

SAFETY DATA SHEET (SDS)



Jacquard Products
 Manufactured by Rupert, Gibbon & Spider, Inc.
 P.O. Box 425 | Healdsburg, CA 95448
 800.442.0455 | Fax: 707.433.4906
 www.jacquardproducts.com

Sodium Hydrosulfite / Color Remover - Pg 1

Revision Date: 01/29/2018

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

| | | |
|----------------------|---|---|
| Product Name: | SODIUM HYDROSULFITE / COLOR REMOVER | |
| Product Number/Code: | CHM1025, CHM1300, CHM2300 | |
| Recommended Use: | Reducing agent, Oxygen scavenger, Antichlor, Dye auxiliary, Color Remover, Fabric Whitener | |
| Description: | Inorganic salt | |
| Synonym(s): | Sodium Dithionite Sodium hydrosulfite Sodium dithionite Sodium hypo-sulfite Sodium sulfoxylate, Dithionous acid, Disodium salt, Hydro | |
| Restrictions on use: | None known | |
| Manufacturer: | Rupert, Gibbon & Spider, Inc. 1147 Healdsburg Ave. Healdsburg, CA 95448 1-800-442-0455 / 707-433-9577 | |
| Emergency Number: | ChemTel, Inc. - Contract #MIS9128344 | |
| | North America: 1-800-255-3924 | International: 1-813-248-0585 |

SECTION 2 - HAZARD(S) IDENTIFICATION

| | | |
|--|---|------------|
| GHS Classification according to OSHA 29 CFR 1910.1200 and EU EC/1272/2008 | | |
| Toxicological Data on Ingredients: | | |
| Hazard Classification | | |
| Physical Hazards: | Self-heating substance | Category 1 |
| Health Hazards: | Acute oral toxicity | Category 5 |
| | Eye irritation | Category 2 |
| Environmental Hazards: | Aquatic toxicity | Category 3 |
| Label Elements | | |
| Pictogram: | | |
| Signal Words: | Danger, Warning | |
| Hazard Statements-EU: | H251 Self-heating; may catch fire. H303 May be harmful if swallowed. H319 Causes serious eye irritation. H402 Harmful to aquatic life. EUH031 Contact with acids liberates toxic gas. | |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

| Precautionary Statements-EU: | |
|-------------------------------------|---|
| Prevention: | P235 + P410 Keep cool. Protect from sunlight. P264 Wash hands and skin contact areas thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves / eye protection / face protection. |
| Response: | P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention. |
| Storage: | P407 Maintain air gap between stacks/pallets. P420 Store away from other materials. |
| Disposal: | P501 Dispose of contents/container through a waste management company authorized by the local government. |
| Hazard(s) not otherwise classified: | This product is classified as hazardous as defined within the GHS OSHA Hazard Communication Standard 29CFR1910.1200. |

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical identity | Content in percent (%)* | CAS # | EINECS No. |
|--|--------------------------------|--------------|-------------------|
| Sodium hydrosulfite | 70% | 7775-14-6 | 231-890-0 |
| GHS/CLP: Self-heating subs. 1 - H251; Acute tox. 4 - H302; Eye irrit. 2 - H319; Aquatic acute 3 - H402 | | | |
| Sodium carbonate | 30% | 497-19-8 | 207-838-8 |
| GHS/CLP: Eye irrit. 2 - H319 | | | |

SECTION 4 - FIRST AID MEASURES

| Description of first aid measures: | |
|--|--|
| In the event of skin contact: | Wash immediately with plenty of soap and water for at least 15 minutes; get medical attention. |
| In the event of eye contact: | Flush eyes immediately with plenty of water for at least 15 minutes; get medical attention if irritation persists. |
| In the event of swallowing: | Do not induce vomiting unless under direction of physician; give several glasses of water or milk to drink immediately. Get medical attention. |
| In the event of exposure by inhalation: | May be harmful if inhaled; may cause respiratory tract irritation. Move person to fresh air. If not breathing, administer artificial respiration; if breathing is difficult, give oxygen; keep victim warm. Get medical attention. |
| Most important symptoms and effects, acute and delayed: | May be harmful if swallowed; serious eye irritation. |
| Indication of any immediate medical attention and special treatment needed | Eye wash stations and emergency showers should be available. |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

