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======== SECTION I - IDENTIFICATION OF MATERIAL AND SUPPLIER =====

PRODUCT NAME: AHX-4 275 ACRYLIC URETHANE HARDENER

PRODUCT CODE: 218-C1

MANUFACTURER'S NAME: R. J. McGLENNON CO. INC.

ADDRESS : 198 UTAH ST.

SAN FRANCISCO, CA 94103

EMERGENCY PHONE : (800) 424-9300 INFORMATION PHONE : (415) 552-0311

DATE PRINTED : 08/11/15

======== SECTION II - HAZARDOUS IDENTIFICATION ============

CATEGORY 4 H302

OSHA REGULATORY STATUS

ACUTE TOXICITY - ORAL

THIS CHEMICAL IS CONSIDERED HAZARDOUS BY THE 2012 OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

ACUTE TOXICITY - DERMAL CATEGORY 4 H312 ACUTE TOXICITY - INHALATION (VAPORS) CATEGORY 4 H332 SKIN CORROSION/IRRITATION CATEGORY 2 H315 SERIOUS EYE DAMAGE/EYE IRRITATION CATEGORY 2B H320 CARCINOGENICITY CATEGORY 2 H351 REPRODUCTIVE TOXICITY CATEGORY 2 H361 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) CATEGORY 2 H373 CHRONIC AQUATIC TOXICITY CATEGORY 3 H412 FLAMMABLE LIQUIDS CATEGORY 2 H225 FLAMMABLE LIQUIDS CATEGORY 3 H226 SLOT, SINGLE EXPOSURE CATEGORY 3 H335 EYE IRRITATION CATEGORY 2 H319

LABEL ELEMENTS

- HEALTH HAZARD
- FLAME
- EXCLAMATION MARK

EMERGENCY OVERVIEW STATEMENTS

HAZARD STATEMENTS

HARMFUL IF SWALLOWED

HARMFUL IF INHALED

CAUSES SKIN IRRITATION

CAUSES EYE IRRITATION

SUSPECTED OF CAUSING CANCER

SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD

MAY CAUSE DAMAGE TO THE CENTRAL NERVOUS SYSTEM THROUGH PROLONGED OR REPEATED EXPOSURE

HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS

FLAMMABLE LIQUID AND VAPOR

PRECAUTIONARY STATEMENTS - PREVENTION

OBTAIN SPECIAL INSTRUCTIONS BEFORE USE

DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD

USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED

USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA

SAFETY DATA SHEET

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WASH FACE, HANDS AND ANY EXPOSED SKIN THOROUGHLY AFTER HANDLING

DO NOT BREATHE MIST, VAPORS, SPRAY

KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. - NO SMOKING

KEEP CONTAINER TIGHTLY CLOSED

GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT

USE EXPLOSION-PROOF ELECTRICAL/VENTILATING/LIGHITNG EQUIPMENT

USE ONLY NON-SPARKING TOOLS

TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE

AVOID RELEASE TO THE ENVIRONMENT

PRECAUTIONARY STATEMENTS - RESPONSE

IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ATTENTION

IF IN EYES: REINSE CAUTIONASLY WITH WATER FOR SEVERAL MINUTES. REMOVED CONTACT LENSES, IF PRESENTS AND EASY TO DO.

CONTINUE RINSING IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION

CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL

IF SIN IRRITATION OCCURS: GET MEDICAL ADVICE/ATTENTION

IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER

WASH CONTAMINATED CLOTHING BEFORE REUSE

IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING

IN CASE OF FIRE: USE CO2, DRY CHEMICAL, OR FOAM TO EXTINGUISH

PRECAUTIONARY STATEMENTS - STORAGE

STORE IN A WELL-VENTILATED PLACE, KEEP COOL

PRECAUTIONARY STATEMENTS - DISPOSAL

DISPOSE OF CONTENTS/CONTAINER TO INDUSTRIAL INCINERATION PLANT

DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

HAZARDS NOT OTHERWISE CLASSIFIED OTHER INFORMATION

REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS AND CRACKING

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OTHER INFORMATION

REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS AND CRACKING

=========== SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS ====

		WEIGHT	
REPORTABLE COMPONENTS	CAS NUMBER	PERCENT	
Aliphatic Isocyanate (Homopolymer of HDI)	28182-81-2	44.18	
PARACHLOROBENZOTRIFLUORIDE	98-56-6	40.5	
* XYLENE	1330-20-7	7.40	
1-METHOXY-2-PROPYL ACETATE	108-65-6	7.5	
* Isocyanate Monomer (HDI Monomer)	822-06-0	.30	

