

MATERIAL SAFETY DATA SHEET

Date: September 8, 2009dco

Replaces: May 17, 2006

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: 89208, 89222
PRODUCT NAME: Star brite Rust Stain Remover

NFPA HAZARD RATINGS: Minimal - 0, Slight - 1, Moderate - 2, Serious - 3, Severe - 4
Health: 2, Flammability: 2, Reactivity: 0

CHEMICAL FAMILY: Aqueous cleaning compound

SYNONYMS: No data available

MANUFACTURER NAME AND ADDRESS:

Star brite Distributing, Inc.
4041 S. W. 47 Avenue
Ft. Lauderdale, FL 33314

TELEPHONE NUMBERS:

Chemtec: 800-424-9300 or 703-527-3887
Star brite: 800-327-8583
Jeff Tieger 800-327-8583

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Table with 3 columns: HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY/COMMON NAME), CAS #, PERCENTAGE. Rows include Oxalic acid (Ethanedioic acid) and Ethanol, 2-Butoxy- (Ethylene glycol n-butyl ether).

Table with 4 columns: CAS #, OSHA PEL, ACGIH TLV, OTHER LIMITS. Rows show limits for 144-62-7 and 111-76-2.

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Causes eye irritation. Irritating to skin upon prolonged exposure. Harmful if inhaled or swallowed.

ROUTE(S) OF ENTRY: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other:

POTENTIAL HEALTH EFFECTS (Acute and Chronic):

ACUTE HEALTH EFFECTS

EYES: Can cause severe eye irritation.

SKIN: Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seen as local redness and swelling.

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.

INGESTION: Can burn mouth, throat and stomach.

Target Organ Effects: Central nervous system, kidneys, respiratory system.

Oxalic acid itself is considered a strong systemic poison.

CARCINOGENICITY: NTP? No IARC Monographs? No OSHA Regulated? No

CARCINOGENICITY/OTHER INFORMATION:

No known carcinogens present.

RECOMMENDED EXPOSURE LIMITS: No data available.

LD 50/LC 50: 375 mg/m3 for 5% solution of oxalic acid

MATERIAL SAFETY DATA SHEET

Date: September 8, 2009dco

Replaces: May 17, 2006

PRODUCT CODE: 89208, 89222
PRODUCT NAME: Star brite Rust Stain Remover

SECTION 3. HAZARDS IDENTIFICATION (cont ' d)

SIGNS AND SYMPTOMS OF EXPOSURE:

EYES: Contact produces burning and redness.

SKIN: May be irritating to skin upon prolonged or repeated contact.

INGESTION: May result in severe irritation of the mouth, throat and stomach.

INHALATION: Vapors may cause respiratory tract irritation, cough, discomfort and difficulty in breathing.

SECTION 4. FIRST AID MEASURES

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush eyes with water for at least 15 minutes, lifting eyelids to assist irrigation. Seek medical attention immediately.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INHALATION: Remove to fresh air. If not breathing, administer artificial respiration. If breathing is labored, give oxygen. Seek medical attention if symptoms persist.

INGESTION: If swallowed, do not induce vomiting. Give a solution of calcium lactate, calcium gluconate (both USP grade) or milk, if conscious. Call a physician immediately.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

No data available.

SECTION 5. FIRE FIGHTING MEASURES

FLASH PT: 153.0° F (67° C) METHOD USED: TCC

EXPLOSIVE LIMITS: LEL: No data UEL: No data:

AUTOIGNITION PT: NE or NA

EXTINGUISHING MEDIA:

Dry chemicals, CO₂ or alcohol resistant foam.

FIRE FIGHTING INSTRUCTIONS:

As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

FLAMMABLE PROPERTIES AND HAZARDS:

Material will burn in a fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Keep out of sewers and drains. Avoid contact with skin, eyes and clothing.

MATERIAL SAFETY DATA SHEET

Date: September 8, 2009dco

Replaces: May 17, 2006

PRODUCT CODE: 89208, 89222
PRODUCT NAME: Star brite Rust Stain Remover

SECTION 7. HANDLING AND STORAGE

HAZARD LABEL INFORMATION:

DANGER! Avoid contact with skin and eyes. Harmful or fatal if swallowed.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Avoid contact with eyes, skin and clothing. Keep away from food and drinking water. Keep out of reach of children.

OTHER PRECAUTIONS:

No data available.

WORK/HYGIENIC/MAINTENANCE PRACTICES:

Do not smoke while using. Wash hands after use. Launder clothes before reuse. Use good personal hygiene at all times.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY EQUIPMENT (Specify Type):

Not required under normal use.

EYE PROTECTION:

Safety glasses, chemical safety goggles or face shield recommended to prevent eye contact.

PROTECTIVE GLOVES:

Rubber or neoprene gloves are recommended.

OTHER PROTECTIVE CLOTHING:

Boots, apron or coveralls as necessary to prevent skin contact.