SECTION 5 - FIREFIGHTING MEASURES

| | |
|---|--|
| Extinguishing media: | Carbon dioxide, dry chemical. Do not use water (if water must be used, use in flooding amounts). |
| Special hazards arising from the substance or mixture : | Product heats spontaneously when in contact with moisture. Combustion products may include but are not limited to: oxides of sulfur, hydrogen sulfide, metallic oxides. Closed containers may rupture violently when heated. Material may reignite after fire is extinguished; apply sufficient water to completely dissolve the material. Contain runoff. |
| Advice for fire fighters: | Use protective fire fighting clothing and positive pressure self-contained breathing apparatus to protect against potential harmful and/or irritating fumes. Do not use high pressure water jet which may cause dusting. |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

| | |
|--|---|
| Personal precautions, protective equipment and emergency procedures: | Isolate area; use appropriate personal protection equipment; keep unnecessary and unprotected personnel from entering the involved area. |
| Methods and material for containment and clean up: | Where possible recover uncontaminated material for reuse. Mix waste material together with some soda ash and collect into appropriate disposal container. Flush the spill area with plenty of water; collect contaminated waters for appropriate disposal. Dispose of in accordance with applicable local and federal environmental control laws and regulations. |
| Environmental procedures: | Prevent contamination of soil and water. |
| Reference to other sections: | For more information on exposure controls, personal protection and disposal, review data in section 8 and section 13 of this SDS. |

SECTION 7 - HANDLING AND STORAGE

| | |
|--|--|
| Precautions for safe handling: | Ensure adequate ventilation of workplace and storage areas. Avoid contact with eyes, skin and clothing; wear proper personal protective equipment to control exposure to product; avoid breathing dusts. Wash thoroughly after handling. |
| Conditions for safe storage including any incompatibilities: | Store in a cool, dry area away from excessive heat. Keep away from food and feedstuffs; keep away from incompatible materials. Avoid contact with moisture; keep container tightly closed. |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| Control parameters: | |
|---|--|
| Occupational exposure limits: | Occupational exposure limits: None established. Treat as a nuisance dust: particulates not otherwise regulated; OSHA PEL: 15 mg/m ³ (total dust); 5 mg/m ³ (respirable fraction). Note: Exposure limit for the decomposition product, Sulfur dioxide: WEL(TWA): 1 ppm (2.5 mg/m ³) |
| Recommended monitoring procedures: | If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference can be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents for the determination of hazardous substances. |
| Exposure controls: | Follow good industrial workplace practices; do not eat, drink or smoke while handling; wash hands before breaks and at end of work-shift; follow recommendations in this SDS. |
| Appropriate engineering controls: | Ensure adequate ventilation through local exhaust. |
| Individual protection measures, such as personal protective equipment: | |
| Eye/face protection: | Wear safety glasses with side shields or chemical safety goggles. Refer to OSHA 29CFR1910.133 and European Standard EN166. |
| Skin protection: | Wear suitable protective clothing as necessary to minimize skin contact. Refer to OSHA 29CFR1910.132 and 1910.136 for OSHA approved standards on protective clothing and footwear. |
| Hand protection: | Wear nitrile rubber or other suitable protective gloves; refer to European Standard EN374. Some options include: nitrile rubber (0.4 mm coating thickness); butyl rubber (0.7 mm coating thickness). Gloves selected should have a breakthrough rating of at least >30 minutes. |
| Other protective equipment: | The type and degree of personal protective equipment appropriate will depend on the specific work operation. |
| Environmental exposure controls: | Emissions from process and ventilation equipment should be monitored to ensure compliance with all applicable environmental control regulations. |
| Respiratory protection: | Respiratory protection is not required under normal conditions of use. Where protection from nuisance levels of dusts is desired a NIOSH approved dust mask may be used, e.g., particle filter with medium efficiency for solid particles (EN143 or 149, Type P2 or FFP2). Respirator use should follow the guidelines of an established respiratory protection program in compliance with 29CFR1910.134 (also see Canadian CSA Standard Z94.4-93, European Standard CR 529). |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| General information: | |
|--|---|
| Appearance and physical state: | Crystalline powder |
| Color: | White |
| Type of Odor: | Slight characteristic sulfurous odor |
| Odor threshold: | Not determined |
| Important health, safety and environmental information: | |
| Initial Boiling Point and Boiling Range: | Not applicable |
| Melting Point/Freezing Point: | Decomposes at 52°C (126°F) |
| Flammability Classification: | Self-heating substance |
| Flash Point: | Not applicable |
| Auto-ignition Temperature: | 250°C (482°F) |
| Decomposition Temperature: | 70-151°C (158-304°F) |
| Flammability Limits (lower/upper): | No data available |
| Evaporation rate: | Not applicable |
| Vapor Pressure: | No data available |
| Vapor Density (Air=1): | No data available |
| Evaporation Rate (BuAc=1): | Not applicable |
| Octanol/Water Partition Coefficient (log Pow): | < -4.7 |
| Specific Gravity: | 2.2 |
| Bulk Density: | No data available |
| Water Solubility: | 250 g/l @ 20°C |
| pH: | approx. 6 - 8 |
| Viscosity: | Not applicable |
| Explosive Properties: | No data available |
| Oxidizing Properties: | No data available |
| Molecular Formula: | Na ₂ O ₄ S ₂ |
| Molecular Weight: | 174.11 |
| Relative Density: | No data available |
| Solubility(ies): | No data available |

