Section 1 Identification

PRODUCT IDENTITY: Sierra Stain™ BAS-22 Taupe
PRODUCT USES: Perma-Cast® Concrete Stain

COMPANY IDENTITY: Butterfield Color, Inc.
COMPANY ADDRESS: 625 W Illinois Ave
COMPANY CITY: Aurora, IL 60506
COMPANY PHONE: 1-630-906-1980
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

Section 2, Hazard(s) identification

Danger

2.1 HAZARD STATEMENTS: (CAT = Hazard Category)
H100s = General, H200s = Physical, H300s = Health, H400s = Environmental
H290  May be corrosive to metals. (CAT: 1)
H302  Harmful if swallowed. Oral (CAT: 4)
H332  Harmful if inhaled. (CAT: 4)
H314  Causes severe skin burns and eye damage. (CAT: 1)
H318  Causes severe eye damage. (CAT: 1)
H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled. Respiratory sensitization (CAT: 1)
H317  May cause allergic skin reaction. Skin sensitization (CAT: 1)
H340  May cause genetic defects. Germ cell mutagenicity (CAT: 1B)
H350i  May cause cancer by inhalation. Carcinogenicity (CAT: 1B)
H360  May damage fertility or the unborn child. Reproductive toxicity (Cat 1B)
H372  Causes damage to organs through prolonged or repeated exposure. Specific target organ toxicity repeated exposure (Cat 1)

2.2 PRECAUTIONARY STATEMENTS:
P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal
P201  Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P234 Keep only in original container
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P281 Use personal protective equipment as required.
P285 In case of inadequate ventilation wear respiratory protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF EXPOSED OR CONCERNED: Get medical advice/ attention.
P310 Immediately call a POISON CENTER/doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal plant.

See Section 11 for more detailed information on health effects and symptoms.
There are no hazards not otherwise classified that have been identified during the classification process.
There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

Section 3, Composition / Information on Ingredients

Hazardous ingredients

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CAS#</th>
<th>EINECS#</th>
<th>WT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium trichloride</td>
<td>10025-73-7</td>
<td>233-038-3</td>
<td>1-5%</td>
</tr>
<tr>
<td>Sodium dichromate, dyhydrate</td>
<td>7789-12-0</td>
<td>234-190-3</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4, First Aid Measures

4.1 IF INHALED:
Move person to fresh air and keep comfortable for breathing. Consult a physician after significant exposure.

4.2 IN CASE OF SKIN CONTACT:
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
4.3 IN CASE OF EYE CONTACT:
Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing.

4.4 IF SWALLOWED:
Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.

4.5 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
Health injuries may be delayed.
corrosive effects
sensitizing effects
carcinogenic effects
toxic effects for reproduction
Gastrointestinal discomfort
Asthmatic appearance
Respiratory disorder
Allergic reactions
Headache
Dermatitis
See Section 11 for more detailed information on health effects and symptoms.

Harmful if swallowed or if inhaled.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause genetic defects.
May cause cancer by inhalation.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.
Causes severe burns.

4.6 PROTECTION OF FIRST-AIDERS:
Move out of dangerous area.
Consult a physician.
Show this material safety data sheet to the doctor in attendance.

4.7 NOTES TO PHYSICIAN:
Treat symptomatically.

______________________________
Section 5, Fire Fighting Measures

5.1 SUITABLE EXTINGUISHING MEDIA:
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 SPECIFIC EXTINGUISHING METHODS:
Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
5.3 SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:
In the event of fire, wear self-contained breathing apparatus.

Section 6, Accidental Release Measures

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
Use personal protective equipment. Deny access to unprotected persons.

6.2 ENVIRONMENTAL PRECAUTIONS:
Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.

6.3 METHODS AND MATERIAL FOR CONTAINMENT & CLEANING UP:
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

Section 7, Handling and Storage

7.1 ADVICE ON SAFE HANDLING:
Avoid formation of aerosol. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Pregnant women or women of child-bearing age should not be exposed to this product. Follow standard hygiene measures when handling chemical products.

