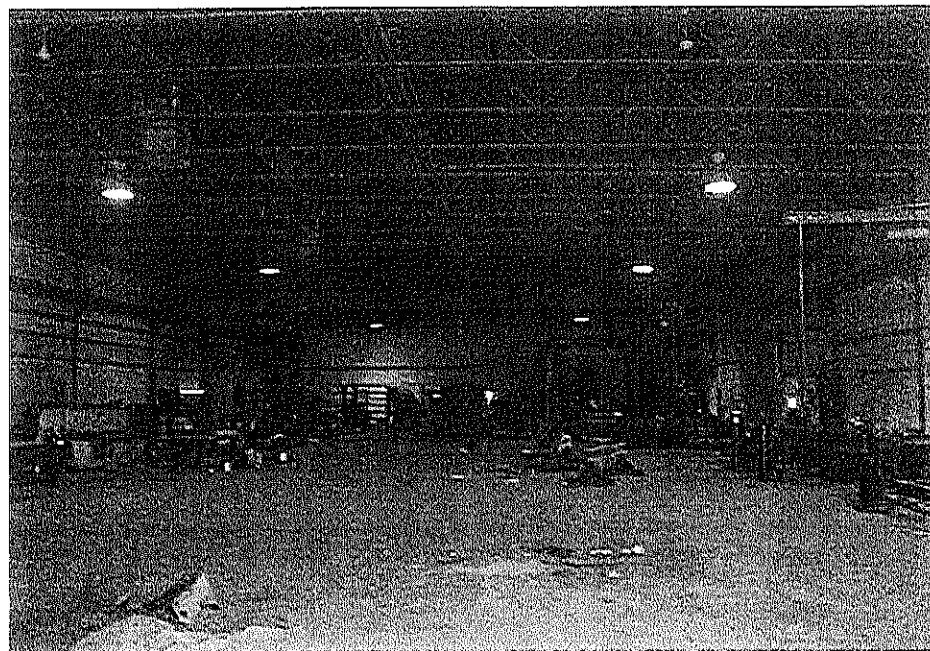
MANITOBA CONSERVATION CONTAMINATED SITES DATABASE

Manitoba Sites File Number	File Name	Company Name	Address	City
0456	FLASH GAS BAR	FLASH GAS BAR-I	HIGGINS AVE., 221	WINNIPEG
1561	LONDERO'S WRECKING	LONDERO'S WRECKING CO. LTD.	HOLDEN ST., 361	WINNIPEG
1763	WINNIPEG TRANSIT GARAGE	WINNIPEG, TRANSIT-KENSINGTON ST.	KENSINGTON ST., 476	WINNIPEG
0058	KERN PARK SHELL (FORMER)	KERN PARK SHELL	KILDARE AVE. E., 610	WINNIPEG
1748	CN RAILWAYS-TRANSCONA SHO	CN RAILWAYS-PANDORA AVE. W., 150	PANDORA AVE. W., 150	WINNIPEG
0819	CN RAILWAYS-PANDORA AVE. W.,	CN RAILWAYS-PANDORA AVE. W., 150	PANDORA AVE. W., 150	WINNIPEG
0618	CN RAILWAYS-TRANSCONA SHOPS	CN RAILWAYS-PANDORA AVE. W., 150	PANDORA AVE. W., 150	WINNIPEG
1080	CN TRANSCONA SHOPS	CN RAILWAYS-PANDORA AVE. W., 150	PANDORA AVE. W., 150	WINNIPEG

APPENDIX IV
OBLIQUE PHOTOGRAPHS



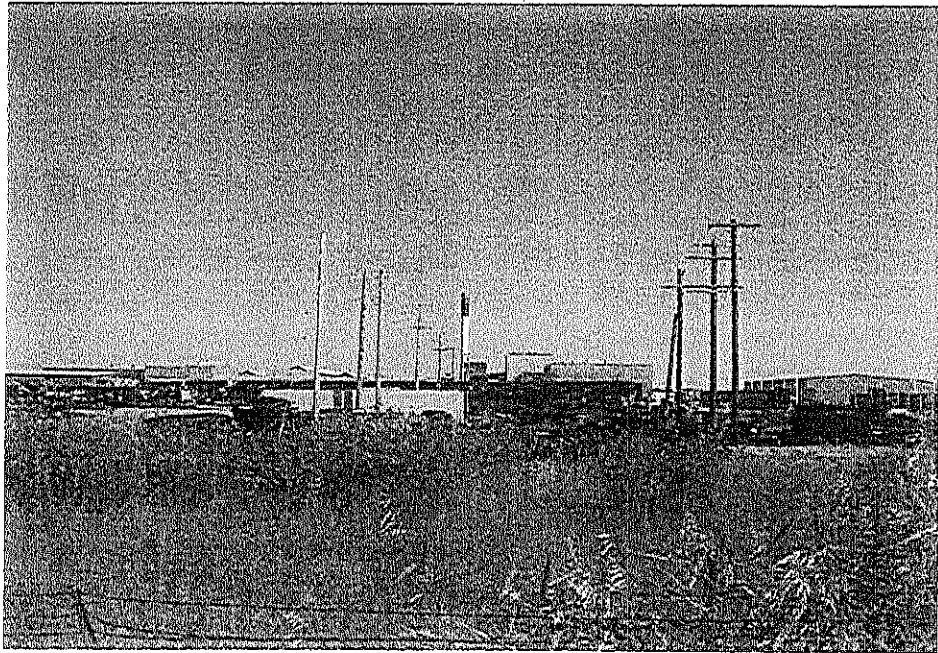
Photograph 1: View looking southeast at Premier Gymnastic's space.