SECTION 10 - STABILITY AND REACTIVITY

| | |
|-------------------------------------|--|
| Reactivity: | Self-heating material; may catch fire if exposed to heat; moisture sensitive. |
| Stability: | Stable under recommended storage conditions. |
| Possibility of hazardous reactions: | Sodium hydrosulfite reacts with acids to release sulfur dioxide. |
| Conditions to avoid: | Avoid exposure to moisture as material decomposes and may generate heat spontaneously. Avoid ignition sources, combustible materials; avoid temperatures above 50°C (122°F). Upon contact with moisture, Sodium hydrosulfite is oxidized to sulfite, bisulfite and bisulfate salts; under strongly acidic conditions it may liberate toxic sulfur dioxide gas. |
| Incompatible materials: | Strong oxidizing agents, acids, strong caustics, low flash point materials. |
| Hazardous decomposition products: | Decomposition products include but are not limited to oxides of sulfur, hydrogen sulfide, metallic oxides. Product decomposes in water to release sulfur dioxide, sodium sulfite, sodium thiosulfite, sodium oxide. |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

SECTION II - TOXICOLOGICAL INFORMATION

| | |
|---|--|
| Information on toxicological effects: | |
| Acute toxicity (list all possible routes of exposure) | |
| Acute Oral Toxicity: | LD50(rat): 2830 mg/kg |
| Acute Dermal Toxicity: | LD50(rabbit): >5,000 mg/kg |
| Acute Inhalation Toxicity: | EC50(rat)(4-hr): >5.5 mg/l The estimated lethal dose for Sodium hydrosulfite is 30 g (approx. 1 ounce). |
| Skin Corrosion/irritation (rabbit): | Slightly irritating. |
| Serious Eye Damage / Eye Irritation (rabbit): | Strongly irritating. |
| Respiratory or Skin Sensitization: | Non-sensitizing. |
| Germ Cell Mutagenicity: | No data available. |
| Carcinogenicity: | Not listed by OSHA/NTP/IARC. |
| Reproductive Toxicity: | No data available. |
| Specific Target Organ Toxicity - single exposure (STOT-se): | No data available. |
| Specific Target Organ Toxicity - repeated exposure (STOT-re): | No data available. |
| Aspiration Hazard: | Not applicable. |
| Potential Health Effects: | |
| Skin Contact: | May cause slight to moderate irritation; prolonged or repeated exposure may result in dermatitis. |
| Eye Contact: | May cause moderate to severe irritation; possible corneal damage. |
| Ingestion: | May cause irritation of the digestive tract; may cause gastric disturbances; may cause nausea and vomiting; harmful if swallowed; may be fatal if swallowed in sufficient quantity. |
| Inhalation: | May cause irritation of the respiratory tract; may cause breathing difficulty and pulmonary edema; may cause respiratory sensitization; degradation products such as sulfur dioxide are extremely irritating; can cause hypersensitivity reactions in individuals with asthma. |
| Chronic Health Effects: | No data available. |
