



M. S. D. S.

Material Safety Data Sheet

EXS 50-A Gloss Finish Optical Clear Coat

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : EXS 50-A Gloss Finish Optical Clear Coat
 IDENTIFICATION NUMBER: EXS 50 A
 HEALTH : WARNING HMIS/NFPA: H2F1RO

Mirage Architectural Products, LLC
 346 South Mountainway Drive
 Orem, UT 84058

EMERGENCY: 800-424-9300 (ChemTrec)
 24 Hours Emergency Hotline

INFORMATION: John Horne. PHONE: 801 225 7960 PREPARE DATE: 12/20/06

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT% LESS THAN
01	PROPIETARY (Methanol, hydrolysis generated, 250 ppm ceiling)	PROPIETARY	50.0 %
02	PROPIETARY (Epch*** <10ppm, DGE 130 ppm, trace phenyl glycidyl ether**)	PROPIETARY	35.0 %
03	BUTYL ACETATE (STEL 200ppm, 950mg/m3.) (CERCLA)	123-86-4	14.40 %
04	UV ABSORBER (Mfg TWA 1mg/m3. Trace contaminants: dimethyl sebacate. 4-piperidinol)	41556-26-7	5.0 %
05	PROPIETARY (As tin STEL 0.2mg/m3)	PROPIETARY	5.0 %
06	ODORLESS MINERAL SPIRITS	64741-65-7	1.30 %

ITEM	EXPOSURE LIMITS				VP mmHg @68F	TOXICITY	
	ACGIH		OSHA			LD50 g/kg	LC50 ppm
	TLV-TWA ppm	TLV-TWA Mg/M3	PEL-TWA ppm	PEL-TWA Mg/M3			
01	dna	dna	dna	dna	N.A.	dna	dna
02	dna	dna	dna	dna	N.A.	2.000	dna
03	150.0000	713.00	150.000	713.000	10.0	10.000	1800.000
04	dna	dna	dna	dna	N.A.	dna	dna
05	dna	0.1	dna	0.1 (S)	N.A.	2.300	dna
06	100	dna	100	dna	1.2	dna	dna

REGULATORY: + Pigment content is dependent on color. **CALIF.TITLE 26:22-12000 (PROP 65). WARNING: This product contains a chemical known to the State of California to cause cancer. #CALIF.TITLE 26:22-12000 (PROP 65). WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. All ingredients are on TSCA inventory or are exempt. Toxic chemicals marked (SARA, CERCLA, HAPs) are subject to reporting requirements of SARA (40CFR 355 and 372), CERLA (40CFR 302), or HAPs (40CFR 63).

(S)=Skin: LD50=Dermal.rabbit: LC50=Inhalation.rat: dna=data not available: na=not applicable

SECTION 3 - HAZARDS IDENTIFICATION

EXPOSURE EFFECTS: Vapor or spray mist or spattered material can be harmful. Irritating to eyes, skin, and if inhaled; to nose and throat. Excessive or prolonged inhalation can cause headache, nausea or dizziness. Repeated and prolonged occupational overexposure to solvents is

associated with permanent brain and nervous system damage. Intentional abuse, misuse or other massive exposure to solvents may cause multiple organ damage and/or death.

OVER-EXPOSURE (prolonged or repeated use): CAN AGGRAVATE OR ACCENTUATE ANY OF THESE EFFECTS.

SKIN: Severe irritant. Severe burns. Sensitization or allergic reaction, such as rash or hives. Can be absorbed through skin. Can cause defatting and drying of skin.

INHALATION: Severe irritant. Lung injury. Respiratory sensitization and allergic reaction such as asthma.

EYES: Severe irritant. Irreversible burns and damage.

INGESTION: Can be fatal if swallowed. Aspiration into lungs can damage lungs and cause chemical pneumonia.

TARGET ORGANS: Kidneys. Liver. Lungs. Skin. Eyes. Stomach. Central nervous system.

