Material Safety Data Sheet

Version 2.0
Revision Date: 26/10/2016

Product and Company Identification

Product Name: SciDye™ DNA Stain
Cat #: SciDS-500
EC Substance Name: Not applicable
EC number: Not applicable
CAS reference number: Not applicable
REACH reference number: A registration number is not available for this substance as the substance or its uses are exempted from registration.
Product Use: For Research Use Only. Not for use in diagnostic procedures.
Company: Debna BioGene AB
Funäsgatan 8
162 74 Vällingby, Sweden
Telephone: +46 841078120

SECTION 1: Substance or mixture possible hazards classification

1.1 Classification according to EC Directives 67/548 / EEC (DSD) and 1999/45/EC (DPD):

Not a hazardous substance or mixture according to EC Directives 67/548 /EEC (DSD) and 1999/45/EC (DPD).

1.2 Classification according to Regulation (EC) No 1272/2008 (CLP):

Signal word: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
H-Statements: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

1.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

1.4 Additional hazards for humans and the environment:

1.4.1 Possible hazardous physicochemical effects: Unknown.

1.4.2 Possible adverse effects on humans and possible symptoms: No data available.

1.4.3 Possible harmful effects: No data available.

SECTION 2: Composition / information on ingredients:

2.1 Chemical characterization:

Aqueous solution with inorganic and organic components.

2.2 Components

Name	REACH-Ref.-No.	CAS No.	EC No.	Proportion %	Classification according to 67/548/EEC and 1999/45 / EC	Classification according to regulation (EC
Water	-	7732-18-5	231-791-2	> 98%	-	-
Atlas ClearSight DNA Stain*	-	-	-	<1%	-	-

*No components need to be disclosed according to the applicable regulations.

SECTION 3: First aid measures

3.1 General information:

If skin irritation or other symptoms persist, consult a physician. Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes, carefully clean before reuse.

3.2 After inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

3.3 After skin contact:

In case of skin contact, rinse immediately with plenty of water. Consult a physician.

3.4 After eye contact:

Eye contact: Remove contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

3.5 After swallowing:

Never give anything to an unconscious person. Do not induce vomiting. Rinse the mouth, spit out the fluid and drink plenty of water. Call a physician immediately and show him the safety data sheet.

3.6 Notes to physician:

Decontamination, symptomatic treatment. No specific antidote known.

3.7 Most important symptoms and effects, both acute and delayed.

The most important known symptoms and effects are described in the labeling (see section 1.2) and/or in section 10.

SECTION 4: Firefighting measures

4.1 Suitable extinguishing media:

This product is not flammable. Use extinguishing agent suitable for type of surrounding fire: water spray, dry chemical or carbon dioxide, fire extinguishing foam, extinguishing powder.

4.2 Extinguishing media which must not be used for safety reasons:

No data available

4.3 Special hazards caused by the product, combustion products or resulting gases:

In the event of fire, toxic and corrosive gases - carbon monoxide, carbon dioxide, and sulphur oxides - can be released.

4.4 Special protective equipment for fire-fighting:

Wear protective clothing. Wear self-contained breathing apparatus for firefighting if necessary.

4.5 Additional information:

No data available.

SECTION 5: Accidental release measures

5.1 Personal precautions:

Avoid contact with skin, eyes and clothing, wear appropriate protective equipment. Ensure adequate ventilation. Avoid aerosol formation. For personal protection see section 6.

5.2 Environmental precautions:

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

5.3 Methods for cleaning up:

Soak up with absorbent material and dispose. Clean contaminated surfaces with water.

5.4 Reference to other sections.

For disposal see section 12.

SECTION 6: Handling and storage

6.1 Handling:

6.1.1 Information for safe handling:

Inhalation of aerosols, contact with eyes, skin and clothing as well as prolonged or repeated exposure may cause irritation. Ensure that the working area is well ventilated. For precautions see section 2.2.

6.1.2 Information on fire and explosion protection:

See section 4.

6.1.3 Handling rules:

No special handling measures required.

6.2 Storage:

6.2.1 Technical measures and storage conditions:

Keep container tightly closed and stored upright to prevent leakage. Always keep in containers of the same material as the original.

6.2.2 Packaging materials:

Packing materials must be tested for durability before use.

