MATERIAL SAFETY DATA SHEET_

X-THANE PART A

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION PAGE 1

HMIS CODES: F R H 0 0 C 1

PRODUCT NAME

: X-thane part A

IDENTIFICATION NUMBER

: 9680a

PRODUCT USE/CLASS

: Waterborne finish

Advantage Coatings 2350 W. Midway Blvd. Broomfield, CO. 80020

EMERGENCY TELEPHONE: (303) 424-9300

PREPARED BY: PRODUCT SAFTY AND COMPLIANCE DEPT.

Information Phone: (303) 842-2385,

PREPARE DATE: 1/09/05

-	SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS -						
ITEMCHEMICAL NAMECAS NUMBERWT/WT%VAPOR PRESSURE							
			IN RANGE	MM Hg	@TEMP		
01	Glycol ether DB	34590-94-8	5-<10%	0.04	77 deg F		
02	N-Methylpyrrolidone	872-50-4	5-<10%	0.00	0.00		
03	Glycol ether EB	29911-28-2	1-<5%	0.06	20 deg C		

-----EXPOSURE LIMITS-----

	ACGIH	NIOSH	OSHA	
ITEM	TLV-TWA	REL	PEL	
01-	N/A.	N/A	N/A	
02-	1 ppm	N/A	N/A	
03	N/A	N/A	N/A	

SECTION 3 – PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE:

>200 deg F-279 deg F

SPECIFIC GRAVITY:

(H2O=1): 1.04

VAPOR DENSITY: HEAVIER THAN AIR

EVAPORATION RATE: SLOWER THAN ETHER

SOLUBILITY IN WATER: SOLUBLE

APPEARANCE AND ODOR: PRODUCTS IN THIS MSDS CLASSIFICATION MAY VARY FROM A

VISCOUS TRANSPARENT LIQUID TO AN OPAQUE SEMIPASTE, HAVING AN ODOR

CHARATERISTIC OF LATEX WATERBORNE SYSTEMS.

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

NFPA 704 HAZARD RATING:

PAGE 2

HEALTH-1;

FLAM-0;

REACTIVITY-0;

SPEC, HAZ, - N/A

FLASH POINT: N/A (WATERBORNE PRODUCT)

METHOD: N/A

FLAMMABLE LIMITS IN AIR BY VOLUME-LOWER: N/A

UPPER: N/A

EXTINGUISHING MEDIA: FOAM, ALOCOHOL, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACE PIECE OPERATED IN PRESSURE DEMAND MODE.

UNUSUAL FIRE AND EXPLOSION HAZARDS

CLOSED CONTAINERS MAY EXPLODE OR BURST (DUE TO THE BUILD UP OF STEAM PRESSURE) WHEN EXPOSED TO EXTREME HEAT.

SECTION 5 – REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID

AVOID CONTAIMINATION WITH STRONG ALKALIES, STRONG MINERAL ACIDS, STRONG OXIDIZING AGENTS. DO NOT FREEZE.

INCOMPATIBILITY (MATERIALS TO AVOID)

NONE KNOWN.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS.

BURNING, INCLUDING WHEN HEATED BY WELDING OR CUTTING, WILL PRODUCE SMOKE, CARBON MONOXIDE AND CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION: NOT EXPECTED TO OCCUR

SECTION 6 – HEALTH HAZARD DATE

INHALATION HEALTH RISKS AN DSYMPTOMS OF EXPOSURE:

VAPOR OR MIST MAY CAUSE HEADACHE NAUSEA, AND IRRITATION OF THE NOSE, THROAT AND LUNGS.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

SLIGHTLY IRRITATING TO THE EYES. FLUSH WITH WATER. CALL PHYSICIAN IF IRRITATION PERSISTS.

SKIN ABSORBTION HEALTH RISKS AND SYMTOMS OF EXPOSURE:

IRRITATING TO THE SKIN UPON REPEATED OR PROLONGED CONTACT.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE: SEE ABOVE CHRONIC: NONE KNOWN

CARCINOGENICITY: NTP CARCINOGEN: NO

IARC MONGRAPHS: NO

OSHA REGULATED: NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: PAGE 3 POSSIBLE ALLERGIC REACTIONS.

EMERGENCY AND FIRST AID PROCEDURES:

IF ON SKIN: THOROUGHLY WASH EXPOSED AREA WITH MMILD SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDER BEFORE REUSE. IF IN EYES: FLUSH WITH LARGE AMOUNT OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. GET MEDICAL ATTENTION. IF SWALLOWED: IMMEDIATELY DRINK TWO GLASSES OF WATER AND GET MEDICAL ATTENTION. IF INHALED: REMOVE PERSON TO FRESH AIR, IF NECESSARY APPLY ARTIFICIAL RESIRATION AND /OR OXYGEN. GET MEDICAL ATTENTION.