MEDICAL CONDITIONS AGGRAVATED: Kidneys. Liver. Skin. Eyes. Respiratory. Allergies.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT INHALATION INGESTION EYE CONTACT

SECTION 4 - FIRST AID MEASURES

FIRST AID PROCEDURES: INHALATION: Remove to fresh air. Restore normal breathing. Treat symptomatically. See physician. SKIN: Wash thoroughly with soap and water. Remove contaminated clothing. Consult physician if irritation persists. EYES: Flush immediately with plenty of water for at least 15 minutes and get medical attention. INGESTION: Drink 1 or 2 glasses of water to dilute. Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult physician or poison control center IMMEDIATELY. Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 81 F (SETA) LOWER EXPLOSIVE LIMIT: 1.0 %
 UPPER EXPLOSIVE LIMIT: 7.6 %

FLAMMABILITY - OSHA: FLAMMABLE - CLASS IC
 DOT: FLAMMABLE

EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL

LOWEST FLASHING SOLVENT: 123-86-4

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode when exposed to extreme heat and pressure buildup. May produce a floating fire hazard. Isolate from electrical equipment, sparks, heat and open flame. Vapors may spread long distances, cause flash fire or ignite explosively.

FIREFIGHTING PROCEDURES: Wear full protective equipment, self-contained breathing apparatus. Water may be used to cool closed containers to prevent pressure build-up or explosion when exposed to extreme heat.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL, LEAKS: Remove all sources of ignition. Avoid breathing vapors. Ventilate area. Use absorbent, inert cleanup materials. (DO NOT use sawdust.) Remove absorbent material with non-sparking tools. Place in separate container. Keep out of sewers and waterways. If entry is threatened or occurs, notify local authorities.

SECTION 7 - HANDLING AND STORAGE

HANDLING AND STORAGE: Keep container closed, upright when not in use. Store in cool, dry, well-ventilated area. Avoid prolonged storage temperatures above 100F. Use caution when pouring. Avoid breathing sanding dust. Do not weld or flame cut on empty container.



M. S. D. S.
Material Safety Data Sheet
EXS 50-A Gloss Finish Optical Clear Coat

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Implement administrative and engineering controls to reduce exposure. Provide sufficient ventilation in volume and pattern to keep air contaminant concentrations below the TLV limits. Remove welding or flame cutting decomposition products; follow current, ANSI Z49.1, "Safety in Welding and Cutting". Refer to 29 CFR parts 1910 and 1915 for coating operations; part 1910.146, Confined Spaces.

RESPIRATORY PROTECTION: Wear NIOSH/MSHA certified respirator designed to remove a combination of particulates (dust or spray mist) and vapor. When brushing, rolling or spreading, select the appropriate respiratory protection for the conditions. For specific conditions, refer to current "NIOSH Pocket Guide to Chemical Hazards". In confined or restricted ventilation areas use air-line respirators or hoods. Refer to 29 CFR, OSHA parts 1910.134 and 1915 for coating operations; part 1910.146 Confined Spaces; ANSI Z88.2, Practices for Respiratory Protection; 42 CFR, part 84 Particulate Respirators.

PROTECTIVE CLOTHING AND EQUIPMENT: Dependent upon application method, wear resistant coveralls, gloves and shoe coverings to prevent skin contact. Wear solvent resistant glasses with splash guards or face shield to protect eyes from splash, spatter and/or spray mist. Consult 29 CFR 1910.132, 133, 136, 138; ANSI Z87.1, Z41. Use explosion and spark-proof equipment.

HYGIENIC PRACTICES: Wash thoroughly after handling and before eating, smoking or using toilet. Launder contaminated clothing before use. Destroy contaminated leather and absorbent shoes, which cannot be decontaminated, to prevent reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE : 212 - 346 F
ODOR : SOLVENT
APPEARANCE : LIQUID
SOLUBILITY IN H2O : NO
MIXED VOC. G/L : 208
VAPOR DENSITY : Is heavier than air
WEIGHT PER GAL : 8.9084
EVAPORATION RATE: Is faster than Butyl Acetate
PHOTOCHEMICALLY REACTIVE: No
VOLATILE VOLUME %: 20.91%

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat, open flame, arc or sparks. Water or moisture.