ENGINEERING CONTROLS (Ventilation etc.):

No data available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATES: [] Gas..... [X] Liquid [] Solid

BOILING POINT: 212.0° F

MELTING POINT: 30.0° F

SPECIFIC GRAVITY (WATER = 1): 1.01 at 25.0° C

VAPOR PRESSURE (VS. AIR OR MM HG):..... No data. NE or NA

VAPOR DENSITY (VS. AIR = 1):..... No data. NE or NA

EVAPORATION RATE (VS. BUTYL ACETATE=1): .. as water at 25.0° C

SOLUBILITY IN WATER: complete at 25.0° C

PERCENT VOLATILE: 92.0 % by weight

SATURATED VAPOR CONCENTRATION: NE or NA

VISCOSITY: water thin at 25.0° C

PH: 1.0

APPEARANCE AND ODOR: Clear to pale yellow liquid with an acidic smell.

SECTION 10. STABILITY AND REACTIVITY

STABILITY: Unstable [] Stable [X]

CONDITIONS TO AVOID - INSTABILITY:

None known.

MATERIAL SAFETY DATA SHEET

Date: September 8, 2009dco

Replaces: May 17, 2006

PRODUCT CODE: 89208, 89222
PRODUCT NAME: Star brite Rust Stain Remover

SECTION 10. STABILITY AND REACTIVITY (cont'd)

INCOMPATIBILITY - MATERIALS TO AVOID:
None known.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
No data available.

HAZARDOUS POLYMERIZATION: May occur [] Will not occur [X]
CONDITIONS TO AVOID - HAZARDOUS POLYMERIZATION:
Product will not undergo polymerization.

SECTION 11. TOXICOLOGICAL INFORMATION

No data available.

SECTION 12. ECOLOGICAL INFORMATION

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
All notification, clean up and disposal should be carried out in accordance with federal, state and local regulations.
Preferred methods of waste disposal are incineration or biological treatment in federal/state approved facility.

SECTION 14. TRANSPORT INFORMATION

This material is not hazardous as defined by 49 CFR 172.101 by the U.S. Department of Transportation.

PROPER SHIPPING NAME: Not regulated
HAZARD CLASS NUMBER and DESCRIPTION: Not regulated
DOT LABEL(S) REQUIRED: Not regulated
UN IDENTIFICATION NUMBER: Not regulated
PACKING GROUP: Not regulated

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER 2000: Not applicable
MARINE POLLUTANT: No component of this product is listed as a Marine Pollutant, per Appendix B to CFR 172.101

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This material is not considered as Dangerous Goods, per regulations of Transport Canada.

UPS SHIPPING: This material is not considered as Hazardous Materials by the United Parcel Service (UPS).

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This material is not considered as dangerous goods under rules of IATA.

IMDG: Not regulated

SECTION 15. REGULATORY INFORMATION

ADDITIONAL U.S. REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for any component of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs. (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

MATERIAL SAFETY DATA SHEET

Date: September 8, 2009dco

Replaces: May 17, 2006

PRODUCT CODE: 89208, 89222
PRODUCT NAME: Star brite Rust Stain Remover

SECTION 15. REGULATORY INFORMATION cont'd

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory.
OTHER U.S. FEDERAL REGULATIONS: Not applicable.
U.S. STATE REGULATORY INFORMATION: Components of this product are covered under specific State regulations, as denoted below:

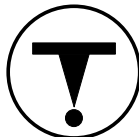
- Alaska - Designated Toxic and Hazardous Substances: 2-Butoxyethanol, Oxalic Acid.
California - Permissible Exposure Limits for Chemical Contaminants: 2-Butoxyethanol, Oxalic Acid.
Florida - Substance List: 2-Butoxyethanol
Illinois - Toxic Substance List: 2-Butoxyethanol, Oxalic Acid.
Kansas - Section 302/313 List: None
Massachusetts - Substance List: 2-Butoxyethanol.
Michigan - Critical Materials Register: No.
Minnesota - List of Hazardous Substances: 2-Butoxyethanol, Oxalic Acid.
Missouri - Employer Information/Toxic Substance List: 2-Butoxyethanol, Oxalic Acid.
New Jersey - Right to Know Hazardous Substance List: 2-Butoxyethanol, Oxalic Acid.
North Dakota - List of Hazardous Chemicals, Reportable Quantities: No.
Pennsylvania - Hazardous Substance List: 2-Butoxyethanol, Oxalic Acid.
Rhode Island - Hazardous Substance List: 2-Butoxyethanol, Oxalic Acid.
Texas - Hazardous Substance List: 2-Butoxyethanol, Oxalic Acid.
West Virginia - Hazardous Substance List: 2-Butoxyethanol, Oxalic Acid.
Wisconsin - Toxic and Hazardous Substances: 2-Butoxyethanol, Oxalic Acid.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): No component of this product is on the California Proposition 65 lists.

