

1 IDENTIFICATION

PRODUCT NAME: ESPRESSO STAIN

CHEMICAL NAME: FIREBRICK STAIN AND COLOR ENHANCER

PRODUCT USE: INDUSTRIAL APPLICATIONS

MANUFACTURER: ALSEY REFRACTORIES COMPANY
266 STATE ROUTE 106 SOUTH
ALSEY, IL 62610
1-314-963-7900

EMERGENCY CONTACT: 1-314-963-7900
MONDAY THRU THURSDAY, 09:00 – 15:00 US CENTRAL TIME [UTC-5]

2 HAZARD IDENTIFICATION

HAZARD CLASSIFICATION: SKIN CORROSION/IRRITATION – CATEGORY 4
ORAL INGESTION – CATEGORY 4
INHALATION – CATEGORY 2

SIGNAL WORD: **DANGER**

HAZARD STATEMENTS: ACUTE TOXICITY-DERMAL
ACUTE TOXICITY-ORAL
ACUTE TOXICITY-INHALATION

PICTOGRAM:



PRECAUTIONARY STATEMENTS:
PREVENTION: DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED.
WASH THOROUGHLY AFTER HANDLING.

SUPPLEMENTAL INFORMATION:
99.71% OF THE MIXTURE CONSISTS OF COMPONENTS OF UNKNOWN ACUTE ORAL TOXICITY. 81.31% OF THE MIXTURE CONTAINS COMPONENTS OF UNKNOWN INHALATION TOXICITY.

RESPONSE: INGESTION: CALL A POISON CENTER IF SWALLOWED
SKIN IRRITATION: WASH WITH SOAP AND WATER.
INHALATION: REMOVE TO FRESH AIR
SEEK MEDICAL ATTENTION IF NECESSARY

3 COMPOSITION/INFORMATION ON INGR EDIENTS

CHEMICAL NAME	CAS-NO	WEIGHT %
COLLOIDAL SILICA	7631-86-9	<10
MANGANESE FERRITE SPINEL	75864-23-2	<10
ZINC OXIDE	1314-13-2	<1

4 FIRST AID MEASURES

SKIN CONTACT: IF SKIN IRRITATION OCCURS, WASH THOROUGHLY WITH SOAP AND WATER.
 ORAL: CALL POISON CENTER
 INHALTION: REMOVE TO FRESH AIR
 ROUTES OF ENTRY: MOUTH, NOSE, SKIN

5 FIREFIGHTING MEASURES

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO₂, DRY CHEMICAL, OTHER.
 PRECAUTIONS FOR FIREFIGHTERS: WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.
 UNUSUAL FIRE & EXPLOSION HAZARDS: CLOSED CONTAINERS CAN BUILD PRESSURE FROM HEAT AND RUPTURE VIOLENTLY. KEEP COOL WITH WATER. PRODUCT WILL NOT BURN BUT MAY SPATTER IF TEMPERATURE EXCEEDS BOILING POINT OF WATER.
 DO NOT USE WATER JET AS AN EXTINGUISHER, AS THIS WILL SPREAD THE FIRE.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

DURING FIRE, GASES HAZARDOUS TO HEALTH MAY BE FORMED.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING MUST BE WORN IN CASE OF FIRE.

FIRE FIGHTING EQUIPMENT/INSTRUCTIONS

MOVE CONTAINERS FROM FIRE AREA IF YOU CAN DO SO WITHOUT RISK.

