



PINTURAS AYA

Zpe de Albrook, Edif. 8A, Panamá
Telf. Información: (507) 232 66 91

MATERIAL SAFETY DATA SHEET

AYALUX

HXE Rust Preventive Enamel



Fecha de la última revisión:
24/08/2009

SECTION I -- COMPOSITION / INFORMATION ON INGREDIENTS

Risky Ingredients		Exposure Limits				Vapor Pressure @ 20°C (68°F) (mm Hg)	Toxicity		Aluminum	Safety Yellow	Carterpillar Yellow	Ante	Blue	Dark Blue
		ACGIH		OSHA										
CAS N°	Chemical Name	TLV-TWA ppm	TLV-TWA mg/m³	PEL-TWA ppm	PEL-TWA mg/m³		LD50 g/Kg	LC50 ppm	% Weight Less Than					
13463-67-7	Titanium Dioxide	dna	5	dna	5	na	10	6820	-	2,50	4,50	11,50	10,50	8,00
1333-86-4	Carbon Black	dna	3,5	dna	3,5	na	dna	dna	-	-	-	0,50	-	-
51274-00-1	Iron Oxide (Yellow)	dna	5	dna	5	na	dna	dna	-	14,50	16,00	-	-	-
1332-37-2	Iron Oxide (Red)	dna	5	dna	5	na	dna	dna	-	-	-	-	-	-
1308-38-9	Chromium Oxide	dna	0,5	dna	0,5	na	5,00	dna	-	-	-	-	-	-
12236-62-3	Molybdate Orange	dna	3	dna	5	na	dna	dna	-	-	-	-	-	-
14038-43-8	Prussian Blue	dna	dna	dna	dna	na	dna	dna	-	-	-	-	4,00	5,00
1330-20-7	Xylene	100	434	100	435	6,6	3,9	6700	6,00	6,00	6,00	6,00	6,00	6,00
67-56-1	Methanol	200	262	200	260	92	5800	dna	1,00	1,00	1,00	1,00	1,00	1,00
25155-81-1	Aromatic Hydrocarbon Resin	dna	dna	dna	dna	na	dna	dna	18,00	18,00	18,00	18,00	18,00	18,00
64742-88-7	Varsol	100	dna	100	dna	2	dna	700	50,00	50,00	50,00	50,00	50,00	50,00

dna = Data not available

na = Not applying

LD₅₀ = Dermal, rabbits

LC₅₀ = Inhalation, rats

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Risky Ingredients		Exposure Limits				Vapor Pressure	Toxicity		White	Light Gray	Cement Gray	Medium Gray	Dark Gray	Brown
		ACGIH		OSHA										
CAS N°	Chemical Name	TLV-TWA	TLV-TWA	PEL-TWA	PEL-TWA	@ 20°C (68°F)	LD50	LC50	% Weight Less Than					
		ppm	mg/m³	ppm	mg/m³	(mm Hg)	g/Kg	ppm						
13463-67-7	Titanium Dioxide	dna	5	dna	5	na	10	6820	18,50	9,00	7,00	5,00	2,50	2,50
1333-86-4	Carbon Black	dna	3,5	dna	3,5	na	dna	dna	-	1,00	1,00	1,00	1,50	1,50
51274-00-1	Iron Oxide (Yellow)	dna	5	dna	5	na	dna	dna	-	-	-	-	-	4,00
1332-37-2	Iron Oxide (Red)	dna	5	dna	5	na	dna	dna	-	-	-	-	-	-
1308-38-9	Chromium Oxide	dna	0,5	dna	0,5	na	5,00	dna	-	-	-	-	-	-
12236-62-3	Molybdate Orange	dna	3	dna	5	na	dna	dna	-	-	-	-	-	-
14038-43-8	Prussian Blue	dna	dna	dna	dna	na	dna	dna	-	-	-	-	-	-
1330-20-7	Xylene	100	434	100	435	6,6	3,9	6700	6,00	6,00	6,00	6,00	6,00	6,00
67-56-1	Methanol	200	262	200	260	92	5800	dna	1,00	1,00	1,00	1,00	1,00	1,00
25155-81-1	Aromatic Hydrocarbon Resin	dna	dna	dna	dna	na	dna	dna	18,00	18,00	18,00	18,00	18,00	18,00
64742-88-7	Varsol	100	dna	100	dna	2	dna	700	50,00	50,00	50,00	50,00	50,00	50,00

