



1 Identification Product identifier Product name: Giemsa Stain Stock number: B21172 **CAS Number:** 51811-82-6 EC number: 257-438-2 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet Details of the supplier of the safety da Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Fax: 800-322-4757 Email: tech@alfa.com www.alfa.com Information Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789. 2 Hazard(s) identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) The substance is not classified as hazardous according to 29 CFR 1910 (OSHA GHS). Hazards not otherwise classified No information known. Label elements GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable WHMIS classification Not controlled Classification custom Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) ALTH I Health (acute effects) = 1 RE I Flammability = 1 ACTIVITY I Physical Hazard = 1 Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. 3 Composition/information on ingredients Chemical characterization: Substances CAS# Description: 51811-82-6 Giemsa Stain Concentration: ≤100% Identification number(s): EC number: 257-438-2 4 First-aid measures Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available. 5 Fire-fighting measures Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Sulfur oxides (SOX) Nitrogen oxides (NOX) Additional decomposition products are unknown. Additional decomposition products are unknown. Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit. 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

(Contd. on page 2)

Product name: Giemsa Stain (Contd. of page 1) Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course. Methods and material for containment and cleaning up: Pick up mechanically. Prevention of secondary hazards: No special measures required. Reference to other sections See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information. Ensure adequate ventilation 7 Handling and storage Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. **Specific end use(s)** No further relevant information available. 8 Exposure controls/personal protection Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Control parameters Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data Exposure controls ersonal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Waish hands before breaks and a tine end of work. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Recommended filter device for short term use: Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. Protection of hands: Impensive cloves Impervious gloves Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. **Eye protection:** Safety glasses **Body protection:** Protective work clothing. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Powder Odor: Not determined Odor threshold: Not determined pH-value: Not applicable. Change in condition Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto innition: ca 300 °C (ca 572 °F) Not determined Not determined Not determined Not determined Not determined Auto igniting: Not determined. Danger of explosion: Explosion limits: Not determined. ower: Not determined Lower. Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Not determined Not applicable. Not determined Not determined. Not applicable. Evaporation rate Solubility in / Miscibility with Not applicable. Water: Not determined Partition coefficient (n-octanol/water): Not determined. Viscosity: dvnamic Not applicable.

10 Stability and reactivity

kinematic: Other information

Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Not applicable. No further relevant information available.

(Contd. on page 3)

Product name: Giemsa Stain

(Contd. of page 2) **Possibility of hazardous reactions** Reacts with strong oxidizing agents **Conditions to avoid** No further relevant information available. **Incompatible materials:** Oxidizing agents **Incompatible materials**. Oxidizing agents **Hazardous decomposition products:** Carbon monoxide and carbon dioxide Sulfur oxides (SOX) Nitrogen oxides Additional decomposition products are unknown. 11 Toxicological information Information on toxicological effects Information on toxicological effects Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No effects known. Carcinogenicity: No effects known. Carcinogenicity: No effects known. Sensiti tarrot error existent toxicity. The effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. 12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment. Results of PBT and vPvB assessment **PBT:** Not applicable. **vPvB:** Not applicable Other adverse effects No further relevant information available. 13 Disposal considerations Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations. 14 Transport information UN-Number DOT, ADN, IMDG, IATA Not applicable UN proper shipping name DOT, ADN, IMDG, IATA Not applicable Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class Not applicable Packing group DOT, IMDG, IATA Not applicable Environmental hazards: Not applicable Not applicable Special precautions for user Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Transport/Additional information: DOT Marine Pollutant (DOT): No UN "Model Regulation": -15 Regulatory information

 Regulatory information

 Safety, health and environmental regulations/legislation specific for the substance or mixture

 GHS label elements Not applicable

 Hazard pictograms Not applicable

 Signal word Not applicable

 Hazard statements Not applicable

 National regulations

 All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

 All components of this product are listed on the Canadian Domestic Substances List (DSL).

 SARA Section 313 (specific toxic chemical listings) Substance is not listed.

 California Proposition 65

 Prop 65 - Chemicals known to cause cancer Substance is not listed.

 Prop 65 - Developmental toxicity, female Substance is not listed.

 Prop 65 - Developmental toxicity, male Substance is not listed.

 Prop 65 - Developmental toxicity, male Substance is not listed.

 Information about limitation of use: For use only by technically qualified individuals.

(Contd. of page 3)

USA

Product name: Giemsa Stain

Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the

market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility or une user.
Department issuing SDS: Global Marketing Department
Date of preparation / last revision 01/19/2017 / Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transportation of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
UPVB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
MTP: National Toxicology Program (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)