^{*} Indicates this product contains EPCRA section 313 chemical(s) subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

This information must be included in all MSDS's that are copied and distributed for this material. WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm. Special Note for urethane hardener formulas: The HDI monomer (CAS 822-06-0) is present as a byproduct at a low level in the basic formula. When properly admixed (with the base component) for spray application the average level of the monomer component falls below normal reportable limits. However; upon aging it may rise to a reportable level (admixed).

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Always follow the protection guidelines presented in this document.

WARNING: This product contains flammable solvent(s).

EYES: FLUSH GENTLY WITH WATER FOR 15 MINUTES, IF ANY IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

SKIN: WASH AFFECTED AREA WITH SOAP AND WATER, IF ANY IRRITATION DEVELOPS AND PERSISTS, SEEK MEDICAL ATTENTION.

INHALATION: REMOVE TO FRESH AIR, IF DIZZINESS OR NAUSEA PERSISTS, SEEK MEDICAL ATENTION.

======== SECTION V - FIRE-FIGHTING MEASURES ================

FLASH POINT: 25 Deg.F. METHOD USED: SETAFLASH

FLAMMABLE LIMITS IN AIR BY % OF VOLUME- LOWER: 1.0% UPPER: 12.7%

EXTINGUISHING MEDIA: FOAM, CO2, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES

WEAR A SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WITH APPROPRIATE TURN-OUT GEAR AND CHEMICAL RESISTANT PERSONAL PROTECTIVE EQUIPMENT.

UNUSUAL FIRE AND EXPLOSION HAZARDS

NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN EXPLODE. DURING TRANSFER OPERATIONS, ALL FIVE GALLON PAILS AND LARGER METAL CONTAINERS (TANK CARS AND TANK TRUCKS) SHOULD BE GROUNDED TO DISSSIPATE STATIC CHARGES. VAPORS ARE HEAVIER THAN AIR, AND CAN TRAVEL ALONG THE GROUND TO IGNITION SOURCES.

======== SECTION VI - ACCIDENTAL RELEASE MEASURE ============

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

SOAK UP WITH INERT ABSORBENT. DO NOT ALLOW MATERIAL TO ENTER DRAINS, SEWER SYSTEM. VENTILATE AREA.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

USE ONLY WITH VENTILATION THAT KEEPS SECTION II COMPONENTS BELOW PERMISSABLE EXPOSURE LIMITS. KEEP CONTAINERS UPRIGHT AND SEALED. AVOID STORAGE ABOVE 120 Deg.F. KEEP FROM FREEZING.

OTHER PRECAUTIONS

AVOID SKIN AND EYE CONTACT. DO NOT BREATHE VAPORS. DO NOT TAKE INTERNALLY. USE ONLY WITH ADEQUATE VENTILATION. DUST FROM SANDING THE DRIED MATERIAL SHOULD BE TREATED AS NUISANCE DUST - THE USE OF A PARTICULATE DUST MASK IS RECOMMENDED. ALL PERSONS WHO USE THIS MATERIAL SHOULD READ AND UNDERSTAND ALL MANUFACTURERS' INSTRUCTIONS AND PRECAUTIONS PRIOR TO USE. THIS MATERIAL IS INTENDED FOR USE IN AN INDUSTRIAL ENVIRONMENT BY TRAINED PERSONNEL ONLY.

========= SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION====

EXPOSURE LIMITS ON

REPORTABLE COMPONENTS CAS NUMBER

Aliphatic Isocyanate (Homopolymer of HDI)

28182-81-2

OSHA Not Established

Manufacturer recommends: 0.5 mg/m3 TWA 8 hours & 1.0 mg/m3 STEL

PARACHLOROBENZOTRIFLUORIDE 98-56-6

PEL: Not Established

TLV: Not Established

* XYLENE 1330-20-7

OSHA PEL EXPOSURE LIIMT: 100 ppm TWA ACGITH TLV EXPOSURE LIMIT: 100 ppm TWA

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OSHA STEL: 150 ppm

1-METHOXY-2-PROPYL ACETATE 108-65-6

OSHA PEL EXPOSURE LIMIT: NE ACGIH TLV EXPOSURE LIMIT: NE

EXPOSURE LIMIT: Rabbit Skin LD50 > 5000mg/kg OTHER

* Isocyanate Monomer (HDI Monomer) 822-06-0

OSHA Not Established

ACGIH: .005 ppm TWA & .034 mg/m3

RESPIRATORY PROTECTION

Respirator Guidelines for spray application of two component acrylic urethane finishes:

Good industrial hygiene practice dictates that when isocyanate containing coatings are spray applied, some form of respiratory protection should be worn. During the spray application of coatings containing this product, the use of a supplied-air (either positive pressure or continuous flow type) respirator is mandatory when one or more of the following conditions exists:

- The airborne isocyanate concentrations are not known; or
- The airborne isocyanate monomer concentrations exceed 0.05 ppm averaged over eight (8) hours (10 times the 8 hour TWA exposure limit); or
- The airborne polyisocyanate (polymeric, oligomeric) concentrations exceed 5 mg/m3 averaged over 8 hours or 10 mg/m3 averaged over 15 minutes (10 times the 8 hour TWA or the 15 minute STEL exposure limits); or
- Operations are performed in a confined space (see OSHA Confined Space Standard, 29 CFR 1910.146).

A properly fitted air-purifying (combination organic vapor and particulate) respirator, proven by test to be effective in isocyanate-containing spray paint environments, and used in accordance with all recommendations made by the manufacturer, can be used when all of the following conditions are met:

- The airborne isocyanate monomer concentrations are known to be below 0.05 ppm averaged over eight (8) hours (10 times the 8 hour TWA exposure limit); and
- The airborne polyisocyanate (polymeric, oligomeric) concentrations are known to be below 5 mg/m3 averaged over 8 hours or 10 mg/m3 averaged over 15 minutes (10 times the 8 hour TWA or the 15 minute STEL exposure limits); and
- A NIOSH-certified (National Institute of Occupational Safety and Health) End of Service Life Indicator or a change schedule based upon objective information or data is used to ensure that cartridges are replaced before the end of their service life. In addition, prefilters should be changed whenever breathing resistance increases due to particulate buildup

VENTILATION

SUFFICIENT TO KEEP SECTION II COMPONENTS BELOW THEIR EXPOSURE LIMITS

PROTECTIVE GLOVES

IMPERVIOUS GLOVES ARE RECOMMENDED (CONSULT INDUSTRIAL HYGIENIST).

EYE PROTECTION

SAFETY GLASSES WITH SIDE SHIELDS ARE RECOMMENDED TO PREVENT CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

EYE WASH STATION. TO PREVENT REPEATED OR PROLONGED CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

WORK/HYGIENIC PRACTICES

WASH HANDS BEFORE EATING.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES ======= _____

BOILING RANGE: 175 - 300 Deg F. SPECIFIC GRAVITY (H2O=1): 1.17

VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER

SOLUBILITY IN WATER: NEGLIGIBLE

APPEARANCE AND ODOR: OPAQUE LIQUID WITH ORGANIC SOLVENTS ODOR.

VAPOR PRESSURE

REPORTABLE COMPONENTS	CAS NUMBER	MM HG @	TEMP
Aliphatic Isocyanate (Homopolymer of HDI)	28182-81-2	N/A	N/A

98-56-6 5.3 PARACHLOROBENZOTRIFLUORIDE 20 Deg C AHX-4 275 ACRYLIC URETHANE HARDENER

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* XYLENE	1330-20-7	5.1	68 Deg F
1-METHOXY-2-PROPYL ACETATE	108-65-6	3.7	20 Deg C
* Isocyanate Monomer (HDI Monomer)	822-06-0	N/A	N/A

STABILITY

STABLE UNDER NORMAL CONDITIONS

CONDITIONS TO AVOID

ALL SOURCES OF IGNITION: HEAT, SPARKS, STATIC ELECTRICITY, OPEN FLAMES

INCOMPATIBILITY (MATERIALS TO AVOID)

STRONG ACIDS AND STRONG BASES, AMINES, ALCOHOLS AND WATER

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

CARBON DIOXIDE, CARBON MONOXIDE, HYDROCARBON COMPOUNDS

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR

======== SECTION XI - TOXICOLOGICAL INFORMATION =============

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

NASAL AND RESPIRATORY IRRITATION, POSSIBLE DIZZINESS OR NAUSEA.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

EYES: PRIMARY IRRITATION, TEARING AND REDNESS. SKIN: POSSIBLE IRRITATION.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

MODERATE IRRITATION, REDNESS.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

SINGLE DOSE ORAL TOXICITY OF PRODUCT IS LOW.