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Risky Ingredients		Exposure Limits				Vapor Pressure	Toxicity		Orange	Black	Red	Intl. Red	Green	Light Green
		ACGIH		OSHA										
CAS N°	Chemical Name	TLV-TWA	TLV-TWA	PEL-TWA	PEL-TWA	@ 20°C (68°F)	LD50	LC50	% Weight Less Than					
		ppm	mg/m³	ppm	mg/m³	(mm Hg)	g/Kg	ppm						
13463-67-7	Titanium Dioxide	dna	5	dna	5	na	10	6820	1,00	-	3,50	1,00	4,00	1,00
1333-86-4	Carbon Black	dna	3,5	dna	3,5	na	dna	dna	-	3,50	-	-	-	-
51274-00-1	Iron Oxide (Yellow)	dna	5	dna	5	na	dna	dna	5,50	-	4,00	-	1,00	2,50
1332-37-2	Iron Oxide (Red)	dna	5	dna	5	na	dna	dna				3,00	0,50	1,00
1308-38-9	Chromium Oxide	dna	0,5	dna	0,5	na	5,00	dna	-	-	-	-	5,00	2,50
12236-62-3	Molybdate Orange	dna	3	dna	5	na	dna	dna	4,00	-	-	-	-	-
14038-43-8	Prussian Blue	dna	dna	dna	dna	na	dna	dna	-	-	-	-	0,50	0,50
1330-20-7	Xylene	100	434	100	435	6,6	3,9	6700	6,00	6,00	6,00	6,00	6,00	6,00
67-56-1	Methanol	200	262	200	260	92	5800	dna	1,00	1,00	1,00	1,00	1,00	1,00
25155-81-1	Aromatic Hydrocarbon Resin	dna	dna	dna	dna	na	dna	dna	18,00	18,00	18,00	18,00	18,00	18,00
64742-88-7	Varsol	100	dna	100	dna	2	dna	700	50,00	50,00	50,00	50,00	50,00	50,00

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SECTION II -- HAZARDS IDENTIFICATION

EFFECTS TO EXPOSURE: Vapor or spray of these products may be detrimental. May cause eye and skin irritation, and if inhaled, respiratory tract irritation. Excessive or prolonged inhalation may cause headache, nausea or dizziness. Repeated and prolonged over-exposure to solvents is associated with permanent brain and nervous system damage. Intentional abuse, incorrect use or another massive exposure to solvents may cause multiple organism damage and/or death.

OVER-EXPOSURE (prolonged or repeated use): May aggravate or accentuate any of these effects.

SKIN: Irritating to skin. May be absorbed through skin. May cause dry skin.

INHALATION: Irritating. Lung lesion. May cause nervous system damage. Chemical pneumonia.

EYES: Severe irritant. Do not use contact lenses when working with this material.

INGESTION: May be harmful if swallowed. May cause lung damage and produce chemical pneumonia.

AFFECTED ORGANS: Lungs. Skin. Eyes. Stomach. Nervous system.

MEDICAL CONDITIONS: Skin. Eyes. Allergies. Breathing. Lungs.

MAIN ENTRY WAYS: Skin contact, inhalation, ingestion, ocular contact.

SECTION III -- FIRST AID MEASURES

FIRST AID PROCEDURES:

INHALATION: Remove to fresh air. Reestablish normal respiration. Treat symptomatically. Contact physician. **SKIN:** Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Seek medical attention if the irritation persists. **EYES:** Immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention. **INGESTION:** Drink 1 or 2 glasses of water for dilution. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Seek immediate medical attention or contact the poison control center. Treat symptomatically.



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SECTION IV – FIRE-FIGHTING MEASURES

FLASH POINT: 40.5° C (SETA)

INFERIOR EXPLOSIVE LIMIT: 0.9%

SUPERIOR EXPLOSIVE LIMIT: 7.0%

FLAMMABILITY: OSHA: Combustible – Class IB
DOT: Flammable

EXTINGUISHING MEDIA: Foam, CO₂ and dry chemical.

THINNER WITH THE LOWER FLASH POINT: 64742-88-7.