SPECIFIC METHODS USE STANDARD FIREFIGHTING PROCEDURES AND CONSIDER THE HAZARDS OF OTHER INVOLVED MATERIALS.GENERAL FIRE HAZARDS NO UNUSUAL FIRE OR EXPLOSION HAZARDS NOTED

6 ACCIDENTAL RELEASE MEASURES

KEEP UNNECESSARY PERSONNEL AWAY. KEEP PEOPLE AWAY FROM AND UPWIND OF SPILL/LEAK. WEAR APPROPRIATE PROTECTIVE EQUIPMENT AND CLOTHING DURING CLEAN-UP. DO NOT TOUCH DAMAGED CONTAINERS OR SPILLED MATERIAL UNLESS WEARING APPROPRIATE PROTECTIVE CLOTHING. ENSURE ADEQUATE VENTILATION. LOCAL AUTHORITIES SHOULD BE ADVISED IF SIGNIFICANT SPILLAGES CANNOT BE CONTAINED. FOR PERSONAL PROTECTION, SEE SECTION 8 OF THE SDS. METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

LARGE SPILLS: STOP THE FLOW OF MATERIAL, IF THIS IS WITHOUT RISK. DIKE THE SPILLED MATERIAL, WHERE THIS IS POSSIBLE. COVER WITH PLASTIC SHEET TO PREVENT SPREADING. ABSORB IN VERMICULITE, DRY SAND OR EARTH AND PLACE INTO CONTAINERS. FOLLOWING PRODUCT RECOVERY, FLUSH AREA WITH WATER.

SMALL SPILLS: WIPE UP WITH ABSORBENT MATERIAL (E.G. CLOTH, FLEECE). CLEAN SURFACE THOROUGHLY TO REMOVE RESIDUAL CONTAMINATION.

NEVER RETURN SPILLS TO ORIGINAL CONTAINERS FOR RE-USE. FOR WASTE DISPOSAL, SEE SECTION 13 OF THE SDS. ENVIRONMENTAL PRECAUTIONS AVOID DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND.

7 HANDLING AND STORAGE

HANDLING: ENSURE PROPER VENTILATION. KEEP RESPIRATORY DEVICE AVAILABLE.

STORAGE: STORE IN ORIGINAL CONTAINER; AWAY FROM INCOMPATIBLE MATERIALS.

AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED EXPOSURE. DO NOT TASTE OR SWALLOW.

WHEN USING, DO NOT EAT, DRINK OR SMOKE. PROVIDE ADEQUATE VENTILATION. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. WASH HANDS THOROUGHLY AFTER HANDLING. WASH CONTAMINATED CLOTHING BEFORE REUSE. OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES. USE CARE IN HANDLING/STORAGE.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES

CHEMICAL	CAS-NO	OSHA PEL (RESPIRABLE DUST)
COLLOIDAL SILICA	7631-86-9	TWA 0.8 mg/m ³ , 20 MPPCF
MANGANESE FERRITE SPINEL	75864-23-2	5 mg/m ³ RESPIRABLE, 15 mg/m ³ TOTAL DUST, TWA 0.1 mg/m ³ RESPIRABLE
ZINC OXIDE	1314-13-2	5 mg/m ³ TOTAL DUST, STEL 10 mg/m ³ , TWA 0.02 mg/m ³ RESPIRABLE

BIOLOGICAL LIMIT VALUES NO BIOLOGICAL EXPOSURE LIMITS NOTED FOR THE INGREDIENT(S).

APPROPRIATE ENGINEERING CONTROLS

GOOD GENERAL VENTILATION (TYPICALLY 10 AIR CHANGES PER HOUR) SHOULD BE USED. VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS. IF APPLICABLE, USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO MAINTAIN AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS. IF EXPOSURE LIMITS HAVE NOT BEEN ESTABLISHED, MAINTAIN AIRBORNE LEVELS TO AN ACCEPTABLE LEVEL. INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION WEAR SAFETY GLASSES WITH SIDE SHIELDS (OR GOGGLES).

SKIN PROTECTION

HAND PROTECTION WEAR APPROPRIATE CHEMICAL RESISTANT GLOVES. SUITABLE GLOVES CAN BE RECOMMENDED BY THE GLOVE SUPPLIER.

OTHER WEAR APPROPRIATE CHEMICAL RESISTANT CLOTHING. RESPIRATORY PROTECTION IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT. THERMAL HAZARDS WEAR APPROPRIATE THERMAL PROTECTIVE CLOTHING, WHEN NECESSARY.