7.2 CONDITIONS FOR SAFE STORAGE:
Prevent unauthorized access. Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Store in accordance with local regulations.

7.3 MATERIALS TO AVOID:
No data available

Section 8, Exposure Controls / Personal Protective Equipment

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Basis **</th>
<th>Value</th>
<th>Exposure limit(s)* / Form of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>chromium trichloride</td>
<td>10025-73-7</td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td>Sodium dichromate, dehydrate</td>
<td>7789-12-0</td>
<td>ACGIH</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
</tr>
</tbody>
</table>

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**Basis
ACGIH. Threshold Limit Values (TLV)
OSHA P0. Table Z-1, Limit for Air Contaminant (1989 Vacated Values)
OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant
OSHA P2. Permissible Exposure Limits (PEL), Table Z-2
OSHA Z3. Table Z-3, Mineral Dust
8.2 ENGINEERING MEASURES:

Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

8.3 PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION:
Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

HAND PROTECTION:
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

EYE PROTECTION:
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

SKIN AND BODY PROTECTION:
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

HYGIENIC MEASURES:
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling.

Section 9, Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPEARANCE</td>
<td>Dark Liquid</td>
</tr>
<tr>
<td>ODOR</td>
<td>Sharp Pungent Odor</td>
</tr>
<tr>
<td>ODOR THRESHOLD</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH (Neutrality)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>MELTING POINT/FREEZING POINT</td>
<td>Not Available</td>
</tr>
<tr>
<td>BOILING RANGE (IBP,50%,Dry Point)</td>
<td>Not Pertinent</td>
</tr>
<tr>
<td>FLASH POINT (TEST METHOD)</td>
<td>Non Flammable</td>
</tr>
<tr>
<td>EVAPORATION RATE (n-Butyl Acetate=1)</td>
<td>Not Pertinent</td>
</tr>
<tr>
<td>FLAMMABILITY CLASSIFICATION</td>
<td>Not Pertinent</td>
</tr>
<tr>
<td>OXIDIZING PROPERTIES</td>
<td>The substance or mixture is not classified as oxidizing.</td>
</tr>
<tr>
<td>LOWER FLAMMABLE LIMIT IN AIR (% by vol)</td>
<td>Not Pertinent</td>
</tr>
<tr>
<td>UPPER FLAMMABLE LIMIT IN AIR (% by vol)</td>
<td>Not Pertinent</td>
</tr>
<tr>
<td>VAPOR PRESSURE (mm of Hg)@20° C</td>
<td>Not Available</td>
</tr>
<tr>
<td>VAPOR DENSITY (air=1):</td>
<td>Not Pertinent</td>
</tr>
<tr>
<td>GRAVITY @ 68/68° F / 20/20° C:</td>
<td>1.3</td>
</tr>
<tr>
<td>DENSITY:</td>
<td>Soluble</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY (Water=1)</td>
<td></td>
</tr>
<tr>
<td>WATER SOLUBILITY</td>
<td>Not Available</td>
</tr>
<tr>
<td>PARTITION COEFFICIENT (n-Octane/Water)</td>
<td>Not Available</td>
</tr>
<tr>
<td>DENSITY:</td>
<td></td>
</tr>
</tbody>
</table>
Section 10, Stability & Reactivity

10.1 REACTIVITY:
No dangerous reaction known under conditions of normal use.

10.2 CHEMICAL STABILITY:
The product is chemically stable.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:
Stable under recommended storage conditions.

