date of prep : 26/10/16 

SECTION I

manufacturer : Consolidated Coatings Corporation

: #310 7651 Vantage Way

Delta, British Columbia

mfq. code id : 1-60-1206 MSDS revision# : 200027

V4G 1A6

: 604-946-7626 telephone#

emergency#

whmis class : B,D2B

- H M I S -

| HEALTH : 2 |

FLAMMABILITY : 3 REACTIVITY : 0

PERSONAL PROTECT.: G

(HAZARD RATING: 0=least, 1=slight, 2=moderate, 3=high, 4=extreme, \*=chronic)

(G = safety glasses, gloves, & vapor respirator)

trade name : COAL TAR EPOXY PT.A [1:1]

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HAZARDOUS COMPONENTS SECTION II-A

| SECTION 11-A |                          |            |          |      |                                  |                 |
|--------------|--------------------------|------------|----------|------|----------------------------------|-----------------|
|              |                          | CAS#       | % by wt. | SARA | vapor pressure<br>(mm Hq @ 20 C) | LEL<br>(@ 25 C) |
| no.          | component                | CAS#       | * by wc. |      |                                  |                 |
| 1            | METHYL ETHYL KETONE      | 78-93-3    | 1 - 5    | YES  | 70.20                            | 1.80            |
| 2            | TOLUENE                  | 108-88-3   | 5 - 10   | YES  | 47.00                            | 1.40            |
| 3            | XYLENE                   | 1330-20-7  | 5 - 10   | YES  | 6.60                             | 1.10            |
| 4            | REFINED COAL TAR         | 65996-93-2 | 35 - 40  | NO   | N/A                              | 1.00            |
| 5            | TALC                     | 14807-96-6 | 20 - 25  | NO   | N/A                              | N/A             |
| 6            | SILICEOUS MUSCOVITE MICA | 12001-26-2 | 1 - 5    | NO   | N/A                              | N/A             |
| 7            | AMORPHOUS SILICA GEL     | 7631-86-9  | 1 - 5    | NO   | N/A                              | N/A             |
| 8            | TETRAETHYLENEPENTAMINE   | 112-57-2   | 5 - 10   | NO   | N/A                              | N/A             |

<sup>&</sup>gt;> Component number 4 is listed by NTP, OSHA and IARC as a carcinogen or a possible carcinogen.

(N/A = not applicable)

Please refer to appropriate reference sources for carcinogenicity information.

<sup>&</sup>gt;> Under the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372, chemicals listed on the Section 313 List (40 CFR Part 373.65) are identified under the heading 'SARA

OCCUPATIONAL EXPOSURE LIMITS SECTION II-B skin PEL/STEL PEL/CEILING no. (OSHA) PEL/TWA N/E 200 ppm N/E N/E 300ppm,500ppm 10m/8hr 200 ppm N/E N/E N/E 100 ppm / 434 mg/m3 N/E N/E N/E N/E N/E N/E N/E 20 mppcf N/E N/E N/E 20 mppcf N/E N/E N/E 20 mppcf N/E N/E N/E skin TLV/STEL TLV/CEILING (ACGTH) TLV/TWA N/E N/E 885 ppM 1 590 ppm N/E 150 ppm N/E 2 100 ppm N/E N/E N/E 100 ppm / 434 mg/m3 3 N/E N/E N/E N/E N/E N/E N/E 5 2 mg/m3 Resp. Dust N/E t 3 mg/m3 Respirable Dus N/E 6 N/E N/E N/E 10 mg/m3 Total Dust 7 N/E N/E 8 >> The dried film of this product may become a dust nuisance when removed by sanding or grinding. OSHA recommends a PEL/TWA of 15 mg/m3 for total dust and 5 mg/m3 for the respirable fraction. ACGIH recommends a TLV/TWA of 10 mg/m3 for total dust. >> (SKIN) absorption may contribute to the overall exposure to this material. Take appropriate measures to prevent skin contact. (N/E = not established) PHYSICAL DATA SECTION III \_\_\_\_\_\_ % volatile by volume : 34.74 (Theoretical) boiling point : not established % volatile by weight : 22.19 (Theoretical) evaporation rate : < 1 (ether = 1)