SPECIAL EXPOSURE HAZARDS: Closed containers may explode when exposed to high temperatures and pressures. May provoke floating fire danger. Store away from electrical equipment, sparks, heat and open flame. Pulverized vapors at a long distance may cause fire or explosion. Water or foam may cause bubbling due to the generation of carbon dioxide.

FIRE-FIGHTING PROCEDURES: Wear appropriate protection equipment and self-contained breathing apparatus (SCBA). Use water spray to keep fire-exposed containers cool and prevent very high pressures or explosions due to extreme heat exposure.

SECTION V -- ACCIDENTAL RELEASE MEASURES

SPILLS, LEAKS: Shut off all ignition sources. Avoid breathing vapors or mist. Provide adequate ventilation. Absorb with an inert dry material. (DO NOT USE sawdust). Pick up the absorbent material with spark-proof tools. Place in an appropriate waste disposal container. Prevent entry into sewers and water courses; if this happens, contact local authorities.

SECTION VI -- HANDLING AND STORAGE

HANDLING AND STORAGE: Keep container tightly closed and keep upright until ready to use. Store in a dry, cool and well-ventilated area. Avoid prolonged storage at temperatures above 39° C (100° F). Take precautions when pouring the product. Avoid breathing sand down dust. Do not weld or flame cut empty containers.



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SECTION VII – EXPOSURE CONTROL / PERSONAL PROTECTION

VENTILATION: Use process enclosures and engineering controls to avoid exposure. Provide adequate ventilation to maintain airborne contaminants below TLV limits. Remove decomposition products by welding or flame cut. Comply with the current ANSI Z49.1 standard, "Safety in Welding and Allied Processes". Consult references 29 CFR, parts 1910 y 1915, for Painting Operations; part 1910.146 for Confined Spaces.

RESPIRATORY PROTECTION: Wear certified NIOSH/MSHA masks, designed to eliminate a combination of solid and liquid particles and vapors. When applying the product with brush, roller or spray, select the appropriate respiratory protection for the condition. For specific conditions consult the current reference "NIOSH Pocket Guide to Chemical Hazards". In confined areas or with restricted ventilation, use an autonomous equipment. Consult references 29 CFR, OSHA parts 1910.134 y 1915 for Painting Operations; part 1910.146 for Confined Spaces; ANSI Z88.2 Respiratory Protection Standard; 42 CFR part 84 Respiratory Particulate.

CLOTHING AND EQUIPMENT PROTECTION: Depending upon application method, wear resistant jumpsuits and/or aprons, gloves and shoe protectors, to avoid skin contact. Wear solvent resistant glasses with lateral protection or mask to protect eyes from splash, or spray fog. See references 29 CFR 1910.132, 133, 136, 138 and ANSI Z87.1, Z41. Use spark and explosion proof equipment.

HYGIENE MEASURES: Wash thoroughly after handling this product, before eating, smoking or using the lavatory. Wash contaminated clothing before using it again. Discard contaminated absorbing leather shoes that cannot be cleaned, to avoid using them again.

SECTION VIII – PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANK (°C)	154 - 205	VAPOR DENSITY	Heavier than air
ODOR	Solvent	WEIGHT BY GALLON (Kg/Gal)	3,9
PHYSICAL STATE	Liquid	EVAPORATION RATE	Slower than Butyl-Acetate
WATER SOLUBILITY	No	PHOTOCHEMICAL REACTIVITY	No
VOC (g/l)	<360		
VOLATILES BY VOLUME (%)	<50		



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SECTION IX -- STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat, open flame, sparks or weld.

INCOMPATIBILITY: Strong oxides, acids and alkaline.

HAZARDOUS DECOMPOSITION PRODUCTS (FIRE, WELD): CO, CO₂, NO_x. Aldehydes. Phenols. Smoke and toxic gases.

POLIMERIZATION RISKS: Under normal conditions, should not be produced.

STABILITY. This product is stable under normal storage conditions.

SECTION X – TOXICOLOGICAL PROPERTIES

TOXICOLOGICAL PROPERTIES. See section I.

SECTION XI -- ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: There is no information.

SECTION XII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Place separately, in closed containers according to local and state regulations.

SECTION XIII – TRANSPORT INFORMATION

PROPER SHIPPING NAME: Paint
HAZARD CLASS: 3
UN NUMBER: 1263
PACKING GROUP: II

HAZARD SUBCLASS: na
IMO: na