10.4 CONDITIONS TO AVOID:
No data available.

10.5 HAZARDOUS POLYMERIZATION:
No data available.

Section 11, Toxicological Information

11.1 ACUTE TOXICITY:
Harmful if swallowed or if inhaled.

11.2 COMPONENTS:

**Chromium Trichloride:**
Acute oral toxicity: LD50 (Rat): 1,870 mg/kg
Acute inhalation toxicity: LC50 (Mouse): 0.03 mg/l
Exposure time: 4h
Test Atmosphere: dust/mist

**Sodium dichromate, dehydrate:**
Acute inhalation toxicity: LC50 (Rat): 0.2 mg/l
Exposure time: 4h
Test Atmosphere: dust/mist

11.3 SKIN CORROSION/IRRITATION:
Causes severe burns.

11.4 SERIOUS EYE DAMAGE/EYE IRRITATION:
Causes serious eye damage.

11.5 RESPIRATORY OR SKIN SENSITIZATION:
Skin sensitization: May cause an allergic skin reaction.
Respiratory sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

11.6 GERM CELL MUTAGENICITY:
May cause genetic defects.
11.7 REPRODUCTIVE TOXICITY:
May damage fertility or the unborn child.

11.8 STOT-SINGLE EXPOSURE:
Not classified based on available information.

11.9 STOT-REPEATED EXPOSURE:
Causes damage to organs through prolonged or repeated exposure.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

11.10 ASPIRATION TOXICITY:
Not classified based on available information.

11.11 CARCINOGENICITY:
May cause cancer by inhalation.

**IARC**
Group 1: Carcinogenic to humans
sodium dichromate, dehydrate 7789-12-0

**NTP**
Known to be human carcinogen
sodium dichromate, dehydrate 7789-12-0

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**Section 12, Ecological Information**

12.1 OTHER INFORMATION:
Do not empty into drains; dispose of this material and its container in a safe way.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
May be harmful to the environment if released in large quantities.
Water polluting material.

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**Section 13, Disposal Considerations**

13.1 DISPOSAL METHODS:
Waste from residues : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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**Section 14, Transportation Information**

**DOT**
UN number 3264
Description of the goods Corrosive liquid, acidic, inorganic, n.o.s.
(Sodium dichromate, dehydrate, chromium trichloride)
Class 8
Packing group II
Labels 8
Emergency Response 154
Guidebook Number
**IATA**
UN number 3264  
Description of the goods Corrosive liquid, acidic, inorganic, n.o.s.  
(Sodium dichromate, dehydrate, chromium trichloride)  
Class 8  
Packing group II  
Labels 8  
Packing instruction (cargo aircraft) 855  
Packing instruction (passenger aircraft) 851  
Packing instruction (passenger aircraft) Y840

**IMDG**
UN number 3264  
Description of the goods CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
(Sodium dichromate, dehydrate, chromium trichloride)  
Class 8  
Packing group II  
Labels 8  
EmS Number 1 F-A  
EmS Number 2 S-B  
Marine pollutant yes

**Special precautions for user**
No data available

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
Not applicable

**Section 15, Regulatory Information**

15.1 TSCA LIST:
All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

15.2 SARA 311/312 HAZARDS
Chronic Health Hazard  
Corrosive to Metals  
Acute toxicity (any route of exposure)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Respiratory or skin sensitization  
Germ cell mutagenicity  
Carcinogenicity  
Reproductive toxicity  
Specific target organ toxicity (single or repeated exposure)

15.3 SARA 302
The following components are subject to reporting levels established by SARA Title III, Section 302:
chromium trichloride 10025-73-7 1 %
15.4 SARA 313
The following components are subject to reporting levels established by SARA Title III, Section 313:
chromium trichloride 10025-73-7 1 %
sodium dichromate, dehydrate 7789-12-0 1 %

15.5 CLEAN AIR ACT
Ozone-Depletion Potential This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):
cromium trichloride 10025-73-7 1 %
sodium dichromate, dehydrate 7789-12-0 1 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

CALIFORNIA PROP 65 WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

Section 16, Other Information

16.1 HMIS CLASSIFICATION

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS attempts to convey full health warning information to all employees.

16.2 SDS REVISION DATE: 5/14/2019

Notice: Butterfield Color, Inc. expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.

Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Prepared By: HS&E Compliance Resources