TUFFCOAT TM MATERIAL SAFETY DATA SHEET (MSDS)

Product Code: TUFFCOAT Product Code: TF-OC-RT-01 ====================================					HMIS CODES; H F R P 100 B		
======= <u>SECT</u>	ION 1 - MANUFACTUR	RER IDEN	TIFCA	<u>TIN</u> =====	:=====	=========	
Manufacturers' Name: AWC [Architectural Waterproofing Corporation] Address: Plot 2616 GIDC Umbergaon Emergency Phone: Back –Up (0260) 319-3000 Information Phone (022) 28883000				n]	Date Printed: Date Revised:		
======= <u>SECTION 2 – HAZARDOUS INGR EDIENTS/ SARA III INROMATION</u> =========							
Reportable components BASES	CAS no.	MM	HG	@ TF	Temp -TX-W	Weight %	
Ingredients listed below are contained within the listed ranges							
#crystalline Silica (Quartz) 14808-60-7 N/A N/A 18.5 20.5 OSHA PEL TWA: [29CFR 1910.1000, TABLE Z-1-A] 10mg/m3/ (%SiO2 +2) (Respirable fraction) ACGIH TLV TWA: 0.05mg/m3 (Respirable fraction) May also contain trace amounts of Aluminum oxide (CAS#1344-28-1), Iron oxide (CAS#1309-37-1), & Titanium Dioxide (CAS# 13463-67-7)							
Acrylic Polymer Contains: <=0.2% Aqua Ammo Manufacturers suggested guide				20C/68F	14	16	
Acrylic Copolymer Emulsion Contains: 0.0-0.1% Aqua Ammo Manufacturers suggested guide			opm.	68F/20C	14	16	
Titanium dioxide Contains: Titanium dioxide, CAS ACGIH TLV TWA: 10mg/m3, tot Aluminum hydroxide, CAS#216 Note: Titanium dioxide has bee Regulations. WHMIS: D2A- Very toxic mater	al dust, OSHA PEL TWA 45-51-2, no exposure li en classified in accorda	mits esta	blishe	d.	18 of the Co	0 ontrolled Product	
Calcium Carbonate OSHA PEL: 15mg/m3, Total Dus ACGIH TLV: 10mg/m3, total du If Silica levels above 1.0% are p	ust containing no asbes	tos and <			0 e Silica fo	12 or Both OSHA PEL	

and ACGIH TLV.

AWC » Products Specialized Coating

Nepheline syenite, various grades. 37244-96-5 N/A N/A 7 6

No exposure limits have been established for this material.

EPOXY DISPERSION MIXTURE N/A N/A 2 2

MANUFACTURER HOLDS CHEMICAL IDENTITY CONFIDENTIAL.

NO OCCUPATIONAL EXPOSURE HAS BEEN ESTABLISHED FOR THIS CHEMICAL COMPONENT.

*Diethylene glycol monobutyl ether 112-34-5 0.02 77F/20C 1 2

N exposure limits have been established.

Dow industrial hygiene suggests: 35ppm, TWA

* Indicates toxic chemical (s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

Indicates carcinogenic chemical.

NOTE: If tinted may contain Carbon Black CAS#1333-86-4 AND /OR Crystalline Silica CAS# 14808-60-7. If tinted DARK GRAY or BLACK consider these levels to be reportable.

This MSDS may be used for other colors and container sizes of this product.

Potential Health Effects

Eves:

Contact with product or exposure to vapor may cause mild/moderate irritation to the eyes.

Skin:

May cause moderate skin irritation. Causes drying of the skin.

Ingestion:

While this material has a low degree of toxicity, ingestion of large quantities may cause irritation of the digestive tract.

Inhalation;

May cause irritation to respiratory tract. Coughing and chest pain may result as well as shortness of breath and reduced pulmonary function.

-----SECTION 4 FIRST AID MEASURES-------

EYES:

Immediately flush with copious amount of water for at least 15 minutes. If redness, itching, or a burning sensation persists consult a physician or ophthalmologist immediately.