LABELING (Precautionary Statements) ANSI LABELING (Z129.1): WARNING! CAUSES MODERATE TO SEVERE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. MAY BE HARMFUL OR FATAL IF SWALLOWED. Avoid contact with skin or eyes. Avoid breathing vapors or mists. Do not taste or swallow. Wash thoroughly after handling. Wear gloves and goggles. Wear appropriate body protection and face-shield if operations will involve splashes or sprays. FIRST-AID: In case of contact with skin or eyes, flush immediately with plenty of water for at least 15 minutes. If inhaled, remove to fresh air. If ingested, do not induce vomiting. Get medical attention. IN CASE OF FIRE: Use water fog, dry chemical, CO2, or "alcohol" foam. IN CASE OF SPILL: Absorb spill with sodium bicarbonate or other acid-neutralizing material and place in suitable container. Consult Material Safety Data Sheet for additional information.

ADDITIONAL CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: The components of this product are listed on the DSL Inventory.
OTHER CANADIAN REGULATIONS: Not applicable.
CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: The components of this product are not on the CEPA Priority Substances Lists.
CANADIAN WHMIS SYMBOLS: Class D2B: Chronic Toxic Effects-skin and respiratory irritation.



MATERIAL SAFETY DATA SHEET

Date: September 8, 2009dco

Replaces: May 17, 2006

PRODUCT CODE: 89208, 89222
PRODUCT NAME: Star brite Rust Stain Remover

SECTION 16: OTHER INFORMATION

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Star brite assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Star brite assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following:

CAS #: This is the Chemical Abstract Service Number which uniquely identifies each constituent.

EXPOSURE LIMITS IN AIR:

ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. **TLV** - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (**TWA**), the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level (**C**). Skin absorption effects must also be considered.

OSHA - U.S. Occupational Safety and Health Administration.

PEL - Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (*Federal Register*: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order. **IDLH** - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. **The DFG - MAK** is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (**OSHA**). NIOSH issues exposure guidelines called Recommended Exposure Levels (**RELs**). When no exposure guidelines are established, an entry of **NE** is made for reference.

HAZARD RATINGS:

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: Health Hazard: **0** (minimal acute or chronic exposure hazard); **1** (slight acute or chronic exposure hazard); **2** (moderate acute or significant chronic exposure hazard); **3** (severe acute exposure hazard; onetime overexposure can result in permanent injury and may be fatal); **4** (extreme acute exposure hazard; onetime overexposure can be fatal). Flammability Hazard: **0** (minimal hazard); **1** (materials that require substantial pre-heating before burning); **2** (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); **3** (Class IB and IC flammable liquids with flash points below 38°C [100°F]); **4** (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F]). Reactivity Hazard: **0** (normally stable); **1** (material that can become unstable at elevated temperatures or which can react slightly with water); **2** (materials that are unstable but do not detonate or which can react violently with water); **3** (materials that can detonate when initiated or which can react explosively with water); **4** (materials that can detonate at normal temperatures or pressures).

NATIONAL FIRE PROTECTION ASSOCIATION: Health Hazard: **0** (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); **1** (materials that on exposure under fire conditions could cause irritation or minor residual injury); **2** (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); **3** (materials that can on short exposure could cause serious temporary or residual injury); **4** (materials that under very short exposure causes death or major residual injury). Flammability Hazard and Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System".

FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (**NFPA**). Flash Point - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

TOXICOLOGICAL INFORMATION:

Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: **LD₅₀** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; **LC₅₀** - Lethal Concentration (gases) which kills 50% of the exposed animals; **ppm** concentration expressed in parts of material per million parts of air or water; **mg/m³** concentration expressed in weight of substance per volume of air; **mg/kg** quantity of material, by weight, administered to a test subject, based on their body weight in kg. Data from several sources are used to evaluate the cancer-causing potential of the material. The sources are: **IARC** - the International Agency for Research on Cancer; **NTP** - the National Toxicology Program, **RTECS** - the Registry of Toxic Effects of Chemical Substances, **OSHA** and **CAL/OSHA**. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other measures of toxicity include **TDLo**, the lowest dose to cause a symptom and **TCLo** the lowest concentration to cause a symptom; **TDo**, **LDLo**, and **LDo**, or **TC**, **TCo**, **LCLo**, and **LCo**, the lowest dose (or concentration) to cause lethal or toxic effects. **BEI** - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV. Ecological Information: EC is the effect concentration in water.

REGULATORY INFORMATION:

This section explains the impact of various laws and regulations on the material. **EPA** is the U.S. Environmental Protection Agency. **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **DOT** and **TC** are the U.S. Department of Transportation and the Transport Canada, respectively. Superfund Amendments and Reauthorization Act (**SARA**); the Canadian Domestic/Non-Domestic Substances List (**DSL/NDSL**); the U.S. Toxic Substance Control Act (**TSCA**); Marine Pollutant status according to the **DOT**; the Comprehensive Environmental Response, Compensation, and Liability Act (**CERCLA** or **Superfund**); and various state regulations.