Disperse Blue 35

sc-252758

Material Safety Data Sheet

Hazard Alert Code Key: 

EXTREME | HIGH | MODERATE | LOW

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
Disperse Blue 35

STATEMENT OF HAZARDOUS NATURE

NFPA

SUPPLIER
Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

EMERGENCY
ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2435 2255
(1-800-CHEMCALL) or call +613 9573 3112

SYNONYMS
C20-H14-N2-O5, "anthraquinone dye", "Dispersol Navy B-T ICI"

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Toxicity:</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Body Contact:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Reactivity:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chronic:</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW
RISK
May cause SENSITISATION by skin contact.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED
- The material has NOT been classified as "harmful by ingestion".
  This is because of the lack of corroborating animal or human evidence.

EYE
- Although the material is not thought to be an irritant, direct contact with the eye may cause transient discomfort characterized by tearing or conjunctival redness (as with windburn).
  Slight abrasive damage may also result.

SKIN
- The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models).
  Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
  Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED
- The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models).
  Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

CHRONIC HEALTH EFFECTS
- Skin contact with the material is more likely to cause a sensitization reaction in some persons compared to the general population.
  Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.
  Disperse dyes are lipophilic substances which dissolve in chemical fibre. For technical reasons, only small molecules with a required water solubility of approximately 30 mg/l are suitable. Additional organic solvents (dye accelerators, carriers) are used in the dyeing process. If this dyeing is not done in accordance with state of the art, e.g. over-dying, wrong textile substrate or incomplete removal of the carriers, there may be higher exposure to the dyes and carriers when wearing garments dyed in this way. Given their properties (small molecular size, high lipophilicity) and the fact that disperse dyes and carriers are lipophilic substances, some of them are easily absorbed through the skin which means that health concerns can't be ruled out.
  The majority of sensitising dyes, present in clothes, practically all belong to the group of disperse dyes, which has been developed for use on synthetic fibres. The explanation is probably that the attachment of molecules from disperse dyes is weak, as they are more easily available for skin contact. In Germany, disperse azo dyes like Disperse Blue 1, 35, 106 and 124, Disperse Yellow 3, Disperse Orange 3, 37, 76 and Disperse Red 1 have been associated with contact dermatitis, resulting from exposure to textiles coloured with these dyes. In most cases the dermatitis resolved, once the sensitising "textile" had been discarded. These dyes are no longer recommended for colouring of textiles, which come into contact with the skin.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>CAS RN</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>anthraquinone dye as C.I. Disperse Blue 35</td>
<td>12222-75-2</td>
<td>&gt;98</td>
</tr>
</tbody>
</table>

Section 4 - FIRST AID MEASURES

SWALLOWED
- Immediately give a glass of water. · First aid is not generally required. If in doubt, contact a Poisons Information Center or a doctor.

EYE
- If this product comes in contact with eyes: · Wash out immediately with water. · If irritation continues, seek medical attention.

SKIN
- If skin contact occurs: · Immediately remove all contaminated clothing, including footwear · Flush skin and hair with running water (and soap if available).

INHALED
- If dust is inhaled, remove from contaminated area. · Encourage patient to blow nose to ensure clear passage of breathing. · If irritation or discomfort persists seek medical attention.

NOTES TO PHYSICIAN
- Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

Vapour Pressure (mmHG): Negligible
Upper Explosive Limit (%): Not available.
Specific Gravity (water=1): Not available.
Lower Explosive Limit (%): Not available.

EXTINGUISHING MEDIA
- Water spray or fog.
- Foam.

FIRE FIGHTING
- Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS
- Combustible solid which burns but propagates flame with difficulty.
- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.
- Combustion products include: carbon monoxide (CO), carbon dioxide (CO2), other pyrolysis products typical of burning organic material.
- May emit poisonous fumes.
- May emit corrosive fumes.

FIRE INCOMPATIBILITY
- Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION
Glasses:
- Safety Glasses.
- Chemical goggles.
Gloves:
Respirator:
Particulate

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS
- Clean up all spills immediately.
- Avoid breathing dust and contact with skin and eyes.