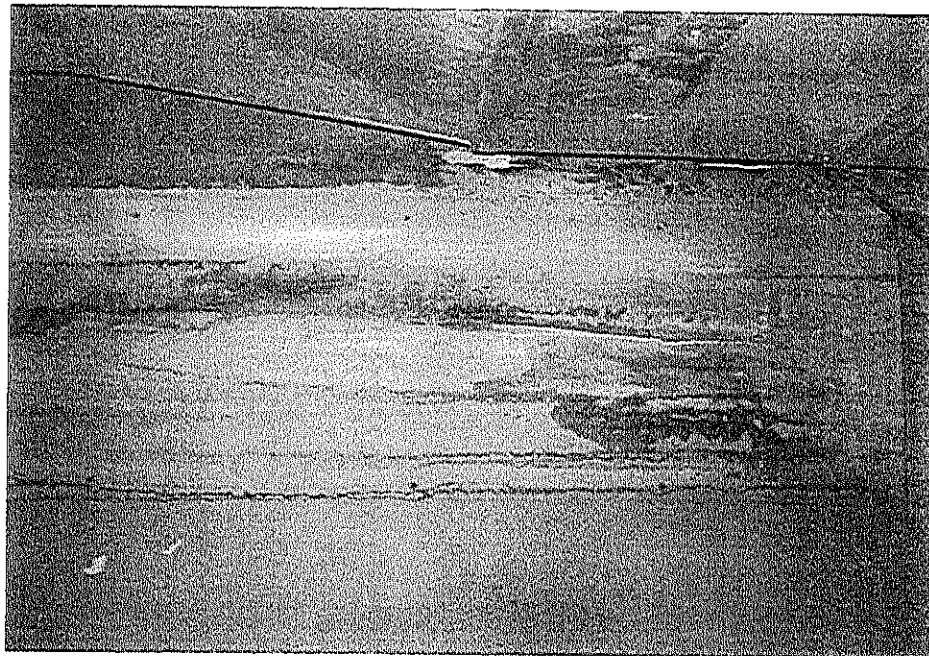
Photograph 2: View looking east at North Star Trailer Manufacturing's space.



Photograph 3: View looking at Canital Granite's space.



Photograph 4: View looking east at CNR's Transcona Yards to the east of the Property.



Photograph 5: View looking at minor water damage and mould growth within North Star Trailer Manufacturing's unit, in the janitor's room.



Photograph 6: View looking at chemical storage within North Star Trailer Manufacturing's unit.

DATE: 2009/03/10
TIME: 15:05

MANITOBA

TITLE NO: 2274783

STATUS OF TITLE

PAGE: 1

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR...	STRUCTURAL COMPOSITE TECH.
ORIGINATING OFFICE...	WINNIPEG	ADDRESS.....	#200-100 HOKA STREET
REGISTERING OFFICE...	WINNIPEG		WINNIPEG MB R2C 3N2
REGISTRATION DATE....	2008/01/04		
COMPLETION DATE.....	2008/01/09		

CLIENT FILE... NA
 PRODUCED BY... S.KARASEVICH

LEGAL DESCRIPTION:

ZADCO INC.

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED
HEREON IN THE FOLLOWING DESCRIBED LAND:

PARCEL A PLAN 38269 WLTO
IN S 1/2 5-11-4 EPM

ACTIVE TITLE CHARGE(S):

231706 WPG ACCEPTED	CAVEAT	REG'D: 1974/09/03
DESCRIPTION:	PART	
FROM/BY:	MAN. TELEPHONE SYSTEM	
TO:		
CONSIDERATION:		NOTES:

ADDRESS(ES) FOR SERVICE:

EFFECT	NAME AND ADDRESS	POSTAL CODE
ACTIVE	ZADCO INC. 100 HOKA STREET WINNIPEG MB	R2C 3N2

ORIGINATING INSTRUMENT(S):

REGISTRATION NUMBER	TYPE	REG. DATE	CONSIDERATION	SWORN VALUE
3559772 WPG	T	2008/01/04	\$2,450,000.00	\$2,450,000.00
PRESENTED BY:	TAYLOR MCCAFFREY LLP			
FROM:	61135 MANITOBA LTD.			
TO:	ZADCO INC.			