INCOMPATIBILITY: Strong oxidizers, acids and alkalies.

HAZARDOUS DECOMPOSITION PRODUCTS: (BY FIRE, BURNING OR WELDING); CO, CO2, NOx, Aldehydes, Phenols, Silicon oxide fumes, Methanol, Toxic gases or fumes, Formaldehyde at temperatures above 300F (150C). Tin compound fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

TOXICOLOGICAL PROPERTIES: See Section 2.

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information.

SECTION 13 - DISPOSAL CONSIDERATIONS

EPA Waste No.: D001

DISPOSAL METHOD: Place in separate, appropriate, closed container in accordance with all applicable local, State, and Federal regulations. This material has NOT been tested by Toxicity Characteristic Leaching Procedure <TCLP>.

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Paint

DOT HAZARD CLASS: 3

HAZARD SUBCLASS: NA

DOT UN/NA NUMBER: 1263

IMO: NA

PACKING GROUP: III

SECTION 15 - REGULATORY INFORMATION

U. S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product:

--- --- --- CHEMICAL NAME --- --- --- CAS NUMBER
No non-hazardous materials are among the top five ingredients.

PENNSYLVANIA RIGHT-TO-KNOW:

The following non-hazardous ingredients are present in the product at greater than 3%:

--- --- --- CHEMICAL NAME --- --- --- CAS NUMBER
No non-hazardous ingredients are present at greater than 3%.

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

SECTION 16 - OTHER INFORMATION

DATE PRINTED: 11/14/05

NOTICE: Removal of old lead paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-424-LEAD.

<END OF MSDS>



M. S. D. S.

Material Safety Data Sheet

EXS 50 B ACTIVATOR

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : EXS 50 B ACTIVATOR
 IDENTIFICATION NUMBER : EXS 50-B
 HEALTH : DANGER HMIS/NFPA : H3F1R0

Mirage Architectural Products, LLC
 346 South Mountainway Drive
 Orem, UT 84058

EMERGENCY: 800-424-9300 ChemTrec)
 24 Hours Hours Emergency Hotline

INFORMATION: John Home. PHONE: 801 225 7960 PREPARE DATE: 12/20/06

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT% LESS THAN
01	PROPIETARY (As methanol @2%: trace contaminant toluene# @ 50ppm. STEL 250ppm. 325mg/m3. Ceiling 1000ppm.)	PROPIETARY	75.0 %
02	HIGH FLASH NAPHTHA (Mfg TLV 50ppm: trace contaminant benzene**#<1ppm SARA. toluene#<0.1%SARA)	64742-95-6	14.60 %
03	1,2,4 - TRIMETHYLBENZENE (STEL 200ppm, 950mg/m3.) (SARA)	95-63-6	10.80 %
04	METHYL ALCOHOL (STEL 250ppm, 325mg/m3. Ceiling 1000ppm as human LDLo 143mg/kg) (HAPS, SARA, CERCLA)	67-56-1	1.50 %

ITEM	EXPOSURE LIMITS				VP mmHg @68F	TOXICITY	
	ACGIH TLV-TWA ppm	ACGIH TLV-TWA Mg/M3	OSHA PEL-TWA ppm	OSHA PEL-TWA Mg/M3		LD50 g/kg	LC50 ppm
01	200	262	200	260	N.A.	dna	dna
02	dna	dna	100	dna	2.7	3.100	3670.000
03	25.0000	125.00	25.0000	125.0000	1.0	dna	dna
04	200.0000	262.00	200.0000	260.000(S)	96.0	20.000	64000.000

REGULATORY: + Pigment content is dependent on color. **CALIF.TITLE 26:22-12000 (PROP 65). WARNING: This product contains a chemical known to the State of California to cause cancer. #CALIF. TITIE 26:22-12000 (PROP 65). WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. All ingredients are on TSCA inventory or are exempt. Toxic chemicals marked (SARA. CERCLA. HAPs) are subject to reporting requirements of SARA (40CFR 355 and 372). CERCLA (40CFR 302). or HAPs (40CFR 63).