SKIN:

Wash with plenty of soap and water. Remove contaminated Clothing and shoes, wash before reuse. If irritation persists consult a physician.

INGESTION:

Not considered a potential route of exposure. If swallowed, give 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Consult a physician immediately.

INHALATION:

Remove from source of exposure and in to fresh air. If symptoms persist consult a physician immediately. If not breathing, give artificial respiration and call emergency medical services immediately.

NOTE TO PHYSICIAN:

No specific antidote. Supportive care, treatment based on judgment of the physician in response to reactions of the patient.

FLAMMABLE PROPERTIES: FLASH POINT: 220F/ 104.4C LOWER FLAMMABLE LIMITS: 0.85 UPPER FLAMMABLE LIMIT: 24.6 AUTO IGNATION TEMPERATURE: N/A

EXTINGUISHING MEDIA:

Foam, CO₂, dry chemical, water fog or spray, as appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES:

Do not enter any enclosed or confined fire space without full protective equipment, including self - contained breathing apparatus (pressure -demand MSHA/NIOSH approved or equivalent) to protect against the hazardous effects of combustion products and oxygen deficiency.

SMALL SPILLS

Stop spill at source. Pick up with mop and shovel. Rinse well with water.

LARGE SPILL:

Wear skin, eye & respiratory protection during clean-up.

Evacuate area of all non-essential personnel. Ventilate spill area. Dike, and contain and /or absorb with inert material (sand, earth or other suitable material) to prevent entry into storm drains, sewers and other unauthorized treatment/ drainage systems and natural waterways. Scoop with lid. If spill occurs near air inlets or inside, turn off heating or air-conditioning equipment to prevent contaminating building.

HANDLING AND STORAGE:

Keep from freezing. Keep container cool and dry. Use and store this product with adequate ventilation. Keep product containers tightly closed when not in use. Avoid subjecting this product to extreme temperature variations.

OTHER PRECAUTIONS:

Avoid skin or eye contact. Avoid prolonged or repeated breathing of vapors and mists. If spilled on clothing, launder before reuse. Do not take internally. Use only in a well ventilated area. Keep out of the reach of children.

In outside spray, mixing and rolling applications situate workers upwind of operation & provide airflow in a downwind direction so as to carry fumes and residual spray away from workers.

Provide sufficient mechanical (general and/ or local exhaust)

Ventilation to maintain exposure below TLV (s).

RESPIRATORY PROTECTION:

Wear a NIOSH approved respirator appropriate for the vapor or mist concentration at the point of use. Appropriate respirators may be a full-face pieces or a hall mask air-purifying cartridge respirator equipped for organic vapors/ mists, a self-contained breathing apparatus in the pressure demand mode, or a supplied-air respirator. Refer to OSHA standard 29 CFR 1910.134 for additional information.

SKIN PROTECTION:

The uses of nit rile rubber gloves is advised to prevent skin contact and possible irritation.

EYE PROTECTION:

Safety glasses with side-shields.

=======SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES=================

BOILING RANGE: 212F/100C - 404F/ 2230C

MELTING POINT: N/A

SPECIFIC GRAVITY (H2₀=1): 1.4288 VAPOR DENSITY (Air=1): N/A

VAPOR PRESSURE: 17mm Hg @ 20C/ 68F WATER

EVAPORATION RATE (N- Butyl Acetate =1): slower than either

COATING V.O.C.: 0.87 1b/g1 COATING V.O.C.: 104 g/1 MATERIAL V.O.C.: 0.4 1b/g1 MATERIAL V.O.C.: 48 g/1

SOLUBILITY IN WATER: SOLUBLE APPEARANCE: PIGMENTED, VISCOUS. ODOR: FAINT AMMONIACAL ODOR.

pH: 8.0

STABILITY:

STABLE

CONDITIONS TO AVOID:

EXTREMELY HOT OR COLD TEMPERATURES.