FROM TITLE NUMBER(S):

1848045 WPG ALL

LAND INDEX:

LOT	BLOCK	SURVEY PLAN
A		38269

NOTE:

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA
STORAGE SYSTEM ON 2009/03/10 OF TITLE NUMBER 2274783

***** STATUS OF TITLE 2274783 WPG CONTINUED ON NEXT PAGE *****

DATE: 2009/03/10
TIME: 15:05

WINNIPEG LTO
MANITOBA

Fax 2049482140

Mar 11 2009 11:03am P004/004
TITLE NO: 2274783

STATUS OF TITLE

PAGE: 2

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	STRUCTURAL COMPOSITE TECH.
ORIGINATING OFFICE...	WINNIPEG	ADDRESS.....	#200-100 HOKA STREET
REGISTERING OFFICE...	WINNIPEG		WINNIPEG MB R2C 3N2
REGISTRATION DATE....	2008/01/04		
COMPLETION DATE.....	2008/01/09		
		CLIENT FILE...	NA
		PRODUCED BY...	S.KARASEVICH

ACCEPTED THIS 4TH DAY OF JANUARY, 2008
BY D.WILKEN FOR THE DISTRICT REGISTRAR OF
THE LAND TITLES DISTRICT OF WINNIPEG.

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA
STORAGE SYSTEM ON 2009/03/10 OF TITLE NUMBER 2274783.

***** END OF STATUS OF TITLE 2274783 WPG *****

DATE: 2009/03/10
TIME: 15:04

MANITOBA

STATUS OF TITLE

TITLE NO: 2274786
PAGE: 1

STATUS OF TITLE..... ACCEPTED
ORIGINATING OFFICE... WINNIPEG
REGISTERING OFFICE... WINNIPEG
REGISTRATION DATE.... 2008/01/04
COMPLETION DATE..... 2008/01/09

PRODUCED FOR.. STRUCTURAL COMPOSITE TECH.
ADDRESS..... #200-100 HOKA STREET
WINNIPEG MB R2C 3N2

CLIENT FILE... NA
PRODUCED BY... S.KARASEVICH

LEGAL DESCRIPTION:

ZADCO INC.

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED
HEREON IN THE FOLLOWING DESCRIBED LAND:

PARCEL B. PLAN 38269 WLTO
EXC ALL MINES AND MINERALS AS SET FORTH IN TRANSFER 2374746 WLTO
IN S 1/2. 5-11-4 EPM

ACTIVE TITLE CHARGE(S):

NO ACTIVE TITLE CHARGES EXIST ON THIS TITLE

ADDRESS(ES) FOR SERVICE:

EFFECT	NAME AND ADDRESS	POSTAL CODE
ACTIVE	ZADCO INC. 100 HOKA STREET WINNIPEG MB	R2C 3N2

ORIGINATING INSTRUMENT(S):

REGISTRATION NUMBER	TYPE	REG. DATE	CONSIDERATION	SWORN VALUE
3559772 WPG	T	2008/01/04	\$2,450,000.00	\$2,450,000.00
PRESENTED BY:	TAYLOR MCCAFFREY LLP			
FROM:	61135 MANITOBA LTD.			
TO:	ZADCO INC.			

FROM TITLE NUMBER(S):

1848043 WPG ALL

LAND INDEX:

LOT	BLOCK	SURVEY PLAN
B		38269

NOTE:

ACCEPTED THIS 4TH DAY OF JANUARY, 2008
BY D.WILKEN FOR THE DISTRICT REGISTRAR OF
THE LAND TITLES DISTRICT OF WINNIPEG.

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA
STORAGE SYSTEM ON 2009/03/10 OF TITLE NUMBER 2274786.

***** END OF STATUS OF TITLE 2274786 WPG *****



ZONING MEMORANDUM

No. 08 103042 000 00 GR

To:

Taylor McCaffrey LLP
400 St. Mary AVE Floor 9th
Winnipeg MB R3C 4K5

Your Reference: 51132-2 Attn: A. David Marshall

RE: 100 Hoka ST

Batch: 2853 Receipt: 106477
Amount: \$0.00 Ref:
Date Printed: 1/22/2008 13:00:03
CASHIER IDLROSNOSK

Legal Description: PCL A,B PLAN 38269 S 1/2 5 11 4E

The above mentioned land is zoned **M3**

It is subject to **City of Winnipeg Zoning By-law 6400/94 and amendments thereto.**




According to the Surveyor's Certificate prepared by **Pollock & Wright Land Surveyors** dated **Jan 7, 2008** submitted to me, it is my opinion that the buildings indicated thereon comply with the above By-law as to such yards and alignments.