MAJOR SPILLS
- Moderate hazard.
- CAUTION: Advise personnel in area.
- Alert Emergency Responders and tell them location and nature of hazard.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.
- Do NOT cut, drill, grind or weld such containers.
- In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

RECOMMENDED STORAGE METHODS
- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

STORAGE REQUIREMENTS
- Store in original containers.
- Keep containers securely sealed.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Source</th>
<th>Material</th>
<th>TWA ppm</th>
<th>TWA mg/m³</th>
<th>STEL ppm</th>
<th>STEL mg/m³</th>
<th>Peak ppm</th>
<th>Peak mg/m³</th>
<th>TWA F/CC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada - Ontario</td>
<td>C.I. Disperse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Blue 35</td>
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<td></td>
</tr>
<tr>
<td>Occupational Exposure</td>
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<tr>
<td>Limits</td>
<td>(Particles)</td>
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<tr>
<td></td>
<td>(Insoluble or)</td>
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10 (I)
<table>
<thead>
<tr>
<th>Region</th>
<th>Substance</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada - British Columbia</strong></td>
<td>C.I. Disperse Blue 35</td>
<td>10 (N)</td>
</tr>
<tr>
<td>Occupational Exposure Limits</td>
<td>(Particles (Insoluble or Poorly Soluble) Not Otherwise Classified (PNOC))</td>
<td></td>
</tr>
<tr>
<td><strong>Canada - Ontario</strong></td>
<td>C.I. Disperse Blue 35</td>
<td>3 (R)</td>
</tr>
<tr>
<td>Occupational Exposure Limits</td>
<td>(Specified (PNOS) / Particules (insolubles ou peu solubles) non précisées par ailleurs)</td>
<td></td>
</tr>
<tr>
<td><strong>US - Tennessee</strong></td>
<td>C.I. Disperse Blue 35</td>
<td>5</td>
</tr>
<tr>
<td>Occupational Exposure Limits</td>
<td>(Particulates not otherwise regulated Respirable fraction)</td>
<td></td>
</tr>
<tr>
<td><strong>US - California</strong></td>
<td>C.I. Disperse Blue 35</td>
<td>5</td>
</tr>
<tr>
<td>Permissible Exposure Limits</td>
<td>(Particulates not otherwise regulated Respirable fraction)</td>
<td></td>
</tr>
<tr>
<td>for Chemical Contaminants</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>US - Oregon</strong></td>
<td>C.I. Disperse Blue 35</td>
<td>10</td>
</tr>
<tr>
<td>Permissible Exposure Limits</td>
<td>(Particulates not otherwise regulated (PNOR) (f) Total Dust)</td>
<td></td>
</tr>
<tr>
<td>(Z-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>US - Michigan</strong></td>
<td>C.I. Disperse Blue 35</td>
<td>5</td>
</tr>
<tr>
<td>Exposure Limits for Air</td>
<td>(Particulates not otherwise regulated, Respirable dust)</td>
<td></td>
</tr>
<tr>
<td>Contaminants</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>US - Oregon</strong></td>
<td>C.I. Disperse Blue 35</td>
<td>5</td>
</tr>
<tr>
<td>Permissible Exposure Limits</td>
<td>(Particulates not otherwise regulated (PNOR) (f) Respirable Fraction)</td>
<td></td>
</tr>
<tr>
<td>(Z-1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bold print identifies substances for which the Oregon Permissible Exposure Limits (PELs) are different than the federal Limits. PNOR means “particles not otherwise regulated.”
US - Wyoming
Toxic and Hazardous Substances
Table Z1 Limits for Air Contaminants

<table>
<thead>
<tr>
<th>C.I. Disperse Blue 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Particulates not otherwise regulated) (PNOR)(f)- Respirable fraction)</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

Canada - Prince Edward Island
Occupational Exposure Limits

<table>
<thead>
<tr>
<th>C.I. Disperse Blue 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Particles (Insoluble or Poorly Soluble) [NOS] Inhalable particles)</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

See Appendix B current TLV/BEI Book

ENDOELTABLE

PERSONAL PROTECTION

RESPIRATOR
- particulate.
Consult your EHS staff for recommendations

EYE
- Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

■ NOTE: The material may produce skin sensitization in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:
- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and dexterity
Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).
- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.
- Contaminated gloves should be replaced.
Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.
Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.
- polychloroprene
- nitrile rubber
- butyl rubber
- fluorocautchouc
- polyvinyl chloride
Gloves should be examined for wear and/ or degradation constantly.