| Additional Data: | Sodium hydrosulfite: RTECS No. JP2100000 Sodium carbonate: RTECS No. VZ4050000 |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

SECTION 12 - ECOLOGICAL INFORMATION

| Toxicity: | |
|---|---|
| Acute/prolonged toxicity to fish: | LC50 (Leuciscus idus)(96-hr): 83 mg/l |
| Acute/prolonged toxicity to aquatic invertebrates: | EC50 (Daphnia magna)(48-hr): 121 mg/l |
| Acute/prolonged toxicity to aquatic plants: | EC50 (Scenedesmus subspicatus/algae)(72-hr): 216 mg/l |
| Toxicity to bacteria, to soil dwelling organisms and to terrestrial plants: | EC50 (Microtox)(17-hr): 107 mg/l |
| Chronic toxicity to aquatic organisms: | No data available. |
| General effect: | Harmful to aquatic life. |
| Persistence and degradability: | Since this product is an inorganic salt it does not biodegrade; however, it is expected to degrade by dissociation in the environment. |
| Bioaccumulative potential: | Not expected to bioaccumulate. |
| Mobility in soil: | This product is water soluble and, along with its breakdown products, is expected to be mobile. |
| Results of PBT and vPvB assessment (EC reg. 453/2010): | This material is not identified as being persistent bioaccumulative and toxic. |
| German WGK classification: | WGK = 1 (self-assessment). |
| Other adverse effects: | No other adverse effects are identified. |
| Additional information: | This material is not expected to cause significant environmental impact; should not be allowed to enter sewers, watercourses or soils; the product is a reducing agent which reacts readily with oxygen and can cause anaerobic conditions in watercourses. |

SECTION 13 - DISPOSAL CONSIDERATIONS

| Waste treatment methods: | |
|---------------------------------|--|
| Disposal: | Dispose of in compliance with all applicable federal, state and local environmental control laws and regulations. The waste material should be evaluated according to RCRA guidelines to determine possible classification as D001 (ignitability) or D003 (reactivity). Waste characterization and compliance with applicable laws are the responsibility solely of the waste generator. |
| Container Disposal: | Containers should be drained of all residual product prior to disposal. |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

SECTION 14 - TRANSPORT INFORMATION

| | |
|----------------------------------|----------------------------------|
| DOT: | |
| DOT Proper Shipping Description: | UN1384 Sodium Dithionite Mixture |
| Hazard Class: | 4.2 PH II |
| Placard: | Spontaneously Combustible |
| ERG No.: | 135 |
| Marine Pollutant: | No |
| IMDG: | |
| UN number: | UN1384 |
| UN proper shipping name: | Sodium Dithionite Mixture |
| Hazard Class: | 4.2 PH II |
| Placard: | Spontaneously Combustible |
| EMS No.: | F-A, S-J |
| Marine Pollutant: | No |
| IATA: | |
| UN No: | UN1384 Sodium Dithionite Mixture |
| Hazard Class: | 4.2 PH II |
| Placard: | Spontaneously Combustible |
| EMS No.: | F-A, S-J |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

