SAFETY DATA SHEET
CREAMER STAIN

1 IDENTIFICATION
PRODUCT NAME: CREAMER STAIN
CHEMICAL NAME: FIREBRICK STAIN AND COLOR ENHANCER
PRODUCT USE: RESIDENTIAL AND 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

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:
99.5% OF THE MIXTURE CONSISTS OF COMPONENTS OF UNKNOWN
ACUTE ORAL TOXICITY. 81.01% 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 INGREDIENTS
<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS-NO</th>
<th>WEIGHT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>13463-67-7</td>
<td>&lt;10</td>
</tr>
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</table>
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: EYES, SKIN, INHALATION

5 FIRE FIGHTING 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

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS-NO</th>
<th>OSHA PEL (RESPIRABLE DUST)</th>
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<tbody>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>13463-67-7</td>
<td>15 mg/m3 TOTAL DUST, ACGIH TWA 10 mg/m3</td>
</tr>
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BIOLOGICAL LIMIT VALUES NO BIOLOGICAL EXPOSURE LIMITS NOTED FOR THE INGREDIENT(S).
ENGINEERING MEASURES: 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 GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS SHOULD BE WORN.

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

SKIN & BODY PROTECTION: WEAR APPROPRIATE CHEMICAL AND THERMAL RESISTANT GLOVES AND CLOTHING.

RESPIRATORY PROTECTION: IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT.

GENERAL HYGIENE: 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.

<table>
<thead>
<tr>
<th>9 PHYSICAL AND CHEMICAL PROPERTIES</th>
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<tbody>
<tr>
<td>APPEARANCE: GRAY LIQUID</td>
</tr>
<tr>
<td>PHYSICAL STATE: LIQUID</td>
</tr>
<tr>
<td>PH: NA</td>
</tr>
<tr>
<td>FLASH POINT: NOT APPLICABLE</td>
</tr>
<tr>
<td>BOILING POINT: ~212 °F (&gt; 100 °C)</td>
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<tr>
<td>SPECIFIC GRAVITY: 9.41 lb/gallon</td>
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<tr>
<td>AUTO IGNITION: PRODUCT IS NOT SELF-IGNITING</td>
</tr>
<tr>
<td>ODOR: MILD</td>
</tr>
<tr>
<td>WATER SOLUBILITY: NOT AVAILABLE</td>
</tr>
<tr>
<td>EXPLOSION LIMITS: NOT AVAILABLE</td>
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<tr>
<th>10 STABILITY AND REACTIVITY</th>
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</thead>
<tbody>
<tr>
<td>STABILITY: PRODUCT IS STABLE UNDER NORMAL CONDITIONS OF USE, STORAGE, AND TRANSPORTATION.</td>
</tr>
<tr>
<td>INCOMPATIBLE PRODUCTS: STRONG OXIDIZING AGENTS.</td>
</tr>
<tr>
<td>CONDITIONS TO AVOID: AVOID INCOMPATIBLE MATERIALS.</td>
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<tr>
<th>11 TOXICOLOGICAL INFORMATION</th>
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<tbody>
<tr>
<td>INFORMATION ON LIKELY ROUTES OF EXPOSURE</td>
</tr>
<tr>
<td>INHALATION PROLONGED INHALATION MAY BE HARMFUL. SKIN CONTACT HARMFUL IN CONTACT WITH SKIN. EYE CONTACT DIRECT CONTACT WITH EYES MAY CAUSE TEMPORARY IRRITATION. INGESTION HARMFUL IF SWALLOWED.</td>
</tr>
<tr>
<td>SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS</td>
</tr>
<tr>
<td>DUSTS MAY IRRITATE THE RESPIRATORY TRACT, SKIN AND EYES.</td>
</tr>
<tr>
<td>INFORMATION ON TOXICOLOGICAL EFFECTS</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>RESPIRATORY OR SKIN SENSITIZATION</td>
</tr>
<tr>
<td>RESPIRATORY SENSITIZATION NOT A RESPIRATORY SENSITIZER. SKIN SENSITIZATION THIS PRODUCT IS NOT EXPECTED TO CAUSE SKIN SENSITIZATION.</td>
</tr>
<tr>
<td>GERM CELL MUTAGENICITY NO DATA AVAILABLE TO INDICATE PRODUCT OR ANY COMPONENTS PRESENT AT GREATER THAN 0.1% ARE MUTAGENIC OR GENOTOXIC. CARCINOGENICITY RISK OF CANCER CANNOT BE EXCLUDED WITH PROLONGED EXPOSURE.</td>
</tr>
<tr>
<td>IARC MONOGRAPHS. OVERALL EVALUATION OF CARCINOGENICITY</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE (CAS 13463-67-7) 2B POSSIBLY CARCINOGENIC TO HUMANS.</td>
</tr>
<tr>
<td>OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050)</td>
</tr>
<tr>
<td>NOT LISTED.</td>
</tr>
<tr>
<td>US. NATIONAL TOXICOLOGY PROGRAM (NTP) REPORT ON CARCINOGENS</td>
</tr>
<tr>
<td>NOT AVAILABLE. REPRODUCTIVE TOXICITY THIS PRODUCT IS NOT EXPECTED TO CAUSE REPRODUCTIVE OR DEVELOPMENTAL EFFECTS. SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</td>
</tr>
<tr>
<td>NOT CLASSIFIED.</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</td>
</tr>
<tr>
<td>MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.</td>
</tr>
<tr>
<td>ASPIRATION HAZARD NOT AN ASPIRATION HAZARD. CHRONIC EFFECTS MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. PROLONGED INHALATION MAY BE HARMFUL.</td>
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<tr>
<th>12 ECOLOGICAL INFORMATION</th>
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<tbody>
<tr>
<td>ECO TOXICOLOGICAL/CHEMICAL FATE INFORMATION: THE PRODUCT IS NOT CLASSIFIED AS ENVIRONMENTALLY HAZARDOUS.</td>
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</tbody>
</table>
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.

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) NOT 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
CHEMICAL NAME CAS NUMBER REPORTABLE QUANTITY
SARA 311/312 HAZARDOUS CHEMICAL NO.
NO SARA 313 (TRI REPORTING)
OTHER FEDERAL REGULATIONS
CLEAN AIR ACT (CAA) SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPS) LIST NOT REGULATED.
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 CANDIDATE CHEMICALS: LISTED TITANIUM DIOXIDE (CAS 13463-67-7)
US. CALIFORNIA CONTROLLED SUBSTANCES. CA DEPARTMENT OF JUSTICE (CALIFORNIA HEALTH AND SAFETY CODE SECTION 11100)
NOT LISTED. US. MASSACHUSETTS RTK - SUBSTANCE LIST
TITANIUM DIOXIDE (CAS 13463-67-7) US. NEW JERSEY WORKER AND COMMUNITY RIGHT-TO-KNOW ACT
TITANIUM DIOXIDE (CAS 13463-67-7) US. PENNSYLVANIA WORKER AND COMMUNITY RIGHT-TO-KNOW LAW
TITANIUM DIOXIDE (CAS 13463-67-7) US. RHODE ISLAND RTK NOT REGULATED. 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 TITANIUM DIOXIDE (CAS 13463-67-7) LISTED: SEPTEMBER 2, 2011
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 COUNTRY(S) OR REGION INVENTORY NAME ON INVENTORY (YES/NO)* CANADA NON-DOMESTIC SUBSTANCES LIST (NDSSL) 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