GENERAL HYGIENE CONSIDERATIONS

KEEP AWAY FROM FOOD AND DRINK. ALWAYS OBSERVE GOOD PERSONAL HYGIENE MEASURES, SUCH AS WASHING AFTER HANDLING THE MATERIAL AND BEFORE EATING, DRINKING, AND/OR SMOKING. ROUTINELY WASH WORK CLOTHING AND PROTECTIVE EQUIPMENT TO REMOVE CONTAMINANTS.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	BROWN LIQUID	AUTO IGNITION:	PRODUCT IS NOT SELF-IGNITING
PHYSICAL STATE:	LIQUID	ODOR:	MILD
PH:	NA	WATER SOLUBILITY:	NOT AVAILABLE
FLASH POINT:	NOT APPLICABLE	EXPLOSION LIMITS:	NOT AVAILABLE
BOILING POINT:	~212 °F (> 100 °C)	MELTING POINT:	NOT AVAILABLE
SPECIFIC GRAVITY:	10.24 LB/GALLON		

10 STABILITY AND REACTIVITY

STABILITY: PRODUCT IS STABLE UNDER NORMAL CONDITIONS OF USE, STORAGE, AND TRANSPORTATION.

INCOMPATIBLE PRODUCTS: FLUORINE AND CHLORINE

CONDITIONS TO AVOID: AVOID INCOMPATIBLE MATERIALS

11 TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE

INHALATION HARMFUL IF INHALED. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE BY INHALATION. SKIN CONTACT NO ADVERSE EFFECTS DUE TO SKIN CONTACT ARE EXPECTED. EYE CONTACT DIRECT CONTACT WITH EYES MAY CAUSE TEMPORARY IRRITATION. INGESTION HARMFUL IF SWALLOWED.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS
DIRECT CONTACT WITH EYES MAY CAUSE TEMPORARY IRRITATION.

INFORMATION ON TOXICOLOGICAL EFFECTS ACUTE TOXICITY HARMFUL IF INHALED. HARMFUL IF SWALLOWED. SKIN

CORROSION/IRRITATION PROLONGED SKIN CONTACT MAY CAUSE TEMPORARY IRRITATION. SERIOUS EYE DAMAGE/EYE IRRITATION DIRECT CONTACT WITH EYES MAY CAUSE TEMPORARY IRRITATION.

RESPIRATORY OR SKIN SENSITIZATION

RESPIRATORY SENSITIZATION NOT A RESPIRATORY SENSITIZER. SKIN SENSITIZATION THIS PRODUCT IS NOT EXPECTED TO CAUSE SKIN SENSITIZATION.

GERM CELL MUTAGENICITY NO DATA AVAILABLE TO INDICATE PRODUCT OR ANY COMPONENTS PRESENT AT GREATER THAN 0.1% ARE MUTAGENIC OR GENOTOXIC. CARCINOGENICITY THIS PRODUCT IS NOT CONSIDERED TO BE A CARCINOGEN BY IARC, ACGIH, NTP, OR OSHA.

IARC MONOGRAPHS. OVERALL EVALUATION OF CARCINOGENICITY

COLLOIDAL SILICA (CAS 7631-86-9) 3 NOT CLASSIFIABLE AS TO CARCINOGENICITY TO HUMANS. OSHA SPECIFICALLY **REGULATED SUBSTANCES (29 CFR 1910.1001-1050)**

NOT LISTED. US. NATIONAL TOXICOLOGY PROGRAM (NTP) REPORT ON CARCINOGENS

NOT AVAILABLE. REPRODUCTIVE TOXICITY THIS PRODUCT IS NOT EXPECTED TO CAUSE REPRODUCTIVE OR **DEVELOPMENTAL EFFECTS.**

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

NOT CLASSIFIED.

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

ASPIRATION HAZARD NOT AN ASPIRATION HAZARD. CHRONIC EFFECTS MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. PROLONGED INHALATION MAY

BE HARMFUL.