Remarks:

Date: January 22, 2008

for Zoning Administrator

THIS ZONING MEMORANDUM IS NOT A CONFIRMATION OF ANY PERMITTED USE OF LAND. THE ONLY CONFIRMATION OF A PERMITTED USE OF LAND IS A DEVELOPMENT PERMIT ISSUED BY THE PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT.

<p>WHMIS (Canada)</p>  <p>B-2 D-2A D-2B</p>	<p>NFPA (USA)</p> <p>Fire</p>  <p>Health Reactivity</p> <p>Specific hazard</p>	<p>HMIS (USA)</p> <table border="1"> <tr> <td>Health hazards</td> <td>2</td> </tr> <tr> <td>Flammability</td> <td>3</td> </tr> <tr> <td>Physical hazards</td> <td>1</td> </tr> <tr> <td>Personal protection</td> <td>X</td> </tr> </table>	Health hazards	2	Flammability	3	Physical hazards	1	Personal protection	X	<p>Protective clothing</p> 
Health hazards	2										
Flammability	3										
Physical hazards	1										
Personal protection	X										

Section 1. Chemical product and company identification	
Trade name	C949-FDA-12
Product type	Polyester Resin Solution
Chemical family	Aromatic.
Material uses	Used in the manufacture of thermoset plastic parts.
Manufacturer	AOC, LLC 950 Highway 57 East Collierville, TN U.S.A. 38017 Website: www.aoc-resins.com Phone Number: (901) 854-2800 8am-5pm (Central Time) Mon-Fri
In case of emergency	CHEMTREC (US): 24 hours/7 days (800) 424-9300 CANUTEC (Canada): 24 hours/7 days (613) 996-6666

Section 2. Hazards identification	
OSHA status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Routes of entry	Eye contact, Skin contact, Inhalation, Ingestion
Potential acute health effects	<p>Eyes: Severe eye irritant which may result in redness, burning, tearing and blurred vision.</p> <p>Skin: Skin irritant which may result in burning sensation. Repeated or prolonged skin contact may cause dermatitis.</p> <p>Ingestion: Ingestion may result in mouth, throat and gastrointestinal irritation, nausea, vomiting and diarrhea.</p> <p>Inhalation: Inhalation of spray mist or liquid vapors may cause upper respiratory irritation and possible central nervous system effects including headaches, nausea, vomiting, dizziness, drowsiness, loss of coordination, impaired judgement and general weakness.</p>
Potential chronic health effects	<p>CARCINOGENIC EFFECTS:</p> <p>Styrene: Classified A4 (not classifiable for human or animal) by ACGIH. Classified 2B (possible for human) by IARC. Classified as "reasonably anticipated to be a human carcinogen" by NTP. An increased incidence of lung tumors was observed in mice from a recent inhalation study. The relevance of this finding is uncertain since data from other long-term animal studies and from epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic to humans.</p> <p>Vinyl Toluene: Classified A4 (not classifiable for human or animal) by ACGIH. Classified 3 (not classifiable for human) by IARC.</p> <p>Cobalt 2-Ethylhexanoate: Classified A3 (proven for animal) by ACGIH. Classified 2B (possible for human) by IARC.</p> <p>MUTAGENIC or TERATOGENIC EFFECTS: No known effect according to our database.</p>

Section 3. Composition/information on ingredients

Name	CAS #	% by weight
1) Styrene	100-42-5	32.5
2) Vinyl Toluene	25013-15-4	5 - 10
3) Methanol	67-56-1	0.4
4) Cobalt 2-Ethylhexanoate	136-52-7	0.1 - 1

Section 4. First aid measures

Eye contact	Flush with a continuous flow of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Use of buffered baby shampoo will aid in removal. Seek medical attention.
Skin contact	Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. If irritation persists, seek medical attention.
Inhalation	Move the victim to a safe area as soon as possible. Allow the victim to rest in a well-ventilated area. If breathing is difficult, give oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Seek immediate medical attention.

Section 5. Fire-fighting measures

The product is:	Flammable liquid, Class IC.
Auto-ignition temperature	914°F(490°C) Styrene
Flash point	87.6°F (31°C) Styrene
Flammable limits	Lower: 0.9% Upper: 6.8% (Styrene)
Products of combustion	May produce carbon monoxide, carbon dioxide, and irritating or toxic vapors, gases or particulate.
Fire hazard	Flammable in the presence of open flames, sparks, or heat.
Explosion hazard	Can react with oxidizing materials. Explosive in the form of vapor when exposed to heat or flame. Material may polymerize when container is exposed to heat (fire) and polymerization will increase pressure in a closed container which may cause the container to rupture violently.
Fire-fighting media and instructions	SMALL FIRE: Use carbon dioxide, foam, dry chemical or water fog to extinguish. LARGE FIRE: Evacuate surrounding areas. Use carbon dioxide, foam, dry chemical or water fog to extinguish. Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion. Prevent run off to sewers or other water ways.