6.2.3 Requirements for storage rooms and containers:

Keep container tightly closed in a dry and well-ventilated place. If possible, keep in the original container. Do not use food containers because of the risk of confusion. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

6.2.4 Further information on storage conditions:

Recommended storage temperature +4 °C. Protected from light.

6.3 Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 7: Exposure controls/personal protection

7.1 Control parameters

Components with workplace control parameters:

Contains no relevant quantities of substances with occupational exposure limit values that have to be monitored at the workplace according to TRGS 900.

7.2 Exposure controls

Appropriate engineering controls:

Handle in accordance with Good Laboratory Practice. Wash hands before breaks and at the end of workday.

7.2.1 Personal protective equipment

Respiratory protection:

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards. Half masks according to EN 140 or full masks according to EN 136, with filters according to EN 143-P1.

Skin protection:
Handle with suitable protective gloves. Gloves must be inspected prior to use. Damaged and worn protective gloves should be replaced immediately. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and Good Laboratory Practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Completely unsuitable are gloves made of fabric or leather. The following gloves are suitable:
For full contact:

Material:	Minimum layer thickness	Breakthrough time:
Nitrile rubber	0.35 mm	≥ 480 min
Latex	0.35 mm	≥ 480 min

For splash contact:

Material:	Minimum layer thickness	Breakthrough time:
Natural rubber	0.5 mm	≥ 120 min
Latex	0.5 mm	≥ 120 min
Polyvinyl chloride	0.5 mm	≥ 120 min
Nitrile rubber	0.2 mm	≥ 30 min

Eye protection:
Safety glasses with side-shields conforming to EN166 U.

Body protection:
Suitable protective clothing. Special body protection generally not required.
General protective and hygienic measures. Do not eat, drink or smoke during working hours. Keep away from food and drink. Avoid contact with eyes and skin. Remove contaminated and soaked clothing immediately. Wash hands before breaks and after work.

7.2.2 Limitation of environmental exposure:
Prevent further leakage or spillage if safe to do so.

7.2.3 Limitation of end-user exposure:
Avoid breathing vapors, mist or gas. Remove all sources of ignition.

SECTION 8: Physical and chemical properties

8.1 Information on basic physical and chemical properties
- Appearance Form: Orange-red to brown, liquid
- Odour: No data available
- Odour Threshold: No data available
- pH: No data available
- Melting point/freezing point: No data available
- Initial boiling point and boiling range: No data available
- Flash point: No data available
- Evaporation rate: No data available
- Flammability (solid, gas): No data available
- Upper/lower flammability or explosive limits: No data available
- Vapour pressure: No data available

- Vapour density: No data available
- Relative density: No data available
- Water solubility: Soluble in water
- Partition coefficient: No data available
- Auto-ignition temperature: No data available
- Decomposition temperature: No data available
- Viscosity: No data available
- Explosive properties: No data available
- Oxidizing properties: No data available

8.2 Other safety information:

No data available.

SECTION 9: Stability and reactivity

9.1 Reactivity

No data available.

9.2 Chemical stability

Stable under recommended storage conditions.

9.3 Possibility of hazardous reactions

No data available.

9.4 Conditions to avoid

High pressure and temperatures. Stable under regular laboratory conditions. See section 6.

9.5 Materials to avoid

Strong acids, oxidation and reducing agents.

9.6 Hazardous decomposition products

Other decomposition products: No data available.
In the event of fire: see section 4

SECTION 10: Toxicological information

10.1 Information on toxicological effects

10.1.1 The acute toxicity test

Parameter	Value	Species	Remarks
LD_{50} oral	1000-10000 mg/kg	Kunming mice	Nontoxic

10.2.2 Corrosive and irritant effects

Skin corrosion/irritation: No data available
Serious eye damage/eye irritation: No data available

10.2.3 Respiratory or skin sensitization No data available

10.2.4 Aspiration hazard No data available

10.2.5 Carcinogenicity, mutagenicity and toxicity to reproduction mutagenicity:

Paramter	Value	Cell culture/Species	Method	Remarks
In vitro bacterial mutation test	0,5-5 mg/plate	Salmonella typhimurium TA97/98/100/102	AMES-test	Non-mutagenic
In vivo micronucleus test	1000-5000 mg/kg	Kunming mice	The mouse bone marrow micronucleus test	Negativ
In vitro mammalian chromosomal aberration test	31,2-5000 µg/ml	Chinese hamster ovary line.	*in vitro* mammalian cell chromosome aberration detection system	Negative

Carcinogenicity: No data available.
Reproductive toxicity: No toxicological data are available on the components of the product.