(S)=Skin: LD50=Dermal.rabbit: LC50=Inhalation.rat: dna=data not available: na=not applicable

SECTION 3 - HAZARDS IDENTIFICATION

EXPOSURE EFFECTS: Vapor or spray mist or spattered material can be harmful. Irritating to eyes, skin, and if inhaled; to nose and throat. Excessive or prolonged inhalation can cause headache, nausea or dizziness. Repeated and prolonged occupational overexposure to solvents is associated with permanent brain and nervous system damage. Intentional abuse, misuse or other massive exposure to solvents may cause multiple organ damage and/or death.

OVER-EXPOSURE (prolonged or repeated use): CAN AGGRAVATE OR ACCENTUATE ANY OF THESE EFFECTS.

SKIN: Irritant. Burns. Can be absorbed through skin. Can cause defatting and drying of skin.

INHALATION: Irritant. Lung injury. Central nervous system damage. High vapor concentrations may cause drowsiness.

EYES: Severe irritant. Corneal injury. Methanol, if swallowed, can cause eye damage and blindness. DO NOT wear contact lenses when using this material.

INGESTION: Can be fatal if swallowed. Aspiration into lungs can damage lungs and cause chemical pneumonia. Liver damage.

TARGET ORGANS: Kidneys. Liver. Lungs. Heart. Skin. Eyes. Stomach. Central nervous system.

SECTION 3 - HAZARDS IDENTIFICATION

MEDICAL CONDITIONS AGGRAVATED; Kidneys. Liver. Skin. Eyes. Stomach. Intestines. Respiratory. Allergies. Lungs.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT INHALATION INGESTION EYE CONTACT

SECTION 4 - FIRST AID MEASURES

FIRST AID PROCEDURES: INHALATION: Remove to fresh air. Restore normal breathing. Treat symptomatically. See physician. SKIN: Wash thoroughly with soap and water. Remove contaminated clothing. Consult physician if irritation persists. EYES: Flush immediately with plenty of water for at least 15 minutes and get medical attention. INGESTION: Drink 1 or 2 glasses of water to dilute. Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult physician or poison control center IMMEDIATELY. Treat symptomatically. EYES: After flushing eyes for 15 minutes, get IMMEDIATE medical attention from an ophthalmologist.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 108 F (SETA) LOWER EXPLOSIVE LIMIT: 1.0 %
 UPPER EXPLOSIVE LIMIT: 36.0 %

FLAMMABILITY - OSHA: COMBUSTIBLE - CLASS II
 DOT: FLAMMABLE

EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL

LOWEST FLASHING SOLVENT: 67-56-1

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode when exposed to extreme heat and pressure buildup. May produce a floating fire hazard. Isolate from electrical equipment, sparks, heat and open flame. Vapors may spread long distances, cause flash fire or ignite explosively.

FIREFIGHTING PROCEDURES: Wear full protective equipment, self-contained breathing apparatus. Water may be used to cool closed containers to prevent pressure build-up or explosion when exposed to extreme heat.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL, LEAKS: Remove all sources of ignition. Avoid breathing vapors. Ventilate area. Use absorbent, inert cleanup materials. (DO NOT use sawdust.) Remove absorbent material with non-sparking tools. Place in separate container. Keep out of sewers and waterways. If entry is threatened or occurs, notify local authorities.

SECTION 7 - HANDLING AND STORAGE

HANDLING AND STORAGE: Keep container closed, upright when not in use. Store in cool, dry, well-ventilated area. Avoid prolonged storage temperatures above 100F. Use caution when pouring. Avoid breathing sanding dust. Do not weld or flame cut on empty container.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Implement administrative and engineering controls to reduce exposure. Provide sufficient ventilation in volume and pattern to keep air contaminant concentrations below the TLV limits. Remove welding or flame cutting decomposition products; follow current, ANSI Z49.1, "Safety in Welding and Cutting". Refer to 29 CFR parts 1910 and 1915 for coating operations; part 1910.146, Confined Spaces.

RESPIRATORY PROTECTION: Wear NIOSH/MSHA certified respirator designed to remove a combination of particulates (dust or spray mist) and vapor. When brushing, rolling or spreading, select the appropriate respiratory protection for the conditions. For specific conditions, refer to current "NIOSH Pocket Guide to Chemical Hazards". In confined or restricted ventilation areas use air-line respirators or hoods. Refer to 29 CFR, OSHA parts 1910.134 and 1915 for coating



M. S. D. S.

Material Safety Data Sheet

EXS 50 B ACTIVATOR

operations; part 1910.146 Confined Spaces; ANSI Z88.2, Practices for Respiratory Protection; 42 CFR, part 84 Particulate Respirators.

PROTECTIVE CLOTHING AND EQUIPMENT: Dependent upon application method, wear resistant coveralls, gloves and shoe coverings to prevent skin contact. Wear solvent resistant glasses with splash guards or face shield to protect eyes from splash, spatter and/or spray mist. Consult 29 CFR 1910.132, 133, 136, 138; ANSI Z87.1, Z41. Use explosion and spark-proof equipment.

HYGIENIC PRACTICES: Wash thoroughly after handling and before eating, smoking or using toilet. Launder contaminated clothing before use. Destroy contaminated leather and absorbent shoes, which cannot be decontaminated, to prevent reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE	: 148 – 336 F	VAPOR DENSITY	: Is heavier than air
ODOR	: SOLVENT	WEIGHT PER GAL	: 8.0675
APPEARANCE	: LIQUID	EVAPORATION RATE:	Is faster than Butyl Acetate
SOLUBILITY IN H2O	: NO		
MIXED VOC. G/L	: 208		
		PHOTOCHEMICALLY REACTIVE:	Yes
VOLATILE VOLUME %:	30.13		

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat, open flame, arc or sparks. Water or moisture.

INCOMPATIBILITY: Strong oxidizers, acids and alkalis. Water.

HAZARDOUS DECOMPOSITION PRODUCTS: (BY FIRE, BURNING OR WELDING); CO, CO₂, NO_x, Aldehydes, Silicon oxide fumes, Toxic gases or fumes, Formaldehyde at temperatures above 300F (150C).

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

TOXICOLOGICAL PROPERTIES: See Section 2.

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information.

SECTION 13 - DISPOSAL CONSIDERATIONS

EPA Waste No.: D001

DISPOSAL METHOD: Place in separate, appropriate, closed container in accordance with all applicable local, State, and Federal regulations. This material has NOT been tested by Toxicity Characteristic Leaching Procedure <TCLP>.

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Paint

DOT HAZARD CLASS: 8 **HAZARD SUBCLASS:** NA

DOT UN/NA NUMBER: 3066 **IMO:** NA **PACKING GROUP:** II

SECTION 15 - REGULATORY INFORMATION

U. S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product:

--- -- -- -- -- CHEMICAL NAME -- -- -- -- -- CAS NUMBER
No non-hazardous materials are among the top five ingredients.

PENNSYLVANIA RIGHT-TO-KNOW:

The following non-hazardous ingredients are present in the product at greater than 3%:

--- -- -- -- -- CHEMICAL NAME --- -- -- -- -- CAS NUMBER
No non-hazardous ingredients are present at greater than 3%.

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

SECTION 16 - OTHER INFORMATION

DATE PRINTED: 10/24/05

NOTICE: Removal of old lead paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-424-LEAD.

<END OF MSDS>