OTHER
- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

ENGINEERING CONTROLS
- Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES
PHYSICAL PROPERTIES
Solid.
Mixes with water.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Divided solid</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>362.34</td>
</tr>
<tr>
<td>Melting Range (°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling Range (°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash Point (°F)</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temp (°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Autoignition Temp (°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper Explosive Limit (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower Explosive Limit (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Volatile Component (%vol)</td>
<td>Negligible</td>
</tr>
<tr>
<td>Solubility in water (g/L)</td>
<td>Miscible</td>
</tr>
<tr>
<td>pH (1% solution)</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH (as supplied)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour Pressure (mmHG)</td>
<td>Negligible</td>
</tr>
<tr>
<td>Specific Gravity (water=1)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative Vapor Density (air=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
</tbody>
</table>

APPEARANCE
Dark blue granular solid. No odour.

Section 10 - CHEMICAL STABILITY

CONDITIONS CONTRIBUTING TO INSTABILITY
- Presence of incompatible materials.
- Product is considered stable.

STORAGE INCOMPATIBILITY
- Avoid reaction with oxidizing agents.
For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

C.I. Disperse Blue 35

TOXICITY AND IRRITATION
C.I. DISPERSE BLUE 35:

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral (rat) LD50:</td>
<td>&gt;2000 mg/kg</td>
</tr>
<tr>
<td>Skin (-):</td>
<td>- Mild A sensitizer</td>
</tr>
<tr>
<td>Eye (-):</td>
<td>- Mild</td>
</tr>
</tbody>
</table>

[Manufacturer]

Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's edema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.
The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

CARCINOGEN

PBIT_(PERS~

US - Maine Chemicals of High Concern List  Carcinogen

Section 12 - ECOLOGICAL INFORMATION

No data

Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
<th>Bioaccumulation</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.I. Disperse Blue 35</td>
<td>No Data Available</td>
<td>No Data Available</td>
<td>LOW</td>
<td></td>
</tr>
</tbody>
</table>

GESAMP/EHS COMPOSITE LIST - GESAMP Hazard Profiles

Name / EHS TRN A1a A1b A2 B1 B2 C1 C2 D1 D2 D3 E1 E2 E3 Cas No / RTECS No

Legend: EHS=EHS Number (EHS=GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships) NRT=Net Register Tonnage, A1a=Bioaccumulation log Pow, A1b=Bioaccumulation BCF, A1=Bioaccumulation, A2=Biodegradation, B1=Acuteaquatic toxicity LC/ECIC50 (mg/l), B2=Chronic aquatic toxicity NOEC (mg/l), C1=Acute mammalian oral toxicity LD50 (mg/kg), C2=Acute mammalian dermal toxicity LD50 (mg/kg), C3=Acute mammalian inhalation toxicity LC50 (mg/kg), D1=Skin irritation & corrosion, D2=Eye irritation & corrosion, D3=Long-term health effects, E1=Tainting, E2=Physical effects on wildlife & benthic habitats, E3=Interference
with coastal amenities. For column A2: R=Readily biodegradable, NR=Not readily biodegradable. For column D3: C=Carcinogen, M=Mutagenic, R=Reprotoxic, S=Sensitising, A=Aspiration hazard, T=Target organ systemic toxicity, L=Lung injury, N=Neurotoxic, I=Immunotoxic. For column E1: NT=Not tainting (tested), T=Tainting test positive. For column E2: Fp=Persistent floater, F=Floater, S=Sinking substances. The numerical scales start from 0 (no hazard), while higher numbers reflect increasing hazard. (GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships)

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Instructions
All waste must be handled in accordance with local, state and federal regulations. Puncture containers to prevent re-use and bury at an authorized landfill. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate:
- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.

Section 14 - TRANSPORTATION INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

Section 15 - REGULATORY INFORMATION

C.I. Disperse Blue 35 (CAS: 12222-75-2) is found on the following regulatory lists;
"US American Apparel & Footwear Association (AAFA) Restricted Substance List (RSL)"

Section 16 - OTHER INFORMATION

LIMITED EVIDENCE
- Cumulative effects may result following exposure*.
  * (limited evidence).

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Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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