Section 6. Accidental release measures

Small spill	Absorb with an inert material and place in an appropriate waste disposal container.
Large spill	Stop leak if without risk. Eliminate all ignition sources. Contain with an inert material, recover as much as possible and place the remainder in an appropriate waste disposal container. Warn unauthorized personnel to move away. Prevent entry into sewers or confined areas.

Section 7. Handling and storage

Handling	WARNING! Use only in well-ventilated areas. Avoid inhalation and contact with eyes, skin, and clothing. Wear appropriate personal protective equipment for your task. Ground and bond all containers when transferring the material. Empty containers may retain product and product vapor. Do not expose to heat, flame, sparks or other ignition sources such as cutting, welding, drilling, grinding or static electricity. Do not pressurize. Provide adequate safety showers and eyewashes in the area of use.
Storage	Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Containers should be grounded.

Section 8. Exposure controls/personal protection

Exposure limits	Styrene	<p>ACGIH TLV (United States, 3/2012). Absorbed through skin. TWA: 20 ppm 8 hour(s). TWA: 85 mg/m³ 8 hour(s). STEL: 40 ppm 15 minute(s). STEL: 170 mg/m³ 15 minute(s).</p> <p>OSHA PEL Z2 (United States, 11/2006). TWA: 100 ppm 8 hour(s). AMP: 600 ppm 5 minute(s). CELL: 200 ppm</p> <p>NIOSH REL (United States, 6/2009). TWA: 50 ppm 10 hour(s). TWA: 215 mg/m³ 10 hour(s). STEL: 100 ppm 15 minute(s). STEL: 425 mg/m³ 15 minute(s).</p>
	Vinyl Toluene	<p>ACGIH TLV (United States, 3/2012). TWA: 50 ppm 8 hour(s). TWA: 242 mg/m³ 8 hour(s). STEL: 100 ppm 15 minute(s). STEL: 483 mg/m³ 15 minute(s).</p> <p>NIOSH REL (United States, 6/2009). TWA: 100 ppm 10 hour(s). TWA: 480 mg/m³ 10 hour(s).</p> <p>OSHA PEL (United States, 6/2010). TWA: 100 ppm 8 hour(s). TWA: 480 mg/m³ 8 hour(s).</p>
	Methanol	<p>ACGIH TLV (United States, 3/2012). Absorbed through skin. TWA: 200 ppm 8 hour(s). TWA: 262 mg/m³ 8 hour(s). STEL: 250 ppm 15 minute(s). STEL: 328 mg/m³ 15 minute(s).</p> <p>NIOSH REL (United States, 6/2009). Absorbed through skin. TWA: 200 ppm 10 hour(s). TWA: 260 mg/m³ 10 hour(s). STEL: 250 ppm 15 minute(s). STEL: 325 mg/m³ 15 minute(s).</p> <p>OSHA PEL (United States, 6/2010). TWA: 200 ppm 8 hour(s). TWA: 260 mg/m³ 8 hour(s).</p>
	Cobalt 2-Ethylhexanoate	<p>OSHA PEL (United States). TWA: 0.1 mg/m³</p>

Engineering controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Provide adequate safety showers and eyewashes in the area of use.

Personal protection Personal protective equipment may vary depending on the job being performed.
Eye/face: Wear eye protection such as safety glasses with side shields, splash goggles or face shield with safety glasses.
Skin: Avoid skin contact. Impervious gloves should be worn. Other items may include long sleeves, lab coats, or impervious jackets.
Respiratory: Determine if airborne concentrations are below the recommended exposure limits in accordance your company's PPE program and regulatory requirements. If they are not, select a NIOSH-approved

Section 8. Exposure controls/personal protection

respirator that provides adequate protection from the concentration levels encountered. Air-purifying respirators are generally adequate for organic vapors. Use positive pressure, supplied-air respirators if there is potential for an uncontrolled release, if exposure levels are unknown, or under circumstances where air-purifying respirators may not provide adequate protection. Reference OSHA 29 CFR 1910.134.

Personal protection in case of a large spill Chemical resistant gloves, full protective suit, and boots. Respiratory protection in accordance with OSHA regulation 29 CFR 1910.134. A self-contained breathing apparatus should be used to avoid inhalation of the product vapors.

Section 9. Physical and chemical properties

Physical state	Liquid.
Color	Amber.
Odor	Disagreeable.
Molecular weight (g/mol)	1000 to 15000
Boiling point	293°F(145°C) Styrene
Melting point	Not available.
pH (1% soln/water)	Not applicable.
Vapor pressure	Not established.
Vapor density	3.59 Styrene (Air = 1)
Specific gravity	1.1 (Water = 1)
Partition coefficient: n-octanol/water	Not available.
Evaporation rate	Not available.
Odor threshold	0.14 ppm Styrene
Solubility in water	Slight.
Dispersibility properties	Not dispersed in water.