INCOMPATIBILITY (MATERIALS TO AVOID):

AVOID CONTACT WITH STRONG ACIDS AND STRONG OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS

THERMAL DECOMPOSITION MAY YIELD CARBON MONOXIDE AND CARBON DIOXIDE. UNIDENTIFIED ORGANIC COMPOUNDS IN FUMES AND SMOKE MAY BE FORMED DURING COMBUSTION.

HAZARDOUS POLYMERIZATION:

NOT EXPECTED TO OCCUR.

=========SECTION 11 TOXICOLOGICAL INFORMATION=================

*Data is for individual components of preparation.

Materials having known chronic/acute effects on eyes:

DIETHYLENE GLYCOL MONBUTYL ETHER CAS# 112-34-5 RABBIT: MODERATE

Acrylic polymer: Slight irritation (rabbit)

Materials having a known dermal toxicity:

DIETHYLENE GLYCOL MONBUTYL ETHER CAS# 112-34-5

SKIN IRRITATION- RABBIT: SLIGHT SKIN IRRITATION- GUINEA PIG: SLIGHT DERMAL LD-50 (RABBIT): 2764mg/kg

Crystalline silica, CAS: 14808-60-7: skin irritation-due to the high tendency to absorb moisture (and oils), many individuals experience excessively dry, chapped skin with prolonged or repeated exposure.

Materials having a known oral toxicity:

DIETHYLENE GLYCOL MONBUTYL ETHER CAS # 112-34-5

ORAL LD-50 (RAT): 7292 mg/kg. ORAL LD-50 (MOUSE): 2406 mg/kg.

ACRYLIC POLYMER LD-50 > 5,000mg/kg (rat)

Materials having a known Inhalation hazard:

Crystalline Silica, CAS: 14808-60-7. Respirable Crystalline Silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death. Crystalline Silica inhaled from occupational sources is also classified as carcinogenic to humans. There is also evidence that exposure to respirable silicosis or the disease silicosis is associated with the increased incidence of leroderma, an autoimmune disorder manifested by a fibrosis of the skin and internal organs. Silicosis increases the risk of tuberculosis. There are always several studies suggesting that exposure to respirable crystalline silica or that the disease silicosis is associated with the increased incidence of kidney disorders.

Identified Acute/ short-term Effects.

Headache, nausea, abdominal pain and irritation of the nose, throat and lungs. Skin and eye irritation.

Identified Carcinogens/ longterm Effects:

Contains crystalline silica CAS#14808-60-7. Overexposure to respirable crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. This dust can be formed when sanding or otherwise mechanically abrading the dried product surface. Follow all OSHA guidelines and precautions to avoid over exposure. The international agency for research on cancer (IARC) has evaluated in volume 68, monographs on the evaluation of the carcinogenicity risk of chemicals to humans, crystalline silica in the form of quartz and amorphous silica (1997), that there is "sufficient evidence for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite from occupational exposures has been classified as a group 1 carcinogen by the IARC.

Identified Teratogens:

INFORMATION BASED ON THE TOXICITY PROFILES FOR DIETHYLENE

GLYCOL MONOBUTYL ETHER: CAS#112-34-5

DERMAL STUDY (RABBIT): NOEL FOR MATERNAL TOXICITY = 5mg/kg/day (HIGHEST DOSE TESTED)

; NOEL FOR DEVELOPMENTAL TOXICITY = 1000mg/kg/day (HIGHEST DOSE

TESTED).

ORAL STUDY (RAT) : NOEL FOR MATERNAL TOXICITY = 5mg/kg,

; NOEL FOR MATERNALTOXICITY = NOT ESTABLISHED,

; NOEL FOR DEVELOPMENTAL TOXICITY = 633 mg/kg/day (HIGHEST DOSE

TESTED).