SECTION 7- PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED CONFINE TO A SMALL AREA: USE ABSORBENT TO CLEAN UP. PLACE IN CONTAINER FOR DISPOSAL.

WASTE DISPOSAL METHOD

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. CONTACT LOCAL CHEMICAL WASTE COMPANY FOR FURTHER INFORMATION.

PRECAUSTIONS TO BE TAKEN IN HANDLING AND STORING:

KEEP MATERIAL FROM FREEZING AS PRODUCT MAY COAGULATE. DO NOT EXPOSE TO EXTREME HEAT.

OTHER PRECAUTIONS:

N/A

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION:

IF EXPOSURE LIMITS ARE EXCEEDED OF IF APPLIED BY SPRAYING, USE APPROPRIATE, PROPERLY FITTED NIOSH/MSHA APPROVED RESPIRATOR. REFER TO OSHA 29 CFR 1910-134 "RESPIRATOR PROTECTION."

VENTILATION:

PROVIDE SUFFIECIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTLATION TO MAINTAIN EXPOSURE BELOW THE LOWEST STATED TLV.

PROTECTIVE GLOVES:

WEAR RESISTENT GLOVES SUCH AS NITRILE RUBBER.

EYE PROTECTION:

CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

WORK/HYGENIC PRACTICES:

EYE WASH AND SAFTY SHOWERS IN THE WORKPLACE ARE RECOMMENDED.

SECTION 9 – DISCLAIMER

WE BELIEVE THAT THE INFORMATION IN THIS MSDS SHEET IS ACCURATE, HOWEVER, BECAUSE THIS MATERIAL CAN BE USED UNDER CONDITIONS OVER WHICH WE HAVE NO CONTROL, WE GIVE NO WARRENTY, EXPRESSED OR IMPLIED AS TO THE ACCURACY OF THE INFORMATION, AND ASSUME NO RESPONSIBILITIY FOR DAMAGE TO PERSON, PROPERTY, OR BUSINESS ARISING FROM ITS USE.

MATERIAL SAFETY DATA SHEET_

X-THANE PART B

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION **HMIS CODES:** F P PAGE 1 H

H

PRODUCT NAME

: X-thane part B

IDENTIFICATION NUMBER

: 9680b

1

PRODUCT USE/CLASS

: Waterborne finish

1

Advantage Coatings 2350 W. Midway Blvd. Broomfield, CO. 80020

EMERGENCY TELEPHONE: (303) 424-9300

3

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Information Phone: (303) 842-2385,

PREPARE DATE: 1/09/05

:=:	SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS -					
ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%-	VAPO	R PRESSURE	
			IN RANGE	MM Hg	@TEMP	
01	Aliphatic isocyanate		65%-85%	0.82	25 C	
02	Dipropylene Glycol	111109-77-4	20-30%			
	Dimethyl ether					
EXPOSURE LIMITS						
	ACGIH	NIOSH		OSHA		
ITEM	TLV-TW	/A REL		PEL		
01-	0.005 pp	m 0.5MM/M3	0.51	MM/M3		
02-	N/A	N/A		N/A		
	SECTION 3	– PHYSICAL/CHEM	IICAL CHAR	RACTERIS	TICS -	

BOILING RANGE:

not determined SPECIFIC GRAVITY: (H2O=1): 1.1

VAPOR DENSITY: HEAVIER THAN AIR SOLUBILITY IN WATER: INSOLUBLE

EVAPORATION RATE: SLOWER THAN ETHER

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SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

NFPA 704 HAZARD RATING:

PAGE 2

HEALTH-1;

FLAM-0;

REACTIVITY-0;

SPEC. HAZ.- N/A

FLASH POINT: N/A (WATERBORNE PRODUCT)

METHOD: N/A

FLAMMABLE LIMITS IN AIR BY VOLUME-LOWER: N/A

UPPER: N/A

EXTINGUISHING MEDIA: FOAM, ALOCOHOL, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACE PIECE OPERATED IN PRESSURE DEMAND MODE.

UNUSUAL FIRE AND EXPLOSION HAZARDS

CLOSED CONTAINERS MAY EXPLODE OR BURST (DUE TO THE BUILD UP OF STEAM PRESSURE) WHEN EXPOSED TO EXTREME HEAT.

SECTION 5 – REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID

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INCOMPATIBILITY (MATERIALS TO AVOID)

NONE KNOWN.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS.

BURNING, INCLUDING WHEN HEATED BY WELDING OR CUTTING, WILL PRODUCE SMOKE, CARBON MONOXIDE AND CARBON DIOXIDE.

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HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE: SEE ABOVE CHRONIC: NONE KNOWN

CARCINOGENICITY: NTP CARCINOGEN: NO OSHA REGULATED: NO

IARC MONGRAPHS: NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: PAGE 3 POSSIBLE ALLERGIC REACTIONS.

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OTHER PRECAUTIONS:

N/A

SECTION 8 – CONTROL MEASURES

RESPIRATORY PROTECTION:

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