Section 10. Stability and reactivity

Stability	This product is normally stable, but can become unstable at elevated temperatures.
Instability temperature	>170°F (77°C)
Conditions of instability	Heat.
Incompatibility with various substances	Polymerizes in the presence of organic peroxides, oxidizing materials, or heat.
Corrosivity	Our database contains no additional remark on the corrosivity of this product

Section 11. Toxicological information

Toxicity to animals	Name	Result	Species	Dose	Exposure
	Styrene	LD50 Intraperitoneal	Rat	898 mg/kg	-
		LD50 Oral	Rat	5000 mg/kg	-
		LD50 Oral	Rat	2650 mg/kg	-
		TDLo Dermal	Rat	26.4 mg/kg	-
		LC50 Inhalation Vapor	Rat	11800 mg/m ³	4 hours
	Vinyl Toluene	LC50 Inhalation Gas. Vapor	Rat	2770 ppm	4 hours
		LD50 Oral	Mouse	3160 mg/kg	-
		LD50 Oral	Rat	2255 mg/kg	-
		LDLo Dermal	Rat	4500 mg/kg	-
		LC50 Inhalation Vapor	Mouse	3020 mg/m ³	4 hours
	Cobalt 2-Ethylhexanoate	LD50 Dermal	Rabbit	>5 g/kg	-
		LD50 Oral	Rat	1.22 g/kg	-
		LD50 Oral	Rat	6171 mg/kg	-
	Methanol	LD50 Dermal	Rabbit	15800 mg/kg	-
		LD50 Oral	Mouse	7300 mg/kg	-
		LD50 Oral	Rat	5600 mg/kg	-
		LC50 Inhalation Gas. Vapor	Rat	145000 ppm	1 hours
		LC50 Inhalation Gas. Vapor	Rat	64000 ppm	4 hours
		LC50 Inhalation Gas. Vapor	Rat	64000 ppm	8 hours

Special remarks on toxicity to animals Lung effects that have been observed in mouse studies have been shown in some studies to be the result of mouse specific enzymes (not in humans) that enable the mechanism for producing cancer in mice.

Special remarks on chronic effects on humans A study of long term effects of workers exposed to styrene levels in the range of 25-35 ppm, 8 hour TWA, indicated a possible mild hearing loss.

Special remarks on other toxic effects on humans No additional remark.


Section 12. Ecological information

Ecotoxicity Toxic to aquatic organisms. Should not be released to sewage system or other bodies of water at concentrations above limits established in regulations or permits.

Section 13. Disposal considerations

Waste disposal Recycle to process, if possible. Consult your local or regional authorities. Ignitable characteristic.

Section 14. Transport information

DOT	UN1866; Resin Solution; 3; III.	Labels 
TDG	UN1866; Resin Solution; 3; III.	
IATA/IMDG	UN1866; Resin Solution; 3; III	
Additional information	US regulations require the reporting of spills when the amount exceeds the Reportable Quantity (RQ) for specific components of this material. See CERCLA in Section 15, Regulatory Information, for the Reportable Quantities.	

Section 15. Regulatory information**Other regulations**

This section does not reference all applicable regulatory compliance lists.

TSCA: All ingredients are listed or compliant with TSCA.

DSL: All ingredients are listed or compliant with the NSNR.

Proposition 65 Warning: This product contains a chemical(s) known to the State of California to cause cancer, birth defects and/or reproductive harm.

SARA 302 component(s): None.

SARA 313 component(s): Styrene, Methanol, Cobalt 2-Ethylhexanoate.

CERCLA(RQ): Styrene - 1000 lbs. (453.6 kg)
Methanol - 5000 lbs. (2268 kg)

Section 16. Other information**Prepared by**

AOC, LLC - Corporate Regulatory Affairs.

ON

LEGAL DISCLAIMER

The information contained in this data sheet is furnished in good faith and without warranty, representation, or inducement or license of any kind, except that it is accurate to the best of AOC, LLC's knowledge, or was obtained from sources believed by AOC, LLC to be reliable. The accuracy, adequacy or completeness of health and safety precautions set forth herein cannot be guaranteed, and the buyer is solely responsible for ensuring that the product is used, handled, stored, and disposed of safely and in compliance with applicable federal, state or provincial, and local laws. AOC, LLC disclaims liability for any loss, damage or personal injury that arises from, or is in any way related to, use of the information contained in this data sheet.