Identified Reproductive toxins:

INFORMATION BASED ON THE TOXICITY PROFILES FOR DIETHYLENE

GLYCOL MONOBUTYL ETHER: CAS#112-34-5

DERMAL STUDY (13-WEEK, RAT): NOEL FOR MATERNAL/ PATERNAL TOXICITY = 2mg/kg/day (HIGHEST

DOSE TESTED)

; NOEL FOR MATERNAL/ PATERNAL FERTILITY = 2mg/kg/day (HIGHEST

DOSE TESTED).

; NOEL FOR DEVELOPMENTAL TOXICITY = 2mg/kg/day (HIGHEST DOSE

TESTED).

ORAL STUDY (RAT): NOEL FOR MATERNAL/ PATERNAL FERTILITY = 1000mg/kg/day (HIGHESTED DOSE

TESTED);

; NOEL FOR EMBRYO/ FERTOTOXICITY = 1000 mg/kg/

Identified Mutagens:

NO DATA.

Ecotoxicological effects on plants and animals:

DIETHYLENE GLYCOL MONBUTYL ETHER CAS # 112-34-5:

OXYGEN DEMAND COD: 2.08g OXYGEN/g

BOD-5: 0.25g OXYGEN/g

ACUTE AQUATIC EFFECTS DATA: 24 HR LC-50 (GOLDFISH): 2700 mg/l

96 HR LC-50 (BLUEGILL SUNFISH): 1300 mg/l.

CHEMICAL FATE:

IN OUTSIDE SPRAY, MIXING AND ROLLING APPLICATIONS SITUATE WORKERS UPWIND OF OPERATION & PROVIDE AIRFLOW IN A DOWNWIND DIRECTION SO AS TO CARRY FUMES & RESIDUAL SPRAY AWAY FROM WORKERS.

LOCAL EXHAUST VENTILATION RECOMMENDED IF GENERATING VAPOR, DUST OR MIST. TURN OFF HEATING AND/ OR AIR CONDITIONING EQUIPMENT TO PREVENT CONTAMINATING BUILDING.

IF EXHAUST VENTILATION IS NOT ADEQUATE, USE MSHA OR NIOSH APPROVED RESPIRATOR. REFER TO OSHA STANDARD 29 CFR 1910.94 FOR GUIDELINES.

INSTRUCTIONS:

Whatever cannot be saved for reuse should be transferred to an appropriate and approved waste disposal facility. Consult appropriate national, state & local regulatory agencies to ascertain proper disposal procedures.

SHIPPING INFORMATION:

DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION: 49CFR 172.101
DEPARTMENT OF TRANSPORTATION (DOT) DESCRIPTION : NOT REGULATED

(Not meant to be all inclusive- selected regulations represented) US REGULATIONS:

STATUS OF SUBSTANCES LISTS:

THE CONCENTRATIONS SHOWN IN SECTION II ARE MAXIMUM CEILING LEVELS (WEIGHT %) TO BE USED FOR CALCULATIONS FOR REGULATIONS.

A REPORTABLE QUANTITY IS A QUANTITY OF A HAZARDOUS SUBSTANCE THAT TRIGGERS REPORTINGS REQUIREMENTS UNDER THE COMPREHENSIVE ENVIRONMENTAL RESPONSE CONPENSATION & LIABILITY ACT (CERCLA). IF A SPILL OF A SUBSTANCE EXCEEDS its REPORTABLE QUANTITY (RQ) IN CFR 302.3 TABLE 40 302.4 APPENDIX A & 302.4 APPENDIX B, THE RELEASE MUST BE REPORTED TO THE NATIONAL RESPONSE CENTRE AT (800) 424-8802, THE STATE EMERGENCY RESPONSE COMMISSION (SERC), AND COMMUNITY EMERGENCY CO-ORDINATORS LIKELY TO BE AFFECTED.