SECTION 15 - REGULATORY INFORMATION

| Safety, health and environmental regulations/legislation specific for the substance or mixture: | |
|--|---|
| Hazard categories | |
| SARA Title III Section 311/312 (40CFR370): | Acute health hazard, fire hazard, reactive hazard. |
| SARA Title III Section 313 (40CFR372): | No reportable components. |
| CERCLA Status (40CFR302): | No Reportable Quantity components. |
| TSCA Inventory Status: | Reported/included. |
| Canadian WHMIS Classification: | B6, D2B, F. |
| Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity: | None known to be in the product at levels requiring a warning. |
| REACH Annex XIV (SVHC): | No listed components. |
| REACH Annex XVII (Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles) | No listed components. |
| REACH registration / per-registration: | This material has been registered, per-registered or is otherwise exempted from registration under the Registration, Evaluation and Authorization of Chemical Substances. |
| Chemical safety assessment: | No data available. |

SECTION 16 - OTHER INFORMATION

| HMIS Hazard ID: | |
|--|--------------------|
| Health: | 2 |
| Flammability: | 2 |
| Reactivity: | 2 (water-reactive) |
| (Personal protective equipment selection is best assigned by the user after performing a hazard assessment on the product as it is to be used in the specific work process.) | |
| Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect | |

Disclaimer:

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

Revision Date: 01/29/2018

| National Chemical Inventories: | |
|---|-------------------|
| All components of this product are listed on the following chemical substance inventories: TSCA (USA) | |
| DSL | (Canada) |
| EINECS | (Europe) |
| ENCS | (Japan) ECL |
| | (Korea) |
| AICS | (Australia) NZIoC |
| | (New Zealand) |
| PICCS | (Philippines) |
| IECSC | (China) |

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

| Abbreviations: | |
|-----------------------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| ADR | International carriage of Dangerous goods by Road |
| AICS | Australian Inventory of Chemical Substances |
| ATE | Acute Toxicity Estimate |
| BfR | Bundesinstitut für Risikobewertung recommendations for food contact materials |
| BCF | Bioconcentration Factor |
| BOD5 | 5-day Biochemical Oxygen Demand |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CLP | Classification, Labeling and Packaging regulation |
| COD | Chemical Oxygen Demand DOT Department of Transportation DSL Domestic Substances List |
| EINECS | European Inventory of Existing Chemical Substances |
| ECL | Existing Chemicals List (Korea) |
| ENCS | Existing and New Chemical Substances Inventory (Japan) |
| EN 689 | Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy. |
| ERG | Emergency Response Guide |
| GHS | Globally Harmonized System |
| HMIS | Hazardous Materials Information System IARC International Agency for Research on Cancer IATA International Air Transport Association |
| ICAO | International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods |
| LD50 | Lethal Dose to 50% of test animal population |
| MAK | Maximale Arbeitsplatz Konzentration |
| NTP | National Toxicology Program |
| OEL | Occupational Exposure Limit |
| OSHA | Occupational Safety & Health Administration |
| PBT | Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit |
| PICCS | Philippine Inventory of Commercial Chemical Substances |
| PNEC | Predicted No Effect Concentration |
| REACH | Registration, Evaluation and Authorization of Chemical Substances |
| RID | International carriage of dangerous goods by Rail SARA Superfund Amendments and Reauthorization Act STEL Short Term Exposure Limit |
| SVHC | Substance of Very High Concern |
| TLV | Threshold Limit Value |
| TSCA | Toxic Substances Control Act |
| TWA | Time Weighted Average |
| VOC | Volatile Organic Compound |
| WGK | Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System |