12 ECOLOGICAL INFORMATION

ECO TOXICOLOGICAL/CHEMICAL FATE INFORMATION: ECOLOGICAL INFORMATION ECOTOXICITY THE PRODUCT IS NOT CLASSIFIED AS ENVIRONMENTALLY HAZARDOUS. HOWEVER, THIS DOES NOT EXCLUDE THE POSSIBILITY THAT LARGE OR FREQUENT SPILLS CAN HAVE A HARMFUL OR DAMAGING EFFECT ON THE ENVIRONMENT. COMPONENTS SPECIES TEST RESULTS ZINC OXIDE (CAS 1314-13-2) AQUATIC FISH LC50 FATHEAD MINNOW (PIMEPHALES PROMELAS) 2246 MG/L, 96 HOURS * ESTIMATES FOR PRODUCT MAY BE BASED ON ADDITIONAL COMPONENT DATA NOT SHOWN. PERSISTENCE AND DEGRADABILITY NO DATA IS AVAILABLE ON THE DEGRADABILITY OF THIS PRODUCT. BIOACCUMULATIVE POTENTIAL NO DATA AVAILABLE. MOBILITY IN SOIL NO DATA AVAILABLE. OTHER ADVERSE EFFECTS NO OTHER ADVERSE ENVIRONMENTAL EFFECTS (E.G. OZONE DEPLETION, PHOTOCHEMICAL OZONE CREATION POTENTIAL, ENDOCRINE DISRUPTION, GLOBAL WARMING POTENTIAL) ARE EXPECTED FROM THIS COMPONENT.

13 DISPOSAL INFORMATION

DISPOSAL OF PRODUCT: COLLECT AND RECLAIM OR PLACE IN SEALED CONTAINERS, PRODUCT MAY BE DISPOSED OF IN A LICENSED WASTE FACILITY, IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

HAZARDOUS WASTE CODE: THE WASTE CODE SHOULD BE ASSIGNED IN DISCUSSION BETWEEN THE USER, THE PRODUCER AND THE WASTE DISPOSAL COMPANY.

14 TRANSPORT INFORMATION

U.S.A. DOT: NOT REGULATED.

CANADIAN TDG: NOT REGULATED.

ADDITIONAL INFORMATION: NOT DANGEROUS ACCORDING TO AVAILABLE INFORMATION.

15 REGULATORY INFORMATION

THIS PRODUCT IS A "HAZARDOUS CHEMICAL" AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. ONE OR MORE COMPONENTS ARE NOT LISTED ON TSCA. TSCA SECTION 12(B) EXPORT NOTIFICATION (40 CFR 707, SUBPT. D)

NOT REGULATED. CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4)

MANGANESE FERRITE SPINEL (CAS 75864-23-2) LISTED. ZINC OXIDE (CAS 1314-13-2) LISTED. SARA 304 EMERGENCY RELEASE NOTIFICATION

NOT REGULATED. OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050)

NOT LISTED. SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA)

HAZARD CATEGORIES IMMEDIATE HAZARD - YES

DELAYED HAZARD - YES FIRE HAZARD - NO PRESSURE HAZARD - NO REACTIVITY HAZARD - NO SARA 302 EXTREMELY HAZARDOUS SUBSTANCE

NOT LISTED. SARA 311/312 HAZARDOUS CHEMICAL

NO

SARA 313 (TRI REPORTING)

CHEMICAL NAME CAS NUMBER % BY WT. MANGANESE FERRITE SPINEL 75864-23-2 <10 ZINC OXIDE 1314-13-2 <1

OTHER FEDERAL REGULATIONS

CLEAN AIR ACT (CAA) SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPS) LIST

MANGANESE FERRITE SPINEL (CAS 75864-23-2) CLEAN AIR ACT (CAA) SECTION 112(R) ACCIDENTAL RELEASE PREVENTION (40 CFR 68.130)

NOT REGULATED. SAFE DRINKING WATER ACT (SDWA)

NOT REGULATED.