COMPONENTS PRESENT THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

NONE KNOWN

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III REQUIRES EMERGENCY PLANNING BASED ON THE THRESHOLD QUANTITIES (TPQ'S) AND RELEASE REPORTING BASED ON REPORTABLE QUANTITIES (RQ'S) IN 40 CFR 355 APPENDIX A&B EXTREMELY HAZARDOUS SUBSTANCES. THE EMERGENCY PLANNING AND RELEASE REQUIREMENTS OF 40 CFR 355 APPLY TO ANY FACILITY AT WHICH THERE IS PRESENT AN AMOUNT OF ANY EXTREMELY HAZARDOUS SUBSTANCES EQUAL TO OR IN EXCESS OF IT'S SHARESHOLD PLANNING QUANTITY.

COMPONENTS PRESENT THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

NONE KNOWN

EPCRA 40 CFR 372 (SECTION 313 REQUIRES EPA AND THE STATES TO ANNUALLY COLLECT DATA ON RELEASE OF CERTAIN TOXIC MATERIALS FROM INDUSTRIAL FACILITIES, AND MAKE THE DATA AVAILABLE TO THE PUBLIC IN THE TOXICS RELEASE INVENTORY (TRI), TH INFORMATION MUST BE INCLUDED IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED OR COMPILED FOR THIS MATERIAL. REPORTING THRESHOLD: STANDARD: A FACILITY MUST REPORT IF IT MANUFACTURES (INCLUDING IMPORTS) OR PROCESSES 25,000 POUNDS OR MORE OR OTHERWISE USES 10,000 POUNDS OR MORE OF A LISTED TOXIC CHEMICAL DURING THE CALENDAR YEAR.

COMPONENTS PRESENT THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE: SEE SECTION II

THE COMPONENTS OF THIS PRODUCT ARE LISTED OR EXCLUDED FROM LISTING ON THE US TOXIC SUBSTANCE CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY. THE MIXTURE SHALL BE ASSUMED TO PRESENT THE SAME HEALTH HAZARDS AS DO THE COMPONENTS WHICOMPRISE ONE PERCENT (BY WEIGHT OR VOLUME) OR GREATER OF THE MIXTURE, EXCEPT THAT MIXTURE SHALBE ASSUMED TO PRESENT A CARCINOGENIC HAZARD IF IT HAS A COMPONENT IN CONCENTRATIONS OF 0 .1 PERCENT GREATER. THE REMAINING PERCENTAGE OF UNSPECIFIED INGREDIENTS, IF ANY, ARE NOT CONTAINED IN ABOVE DEMINIS CONCENTRATIONS AND/ OR ARE BELIEVED TO BE NON-HAZARDOUS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910. 1200), AND MAY CONSIST OF PIGMENTS, FILLERS, DEFOAMERS, WETTING AGENTS, RESINS, DRYERS, ANTI-BACTERIAL AGENTS, WATER AND/ OR SOLVENTS IN VARYING CONCENTRATIONS.

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS:

THIS PRODUCT CONTAINS THE FOLLOWING IN RECORDABLE AMOUNTS:

TITANIUM DIOXIDE CAS#13463-67-7

WHMIS CLASSIFICATION: D2A

WHMIS HEALTH EFFECTS CRITERIA MET BY THIS CHEMICAL:

VERY TOXIC MATERIAL CAUSING OTHER TOXIC EFFECTS

THIS MSDS COVERS MULTIPLE BASES OF THE SAME PRODUCT LINE. CERTAIN BASES DO NOT CONTAIN TITANIUM DIOXIDE. PLEASE CHECK SECTION 2 FOR DETAILS ON CONTENTS.

CANADIAN ENVIRONMENTAL PRITECTION ACT (CEPA):

ALL OF THE COMPONENTS OF THIS PRODUCT ARE EXEMPT OR LISTED ON THE DSL. SEE SECTION II FOR COMPOSITION /INFORMATION ON INGREDIENTS.

