03/18/08

Acrylic Urethane / "AU" Codes (98 Series)

To: MSDS User

Please find enclosed the material safety data sheet as per your request. The information presented in these forms is believed to be correct and sufficient to meet the requirements of the OSHA Hazard Communication Standard 29CFR 1910.1200.

These forms should be made available to all those who handle or may otherwise be exposed to the product(s).

The supplied material safety data sheet covers the common hazardous ingredients associated with more than one product. This is supplied in accordance with 29CFR 1910.1200 paragraph (g)(4), and Cal OSHA T8 CCR section 5194 (g)(4) which states: "where complex mixtures have similar hazards and contents ...but the specific composition varies from mixture to mixture ... the manufacturer may prepare one material safety data sheet to apply to all of these similar mixtures.

This MSDS and environmental data sheet is designed to address the safe use and handling of the R.J. McGlennon Company products that are listed below. It is not intended to address specific technical properties of an individual product.

See R.J. McGlennon Co. individual **Product Data Sheets** for <u>VOC and other specific technical data.</u>

This MSDS (identified as 98MSD Acrylic Urethane) covers all Acrylic Urethane products (both stock and custom) which are labeled as a 98 series Acrylic Urethane.

Following is a listing of our stock products that are made in this 98 series.

Stock Products in 98 Series

AU-1000 Gloss

AU-1001 Semi-Gloss

AU-1002 Satin

AU-1003 Satin Flat

Note: This MSDS will not cover below.

See Separate MSDS for each of the following products in this series

AUS-10 Sanding Sealer (Base)

AH-1 Acrylic Urethane Hardener

98 SERIES ACRYLIC URETHANE - ALL BASES

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PRODUCT NAME: 98 SERIES ACRYLIC URETHANE - ALL BASES HMIS CODES: H F R P

PRODUCT CODE: 98MSD 2 3 1 H

========== SECTION I - MANUFACTURER IDENTIFICATION =============

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

ADDRESS : 198 UTAH ST.

SAN FRANCISCO, CA 94103

EMERGENCY PHONE : (800) 424-9300 DATE REVISED : 01/01/07 INFORMATION PHONE : (415) 552-0311 NAME OF PREPARER : J. Davis

DATE PRINTED : 3/18/2008

======= SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION ========

REPORTABLE COMPONENTS	CAS NUMBER	MM HG	PRESSURE @ TEMP	WEIGHT PERCENT
NORMAL BUTYL ACETATE	123-86-4	10.0	68 Deg F	19.0
OSHA PEL EXPOSURE LIMIT: 150 ppm				
ACGIH TLV EXPOSURE LIMIT: 150 ppm				
OTHER EXPOSURE LIMIT: N/A				
METHYL ETHYL KETONE	78-93-3	78	68 Deg F	19.0
OSHA PEL EXPOSURE LIMIT: 200 ppm - TWA				
ACGIH TLV EXPOSURE LIMIT: 200 ppm - TWA				
OTHER EXPOSURE LIMIT: N/A				
METHYL ACETATE	79-20-9	179	20 Deg C	14.5
OSHA STEL EXPOSURE LIMIT: 250ppm				
ACGIH STEL EXPOSURE LIMIT: 250ppm				
OTHER: NIOSH TWA EXPOSURE LIMIT: 200ppm (10 Hours)				
* XYLENE	1330-20-7	5.1	68 Deg F	11.50
OSHA PEL EXPOSURE LIIMT: 100 ppm TWA				
ACGITH TLV EXPOSURE LIMIT: 100 ppm TWA				
OSHA STEL: 150 ppm				
METHYL AMYL KETONE	110-43-0	2.14	68 Deg F	4.5
OSHA PEL EXPOSURE LIMIT: 100 ppm - TWA				
ACGIH TLV EXPOSURE LIMIT: 50 ppm - TWA				

^{*} 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. This is a two component product and the MSDS is for this single component. Use this information and the MSDS information from the hardener component (AH-1 or AH-2) to determine the best method to apply the admixed product. The section II components will change percentages per the admix ratio.

WARNING: This product contains flammable solvent(s).

EXPOSURE LIMIT: N/A

OTHER

======= SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS ========

BOILING RANGE: 175 - 300 Deg F. SPECIFIC GRAVITY (H2O=1): .93

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

SOLUBILITY IN WATER: NEGLIGIBLE

APPEARANCE AND ODOR: OPAQUE LIQUID WITH ORGANIC SOLVENTS ODOR.

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========== SECTION IV - FIRE AND EXPLOSION HAZARD DATA ===========

FLASH POINT: 25 Deg.F. METHOD USED: SETAFLASH FLAMMABLE LIMITS IN AIR BY % OF VOLUME- LOWER: 1.0% UPPER: 16%

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.

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 BASES

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

CARBON DIOXIDE, CARBON MONOXIDE, HYDROCARBON COMPOUNDS

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR

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.

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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

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.

EMERGENCY AND FIRST AID PROCEDURES

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.

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

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).

MATERIAL SAFETY DATA SHEET

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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.

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.

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.

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.