US STATE REGULATIONS

US. CALIFORNIA CONTROLLED SUBSTANCES. CA DEPARTMENT OF JUSTICE (CALIFORNIA HEALTH AND SAFETY CODE SECTION 11100)

NOT LISTED. US. MASSACHUSETTS RTK - SUBSTANCE LIST

COLLOIDAL SILICA (CAS 7631-86-9) ZINC OXIDE (CAS 1314-13-2) US. NEW JERSEY WORKER AND COMMUNITY RIGHT-TO-KNOW ACT

COLLOIDAL SILICA (CAS 7631-86-9) MANGANESE FERRITE SPINEL (CAS 75864-23-2) ZINC OXIDE (CAS 1314-13-2) US. PENNSYLVANIA

WORKER AND COMMUNITY RIGHT-TO-KNOW LAW

COLLOIDAL SILICA (CAS 7631-86-9) ZINC OXIDE (CAS 1314-13-2) US. RHODE ISLAND RTK

MANGANESE FERRITE SPINEL (CAS 75864-23-2) ZINC OXIDE (CAS 1314-13-2) US. CALIFORNIA PROPOSITION 65

WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. US - CALIFORNIA

PROPOSITION 65 - CRT: LISTED DATE/CARCINOGENIC SUBSTANCE

CRYSTALLINE QUARTZ SILICA (CAS 14808-60-7) LISTED: OCTOBER 1, 1988

INTERNATIONAL INVENTORIES

COUNTRY(S) OR REGION INVENTORY NAME ON INVENTORY (YES/NO)* AUSTRALIA AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) NO CANADA DOMESTIC SUBSTANCES LIST (DSL) NO CANADA NON-DOMESTIC SUBSTANCES LIST (NDSL) NO CHINA INVENTORY OF EXISTING CHEMICAL SUBSTANCES IN CHINA (IECSC) NO EUROPE EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL NO SUBSTANCES (EINECS) EUROPE EUROPEAN LIST OF NOTIFIED CHEMICAL SUBSTANCES (ELINCS) NO JAPAN INVENTORY OF EXISTING AND NEW CHEMICAL SUBSTANCES (ENCs) NO KOREA EXISTING CHEMICALS LIST (ECL) NO NEW ZEALAND NEW ZEALAND INVENTORY NO PHILIPPINES PHILIPPINE INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES NO (PICCS) UNITED STATES & PUERTO RICO TOXIC SUBSTANCES CONTROL ACT (TSCA) INVENTORY NO *A "YES" INDICATES THAT ALL COMPONENTS OF THIS PRODUCT COMPLY WITH THE INVENTORY REQUIREMENTS ADMINISTERED BY THE GOVERNING COUNTRY(S) A "NO" INDICATES THAT ONE OR MORE COMPONENTS OF THE PRODUCT ARE NOT LISTED OR EXEMPT FROM LISTING ON THE INVENTORY ADMINISTERED BY THE GOVERNING COUNTRY(S).

16 OTHER INFORMATION

HMIS® RATINGS HEALTH: 2*

NFPA RATINGS: FLAMMABILITY: 0 PHYSICAL HAZARD: 0 HEALTH: 2 INSTABILITY: 0

NOTE: THIS SAFETY DATA SHEET CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION AND IS NOT TO BE DISCLOSED TO THE GENERAL PUBLIC OR TO COMPETITION EXCEPT AS REQUIRED BY LAW. THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE, WHETHER ORIGINATING WITH ALSEY REFRACTORIES COMPANY OR NOT. THIS INFORMATION IS OFFERED SOLELY FOR USE IN YOUR EVALUATION OF THIS PRODUCT IN RESPECT TO SAFETY, HEALTH, AND ENVIRONMENTAL HAZARDS.

**SDS STATUS: REPLACES ALL PRIOR SDS
SDS END**