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vapor density : > 1 (air = 1)

BASED ON THE PRESENCE OF COMPONENT 8 PRODUCT IS PRESUMED TO BE CORROSIVE TO THE EYES. EXPOSURE MAY CAUSE CHEMICAL BURNS AND EXTENSIVE CORNEAL INJURY. BASED ON THE PRESENCE OF COMPONENTS 1, 2 AND 3 PRODUCT VAPORS AND/OR MISTS MAY ALSO BE IRRITATING TO

SECTION IV HEALTH INFORMATION

kilograms per liter : 1.275 (Theoretical)

# SKIN CONTACT

BASED ON THE PRESENCE OF COMPONENT 8 PRODUCT IS PRESUMED TO BE CORROSIVE TO THE SKIN AND EXPOSURE MAY CAUSE CHEMICAL BURNS. BASED ON THE PRESENCE OF COMPONENTS 1, 2 AND 3 PROLONGED OR REPEATED CONTACT MAY RESULT IN DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN DEFATTING AND DEVELOP THE SKIN WHICH MAY RESULT IN DEFATTION CAN DEVELOP THESE SYMPTOMS AS A RESULT OF CONTACT WITH VERY SMALL AMOUNTS OF LIQUID MATERIAL OR AS A RESULT OF EXPOSURE TO VAPOR. THIS SKIN SENSITIZATION MAY BE TEMPORARY OR PERMANENT. ONCE AN INDIVIDUAL IS DIAGNOSED AS BEING SENSITIZED, NO FURTHER EXPOSURE CAN BE PERMITTED. BASED ON THE PRESENCE OF COMPONENT 4 PRODUCT CAN CAUSE SKIN IRRITATION AND DERMATITIS, INCLUDING ACNE. COAL TAR IS A PHOTOTOXIC SUBSTANCE WHICH, IN THE PRESENCE OF ULTRAVIOLET LIGHT (SUNLIGHT) CAN CAUSE A SKIN REACTION SIMILAR TO AN EXAGGERATED SUNBURN, FREQUENTLY CAUSING BLISTERS.

### INHALATION

EXPOSURE MAY PRODUCE IRRITATION TO THE NOSE, THROAT, RESPIRATORY TRACT, AND OTHER MUCOUS MEMBRANES. BASED ON THE PRESENCE OF COMPONENTS 1, 2 AND 3 EXPOSURE TO HIGH CONCENTRATIONS OF VAPOR MAY PRODUCE CENTRAL NERVOUS SYSTEM DEPRESSION. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

#### INGESTION

BASED ON THE PRESENCE OF COMPONENT 1 PRODUCT IS PRESUMED TO BE MODERATELY TOXIC. BASED ON THE PRESENCE OF COMPONENT 2 INGESTION MAY CAUSE KIDNEY DAMAGE. BASED ON THE PRESENCE OF COMPONENT 2 INGESTION MAY CAUSE LIVER DAMAGE. BASED ON THE PRESENCE OF COMPONENTS 2 AND 3 SMALL AMOUNTS OF THE LIQUID ASPIRATED INTO THE LUNGS DURING INGESTION OR FROM VOMITING MAY RESULT IN SEVERE LUNG DAMAGE. BASED ON THE PRESENCE OF COMPONENTS 1, 2 AND 3 INGESTION MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

#### SIGNS AND SYMPTOMS

SYMPTOMS OF EYE IRRITATION INCLUDE PAIN, TEARING, REDDENING AND SWELLING. SYMPTOMS OF SKIN IRRITATION INCLUDE REDDENING, SWELLING, RASH AND REDNESS. SYMPTOMS OF RESPIRATORY IRRITATION INCLUDE RUNNY NOSE, SORE THROAT, COUGHING, CHEST DISCOMFORT, SHORTNESS OF BREATH AND REDUCED LUNG FUNCTION. SYMPTOMS OR GASTROINTESTIONAL IRRITATION INCLUDE SORE THROAT, ABDOMINAL PAIN, NAUSEA, VOMITING AND DIARRHEA. BASED ON THE PRESENCE OF COMPONENTS 1, 2 AND 3 CENTRAL NERVOUS SYSTEM DEPRESSION MAY BE EVIDENCED BY HEADACHE, DIZZINESS, NAUSEA AND SYMPTOMS OF INTOXICATION; IN EXTREME CASES, UNCONSCIOUSNESS AND DEATH MAY OCCUR. SYMPTOMS OF CHRONIC OVEREXPOSURE INCLUDE LOSS OF MEMORY, LOSS OF INTELLECTUAL ABILITY AND LOSS OF COORDINATION.