ASHLAND®

SAFETY DATA SHEET

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries 40210

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone number	1-800-ASHLAND (1-800-274-5263)
Product name	Derakane Momentum™ 411-350 EPOXY VINYL ESTER RESIN ™ Trademark, Ashland or its subsidiaries, registered in various countries	
Product code	40210	

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, liquid, light yellow

WARNING! FLAMMABLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF INHALED. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN, CAUSE IRRITATION AND BURNS.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Passage of this

ASHLAND®

SAFETY DATA SHEET

Page: 2

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries40210

material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract, skin, lung (for example, asthma-like conditions), liver, central nervous system, male reproductive system, auditory system

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: metallic taste, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, loss of coordination, confusion, liver damage

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible kidney effects, effects on hearing, respiratory tract damage (nose, throat, and airways), testis damage, liver damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: mild effects on color vision, effects on hearing, respiratory tract damage (nose, throat, and airways), central nervous system effects

Carcinogenicity

SAFETY DATA SHEET

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries 40210

Styrene is listed as a possible human carcinogen by the International Agency for Research on Cancer (IARC) and as reasonably anticipated to be a human carcinogen by the National Toxicology Program (NTP).

Reproductive hazard

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Other information

Styrene readily reacts with low concentrations of halogens (for example, fluorine, chlorine, bromine, or iodine) to form a tear-producing substance.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / Trade Secret No.	Concentration
STYRENE	100-42-5	>=40-<50%

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison

ASHLAND®

SAFETY DATA SHEET

Page: 4

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN
™ Trademark, Ashland or its subsidiaries,
registered in various countries40210

control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Water spray, Carbon dioxide (CO₂), Alcohol-resistant foam, Foam, Dry chemical

Hazardous combustion products

phenols, toxic fumes, various hydrocarbons, carbon dioxide and carbon monoxide

Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. During a fire, irritating or toxic decomposition products may be generated. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Polymerization will take place under fire conditions. If polymerization occurs in a closed container, there is a possibility it will rupture violently. Cool storage container with water, if exposed to fire.

NFPA Flammable and Combustible Liquids Classification

Flammable Liquid Class IC

ASHLAND[®]

SAFETY DATA SHEET

Page: 5

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum[™] 411-350 EPOXY
VINYL ESTER RESIN

[™] Trademark, Ashland or its subsidiaries,
registered in various countries 40210

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. Do not use pressure to empty container. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be

ASHLAND®

SAFETY DATA SHEET

Page: 6

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries40210

thoroughly evaluated to establish and maintain safe operating conditions. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

Storage

Do not store near extreme heat, open flame, or sources of ignition. Maintain inhibitor and dissolved oxygen level. Do not blanket or purge with an inert gas to avoid depleting the oxygen concentration. Store out of direct sunlight. Store in a cool, dry, ventilated area, away from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

STYRENE		100-42-5
CAD AB OEL	time weighted average	20 ppm
CAD AB OEL	time weighted average	85 mg/m3
CAD AB OEL	Short term exposure limit	40 ppm
CAD AB OEL	Short term exposure limit	170 mg/m3
CAD BC OEL	time weighted average	50 ppm
CAD BC OEL	Short term exposure limit	75 ppm
OEL (QUE)	time weighted average	50 ppm
OEL (QUE)	time weighted average	213 mg/m3
OEL (QUE)	Short term exposure limit	100 ppm
OEL (QUE)	Short term exposure limit	426 mg/m3
CAD ON OEL	time weighted average	35 ppm
CAD ON OEL	Short term exposure limit	100 ppm
CAD MB OEL	time weighted average	20 ppm
CAD MB OEL	Short term exposure limit	40 ppm

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s). OSHA has formally endorsed a styrene industry proposal for a voluntary 50 ppm

ASHLAND®

SAFETY DATA SHEET

Page: 7

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries 40210

workplace limit on styrene. Members of the Styrene Information and Research Council (SIRC), Composites Institute (CI), Composite Fabricators Association (CFA), International Cast Polymers Association (ICPA) and National Marine Manufacturers Association (NMMA) have agreed to use either engineering controls, work practices or respiratory protection to achieve this voluntary limit for styrene.

Eye protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).
To prevent repeated or prolonged skin contact, wear impervious clothing and boots.
Wear normal work clothing covering arms and legs.
Wear resistant gloves such as:
polyvinyl alcohol

Respiratory protection

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	liquid
Colour	light yellow
Odour	pungent
Boiling point/boiling range	293 °F / 145 °C
Flash point	84.9 °F / 29.4 °C Seta closed cup
Evaporation rate	(<)1 Ethyl Ether
Lower explosion limit/Upper explosion limit	1.1 %(V) / 6.1 %(V)
Vapour pressure	0.853 kPa @ 77 °F / 25 °C
Relative vapor density	(>)1 AIR=1
Density	1.078 g/cm3 @ 68 °F / 20 °C

ASHLAND®

SAFETY DATA SHEET

Page: 8

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN
™ Trademark, Ashland or its subsidiaries,
registered in various countries 40210

	8.7 lb/gal @ 77 °F / 25 °C
Water solubility	insoluble
Viscosity, kinematic	> 20.5 mm ² /s @ 40 °C

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Heat, flames and sparks., Exposure to sunlight., Exposure to air.