HEALTH HAZARDS (ACUTE AND CHRONIC)

NONE KNOWN ON PRODUCT AS SUPPLIED

HOWEVER, OVER EXPOSURE TO SECTION II COMPONENTS CAN CAUSE DIZZINESS, NAUSEA OR HEADACHE. EXCESSIVE SKIN CONTACT CAN CAUSE DERMATITUS. EYE CONTACT CAN CAUSE IRRITATION.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No THIS MATERIAL IS NOT EXPECTED TO BE CARCINOGENIC IN HUMANS BASED ON NEGATIVE EVIDENCE OF CARCINOGENICITY IN LABORATORY ANIMALS. THIS MATERIAL IS NOT LISTED AS A CARCINOGEN BY IARC, NTP OR OSHA. SEE OTHER WARNINGS IN SECTION II. SUSPECTED OF CAUSING CANCER. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. See California warnings in Section II.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

OVER EXPOSURE TO SECTION II COMPONENTS CAN AGGRAVATE PRE-EXISTING DISORDERS OF KIDNEYS, LIVER AND RESPIRATORY SYSTEM.

ECOLOGICAL INFORMATION: NO RELEVANT DATA FOUND

MOBILITY IN SOIL: NO RELEVANT DATA FOUND

OTHER ADVERSE EFFECTS: NO RELEVANT DATA FOUND

======== SECTION XIII - DISPOSAL CONSIDERATION ==============

WASTE DISPOSAL METHOD

HAZARDOUS WASTE REGULATIONS ARE NOT CONSISTENT THROUGHOUT THE COUNTRY (SOME WASTES ARE NOT HAZARDOUS WASTE UNDER FEDERAL RULES, BUT THE SAME WASTE MAY BE DEFINED AS HAZARDOUS WASTE UNDER STATE RULES).

ANY SPILLS SHOULD BE SOAKED UP WITH INERT ABSORBANT AND COLLECTED IN CONTAINERS. PAINT BOOTH FILTERS MAY BE CONSIDERED HAZARDOUS.

CONTACT YOUR LOCAL HAZARDOUS WASTE AGENCY (WITH INFORMATION FROM THIS MSDS) FOR PROPER DISPOSAL INSTRUCTIONS.

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DOT / TDG / MEX

UN-NO UN1263
PROPER SHIPPING NAME PAINT
HAZARD CLASS 3
PACKING GROUP II
NAERG: 127

IATA / IMDG / IMO

UN-NO UN1263
PROPER SHIPPING NAME PAINT
HAZARD CLASS 3
PACKING GROUP PGII
PACKING INSTRUCTIONS 355;366
NAERG: 127
EMS-NO F-E, S-E

========= SECTION XV - REGULATORY INFORMATION ===============

SARA 313 REPORTABLE COMPONENTS CAN BE FOUND IN SECTION III COMPOSITION

SARA 313 HAZARDOUS CATEGORIZATION

ACUTE HEALTH HAZRD YES
CHRONIC HEALTH HAZARD YES
FIRE HAZARD YES
SUDDEN RELEASE OF PRESSURE HAZRD NO
REACTIVE HAZRD NO

STATE REGULATIONS: CALIFORNIA PROPOSITION 65

WARNING: THIS MATERIAL CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 REQUIRES THAT CLEAR AND REASONABLE WARNING BE GIVEN PRIOR TO EXPOSING ANY PERSON TO THIS CHEMICAL

THE INFORMATION IN THIS MSDS AND ENVIRONMENTAL DATA SHEET WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS ACCURACY OR COMPLETENESS. RECIPIENTS ARE ADVISED TO CONFIRM THE CURRENT ACCURACY IN ADVANCE OF NEEDS.