EINECS:

ALL OF THE COMPONENTS OF THIS PRODUCT ARE LISTED IN THE EINECS INVENTORY OR ARE EXEMPTING FROM NOTIFICATION REQUIREMENTS.

STATE REGULATIONS:

CALIFORNIA:

California proposition 65: The following statement is made in order to comply with The California Safe Drinking Water & Toxic Enforcement Act of 1986

"WARNINGS": This product contains the chemical(s) appearing below known to the State of California to:

A: CAUSE CANCER

Crystalline Silica (Airborne Particles of Respirable size), CAS#14-808-60-7

*If tinted contains carbon black: CAS#1333-86-4 and may also contain trace amounts of crystalline silica: CAS#14-808-60-7

B. CAUSES Birth Defects or other Reproductive Harm:

NONE KNOWN

In addition to the above named chemical(s) (if any) , this product may contain trace amounts of chemicals, known to the State of California, to cause Cancer or Birth Defects and other Reproductive Harm

DELAWARE:

NONE KNOWN

FLORIDA:

NONE KNOWN

IDAHO:

CRYSTALLINE SILICA CAS # 14808-60-7

IDAHO AIR POLLUTANT LIST:

TITLE 585 – AAC: 0.005

TITLE 586 – AAAC: -
TITLE 585 – EL: 0.006

TITLE 586 – EL: -
TITLE 585 – OEL: 0.1

TITLE 586 – OEF: --

MASSACHUSETTS

CALCIUM CARBONATE CAS#1317-65-3 SUBSTANCE CODES: 4

SILICA CAS#14808-60-7 SUBSTANCE CODES: 1, 2, 4, *E*C*F5

MICHIGAN: NONE KNOWN MINNESOTA:

LISTED IN THE MINNESOTA HAZARDOUS SUBSTANCES LIST:

CHEMICAL NAME: SILICA CAS#14808-60-7

CODES: --

RATING: --

STATUS: CARCINOGEN?

NEW JERSEY:
NONE KNOWN
NEW YORK:
NONE KNOWN
PENNYSYLVANIA:

CALCIUM CARBONATE CAS#1317-65-3 CODE: E SILICA CAS#14808-60-7 CODE: --

WASHINGTON:

WASHINGTON AIR CONTAMINANT:

CALCIUM CARBONATE (RESPIRABLE) CAS#1317-65-3

WA ppm mg/Cubic Meter

TWA UNK 5
STEL UNK UNK
CEILING UNK UNK

SKIN: UNK

SILICA CAS#14808-60-7

WA SHINGTON AIR CONTAMINANT: ppm mg/Cubic Meter

TWAUNK0.1STELUNKUNKCEILINGUNKUNK

SKIN: UNK
WISCONSIN:
NONE KNOWN
WEST VIRGINIA:

THE FOLLOWING IS ON THE WEST VIRGINIA TOXIC AIR POLLUTANT LIST:

CALCIUM CARBONATE CAS#1317-65-3 (pounds per year):

THE FOLLOWING IS ON THE WEST VIRGINIA TOXIC AIR POLLUTANT LIST:

SILICA CAS#14808-60-7 (pounds per year):

HMIS® III

Health : 2*
Flammability : 0
Physical Hazard : 0

*Following Health rating Indicates Chronic/ Carcinogenic Effects

HMIS® III Personal Protection : I

This rating is for the product as it is packaged. This rating will need to be adjusted by the user based on conditions of use.

The information contained herein relates only to the specific material identified. AWC believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reability, or completeness of the information. To assure proper use and disposal of these materials & the safety & health of employees & customers, AWC urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

AWC [Architectural Waterproofing Corporation]

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Our products are guaranteed to meet established quality control standards. Information contained in our technical data is based on laboratory and field testing, but is subject to change without prior notice. No guarantees of accuracy are given or implied, nor does AWC assume any responsibility for coverage, performance or injuries resulting from storage, handling or use of our products. Liability, if any, is limited to product replacement or, if applicable, to the terms stated within the executed project warranty.