#### AGGRAVATED MEDICAL CONDITIONS

PREEXISTING SKIN, EYE AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. IMPAIRED CENTRAL NERVOUS SYSTEM FUNCTIONS FROM PREEXISTING DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

#### OTHER HEALTH EFFECTS

BASED ON THE PRESENCE OF COMPONENT 1 PRODUCT IS PRESUMED TO BE FETOTOXIC. BASED ON THE PRESENCE OF COMPONENT 2 CHRONIC OVEREXPOSURE MAY CAUSE INJURY TO THE BONE MARROW AND BLOOD CELLS. BASED ON THE PRESENCE OF COMPONENT 2 CHRONIC OVEREXPOSURE MAY CAUSE INJURY TO THE KIDNEYS AND LIVER. BASED ON THE PRESENCE OF COMPONENT 2 CHRONIC OVEREXPOSURE MAY CAUSE DAMAGE TO THE RED BLOOD CELLS. BASED ON THE PRESENCE OF COMPONENT 2 CHRONIC OVEREXPOSURE MAY CAUSE DAMAGE TO THE KIDNEYS. BASED ON THE PRESENCE OF COMPONENT 7 CHRONIC OVEREXPOSURE TO AMORPHOUS SILICA DUST MAY CAUSE A TISSUE RESPONSE (PNEUMOCONIOSIS). BASED ON THE PRESENCE OF COMPONENT 5 CHRONIC OVEREXPOSURE TO TALC DUST MAY CAUSE SCARRING OF THE LUNGS.

# SECTION V

# \_\_\_\_\_\_ EMERGENCY AND FIRST AID PROCEDURES

### EYE CONTACT

IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. SEEK PROMPT MEDICAL ATTENTION.

## SKIN CONTACT

IMMEDIATELY REMOVE CONTAMINATED CLOTHING AND SHOES. WIPE EXCESS FROM SKIN AND FLUSH WITH WATER FOR AT LEAST 15 MINUTES USING SOAP IF AVAILABLE. SEEK PROMPT MEDICAL ATTENTION. DO NOT REUSE CLOTHING UNTIL THOROUGHLY DECONTAMINATED.

# INHALATION

REMOVE VICTIM TO FRESH AIR AND TREAT SYMPTOMATICALLY. PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF THE VICTIM IS NOT BREATHING. SEEK PROMPT MEDICAL ATTENTION.

# INGESTION

DO NOT INDUCE VOMITING. IF VOMITING SPONTANEOUSLY OCCURS, KEEP THE VICTIM'S HEAD BELOW THE HIPS TO PREVENT ASPIRATION INTO THE LUNGS. SINCE ASPIRATION INTO THE LUNGS CAN CAUSE VERY SERIOUS, PERMANENT DAMAGE, THE DECISION OF WHETHER TO INDUCE VOMITING OR NOT SHOULD BE MADE BY A PHYSICIAN. DANGER FROM LUNG ASPIRATION MUST BE WEIGHED AGAINST TOXICITY WHEN CONSIDERING EMPTYING THE STOMACH. CONSULT A PHYSICIAN, HOSPITAL OR POISON CONTROL CENTER AND/OR TRANSPORT TO AN EMERGENCY FACILITY IMMEDIATELY.

>> COMPONENTS 2 AND 3 DO NOT INDUCE VOMITING.