Incompatible products

Acids, alkalis, aluminum, aluminum chloride, Bases, Copper, Copper alloys, halogens, iron chloride, metal salts, Peroxides, Strong oxidizing agents

Hazardous decomposition products

phenols, toxic fumes, various hydrocarbons, carbon dioxide and carbon monoxide

Hazardous reactions

Product can undergo hazardous polymerization., Avoid exposure to excessive heat, peroxides and polymerization catalysts.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

Acute oral toxicity -
Product : no data available

Acute oral toxicity - Components

STYRENE : LD 50: 2,650 mg/kg Species: Rat

Acute inhalation toxicity

ASHLAND®

SAFETY DATA SHEET

Page: 9

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries 40210

Acute inhalation toxicity - : no data available
Product

Acute inhalation toxicity - Components

STYRENE : LC 50: 2800 ppm Exposure time: 4 h Species: Rat

Acute dermal toxicity

Acute dermal toxicity - : no data available
Product

Acute toxicity (other routes of administration)

Acute toxicity (other : no data available
routes of administration)

12. ECOLOGICAL INFORMATION

Biodegradability

Biodegradability - Product : no data available

Biodegradability - Components

STYRENE : Remarks: Readily biodegradable

Bioaccumulation

Bioaccumulation - Product : no data available

Ecotoxicity effects

Toxicity to fish

Toxicity to fish - Product : no data available

Toxicity to fish - Components

STYRENE : LC 50: 4.02 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN
™ Trademark, Ashland or its subsidiaries,
registered in various countries40210

Toxicity to daphnia and other aquatic invertebrates

Toxicity to daphnia and other aquatic invertebrates
- Product : no data available

Toxicity to daphnia and other aquatic invertebrates - Components

STYRENE : EC 50: 4.7 mg/l
Exposure time: 48 h
Species: Water flea (*Daphnia magna*)

Toxicity to algae

Toxicity to algae - Product : no data available

Toxicity to algae - Components

STYRENE : EC 50: > 4.9 mg/l
Exposure time: 72 h
Species: *Pseudokirchneriella subcapitata* (green algae)

Toxicity to bacteria

Toxicity to bacteria - Product : no data available

Toxicity to bacteria - Components

STYRENE : EC 50: ca. 500 mg/l
Exposure time: 0.5 h
Species: activated sludge

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.

ASHLAND®

SAFETY DATA SHEET

Page: 11

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries 40210

14. TRANSPORT INFORMATION

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT /LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	-----------------------------

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN 1866	Resin solution	3		III	
---------	----------------	---	--	-----	--

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN 1866	Resin solution	3		III	
---------	----------------	---	--	-----	--

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN 1866	Resin solution	3		III	
---------	----------------	---	--	-----	--

INTERNATIONAL MARITIME DANGEROUS GOODS

UN 1866	RESIN SOLUTION	3		III	
---------	----------------	---	--	-----	--

TRANSPORT CANADA - INLAND WATERWAYS

UN 1866	RESIN SOLUTION	3		III	
---------	----------------	---	--	-----	--

TRANSPORT CANADA - RAIL

UN 1866	RESIN SOLUTION	3		III	
---------	----------------	---	--	-----	--

TRANSPORT CANADA - ROAD

UN 1866	RESIN SOLUTION	3		III	
---------	----------------	---	--	-----	--

U.S. DOT - INLAND WATERWAYS

UN 1866	Resin solution	3		III	
---------	----------------	---	--	-----	--

U.S. DOT - RAIL

UN 1866	Resin solution	3		III	
---------	----------------	---	--	-----	--

U.S. DOT - ROAD

ASHLAND®

SAFETY DATA SHEET

Page: 12

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries 40210

UN	1866	RESINA, SOLUCIONES DE	3	III
----	------	-----------------------	---	-----

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

WHMIS Classification

- F Dangerously Reactive Material
- B2 Flammable liquid
- D2A Very Toxic Material Causing Other Toxic Effects
- D2B Toxic Material Causing Other Toxic Effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Canadian National Pollutant Release Inventory (NPRI)

STYRENE 43.96 %

Notification status

US. Toxic Substances Control Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	q (quantity restricted)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	n (Negative listing)
Japan. Kashin-Hou Law List	y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	n (Negative listing)
China. Inventory of Existing Chemical Substances	y (positive listing)

ASHLAND®

SAFETY DATA SHEET

Page: 13

Revision Date: 08/24/2012

Print Date: 10/16/2012

MSDS Number: R0402382

Version: 5.5

Derakane Momentum™ 411-350 EPOXY
VINYL ESTER RESIN

™ Trademark, Ashland or its subsidiaries,
registered in various countries40210

	HMIS	NFPA
Health	2*	2
Flammability	3	3
Physical hazards	2	
Instability		2
Specific Hazard	--	--

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).