10.3 Practical experience No data available

10.4 General remarks:

When used and handled according to instructions, the product does not cause harmful effects according to our experience and current information.

SECTION 11: Ecological information

11.1 Toxicity: No data available.

11.2 Persistence and degradability: No data available.

No data on biological and abiotic degradation are available for the components of the product.

11.3 Bioaccumulative potential: No data available

11.4 Mobility in soil: No data available

11.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

11.6 Other adverse effects: No data available.

11.7 General remarks:

When used and handled according to instructions, the product does not cause harmful effects according to our experience and current information.

SECTION 12: Disposal considerations

12.1 Product:

The allocation of a waste code number according to the European waste catalog should be done in consultation with the regional waste disposal company.

12.2 Packaging:

Residues in packages should be removed, preferably by rinsing with water, and after complete emptying in accordance with the regulations for waste disposal. Packaging which is not completely emptied must be disposed of in the form as determined by the regional waste disposal company.

SECTION 13: Transport information

13.1 UN number: Not applicable.

13.2 UN proper shipping name: Not applicable.

In accordance with GGVSEB, ADR / RID, IMDG / GGVSee, ICAO / IATA-DGR.
ADR/RID, GGVSEB: Not dangerous good during shipping.
IMDG / GGVSee: Not dangerous good during shipping.
ICAO / IATA-DGR: Not dangerous good during shipping.

13.3 Transport hazard class(es)

ADR/RID, IMDG, IATA: None.

13.4 Packaging group

ADR/RID, IMDG, IATA: None.

13.5 Environmental hazards

ADR/RID, IMDG, IATA: None.

13.6 Special precautions for user No data available

SECTION 14: Regulatory information

14.1 EU regulations:

14.1.1 Chemical safety assessment according to Regulation (EC) No 1907/2006:

Substance safety assessments (CSA) according to Article 14 (1) of Regulation (EC) No 1907/2006 (REACH) for the components of the product are neither banned nor restricted.

14.1.2 Classification and labeling according to directives 67/548 / EEC (DSD) and 1999/45 / EC (DPD):

Not a hazardous substance or mixture, see section 1.

14.1.3 Classification and labeling according to Regulation (EC) No 1272/2008 (CLP):

Not a hazardous substance or mixture, see section 1.

14.1.4 Hazardous components which must be listed on the label.

14.1.5 Pictograms: None

Signal word: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
H-Statements: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

14.1.6 Special labeling of certain preparations: Neither banned nor restricted.

14.1.7 Approvals and/ or restrictions of use: Neither banned nor restricted.

14.1.8 Information on Directive 1999/13 / EC (VOC Directive) on the limitation of VOC emissions: Neither banned nor restricted.

SECTION 15: Other information

15.1 Training instructions:

Accordance with applicable laws and Good Laboratory Practices.

15.2 Recommended use (s) of application:

For research use only.

15.2 Data sources for the preparation of the safety data sheet:

European Chemical Substances Information System (ESIS),
Internet: http://ecb.jrc.ec.europa.eu/esis.
Hazardous substance information system of the trade associations (GESTIS), Internet:
http://www.hvbg.de/d/bia/gestis/stoffdb/index.html.

Hommel interactive 4.0 - Handbook of Dangerous Goods,
Internet: http://www.springer.com/dal/home/chemistry.
CRC Handbook of Chemistry and Physics, 88th Edition, 2007-2008,
Internet: http://www.hbcpnetbase.com.

15.4 Notes:

This information is only intended to describe the safety requirements of the product and is based on the present state of our knowledge. They do not constitute a guarantee for the characteristics of the product described in the sense of the statutory warranty regulations. Please refer to the respective product data sheets for the delivery properties. If the product mentioned in this Material Safety Data Sheet is mixed or processed with other materials, the data in this Material Safety Data Sheet may not be transferred to the new material, unless otherwise specified.