FIRE AND EXPLOSION HAZARDS SECTION VI

flammability classification - OSHA : FLAMMABLE LIQUID - CLASS IB

- DOT : FLAMMABLE LIQUID

flash point : -9 DEGREES C

EXTINGUISHING MEDIA

USE WATER FOG, FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS

WARNING. EXTREMELY FLAMMABLE. CLEAR FIRE AREA OF UNPROTECTED PERSONNEL. DO NOT ENTER CONFINED FIRE SPACE WITHOUT HELMET, FACE SHIELD, BUNKER COAT, GLOVES, RUBBER BOOTS, AND A POSITIVE PRESSURE NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS

CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.

REACTIVITY

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STABILITY : STABLE

HAZARDOUS POLYMERIZATION : WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID

BASED ON THE PRESENCE OF COMPONENTS 1, 2, 3 AND 4 AVOID OXIDIZING MATERIALS. BASED ON THE PRESENCE OF COMPONENTS 2 AND 4 AVOID STRONG ACIDS. BASED ON THE PRESENCE OF COMPONENT 2 AVOID STRONG ALKALIES. BASED ON THE PRESENCE OF COMPONENT 4 AVOID CHLORINE AND HYPOCHLORITES. BASED ON THE PRESENCE OF COMPONENT 4 KEEP AWAY FROM HEAT SPARKS AND OPEN FLAME.

HAZARDOUS DECOMPOSITION PRODUCTS

OXIDES AND COMPOUNDS OF NITROGEN, CARBON DIOXIDE, CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

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SECTION VIII 

EMPLOYEE PROTECTION

RESPIRATORY PROTECTION

USE VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS - AT LEAST 10 AIR CHANGES PER HOUR ARE RECOMMENDED FOR GOOD GENERAL ROOM VENTILATION. IF EXPOSURE EXCEEDS THE PEL/TLV, USE THE APPROPRIATE NIOSH-APPROVED RESPIRATOR.

PROTECTIVE CLOTHING

WEAR SAFTEY GLASSES, GOGGLES, OR A SPLASH SHIELD TO PREVENT EYE CONTACT. CONTACT LENSES SHOULD NOT BE WORN. WEAR NEOPRENE OR OTHER CHEMICAL RESISTANT GLOVES TO PREVENT SKIN CONTACT.

ADDITIONAL PROTECTIVE MEASURES

EYE WASH FOUNTAINS AND SAFETY SHOWERS SHOULD BE AVAILABLE FOR USE IN AN EMERGENCY.

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SECTION IX \_\_\_\_\_\_

ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES

LARGE SPILLS >> EVACUATE THE HAZARD AREA OF UNPROTECTED PERSONNEL. WEAR APPROPRIATE RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK ONLY IF SAFE TO DO SO. DIKE AND CONTAIN. IF VAPOR CLOUD FORMS, WATER FOG MAY BE USED TO SUPPRESS; CONTAIN RUN-OFF. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND OR OTHER SUITABLE MATERIAL; PLACE IN NON-LEAKING CONTAINERS FOR PROPER DISPOSAL. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE; DISPOSE OF FLUSH SOLUTIONS AS ABOVE. SMALL SPILLS >> TAKE UP WITH AN ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS; SEAL TIGHTLY FOR PROPER DISPOSAL.

WASTE DISPOSAL

OBSERVE ALL FEDERAL, PROVINCIAL, AND LOCAL REGULATIONS REGARDING PROPER DISPOSAL OF WASTE MATERIAL.

SECTION X

### ADDITIONAL PRECAUTIONS

KEEP LIQUID AND VAPOR AWAY FROM HEAT, SPARKS, AND FLAME. EXTINGUISH PILOT LIGHTS, CIGARETTES AND TURN OFF OTHER POSSIBLE SOURCES OF IGNITION PRIOR TO USE AND UNTIL VAPORS ARE GONE. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM HANDLING SITE. KEEP CONTAINERS CLOSED WHEN NOT IN USE. USE WITH ADEQUATE VENTILATION. CONTAINERS, EVEN IF EMPTY, CAN CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, DRILL, GRIND, OR WELD NEAR CONTAINERS.

CONTAINERS CAN CONTAIN HAZARDOUS PRODUCT RESIDUES EVEN WHEN EMPTY. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES.

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