SAFETY DATA SHEET
OSHA HCS (29 CFR 1910.1200); WHMIS Classification

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Product Name: DRAQ5
Product Code: DR05100; DR05500; DR10100; DR50050; DR50200; DR51000
CAS No.: None assigned
EINECS No.: None assigned
REACH Registration No.: None assigned

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified Use(s): Fluorescent DNA Dye
SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet
Company Identification: BioStatus Limited
56A Charnwood Road
Shepshed
Leicestershire
LE12 9NP
United Kingdom
Telephone: T: +44 1509 558 163
Fax: F: +44 1509 651 061
E-Mail (competent person): E: enquiry@biostatus.com
W: www.biostatus.com

1.4 Emergency telephone number
Emergency Phone No.: +44 1509 558 163
(Hours of operation 09.00-18.00 GMT Mon-Fri)

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Product Description: Mixture
OSHA HCS (29 CFR 1910.1200)
Hazardous Ingredient(s): Class D, Division 2, Subdivision B, Toxic Material

2.2 Label elements
Product Name: DRAQ5
Hazard Pictogram(s):

Signal Word(s): Warning
Hazard Statement(s): H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
Precautionary Statement(s): P280: Wear protective gloves/protective clothing/eye protection/face protection.
P264: Wash (hands and exposed skin) thoroughly after handling.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER/doctor if you feel unwell.
P332+P313: If skin irritation occurs: Get medical advice/attention.
2.3 Other hazards

P362: Take off contaminated clothing.
Warning - this preparation contains a substance not yet tested completely.

2.4 Additional Information

None

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

<table>
<thead>
<tr>
<th>Hazardous Ingredient(s)</th>
<th>%</th>
<th>CAS No.</th>
<th>OSHA HCS (29 CFR 1910.1200)</th>
<th>WHMIS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,5-BIS[(2-(DIMETHYLAMINO)ETHYL)AMINO)-4,9-DIHYDROXANTHRACE-9,10-DIONE</td>
<td>&lt;1</td>
<td>None assigned</td>
<td>Irritant.</td>
<td>Class D, Division 2, Subdivision B, Toxic Material</td>
</tr>
</tbody>
</table>

3.3 Additional Information

For full text of H/P phrases see section 16.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General information Warning - this preparation contains a substance not yet tested completely.

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion IF SWALLOWED: Rinse mouth. Get medical attention immediately.

Skin Contact IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, obtain medical attention.

Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation May cause irritation to the respiratory system.

Ingestion Stomach ache. Vomiting

Skin Contact May cause irritation.

Eye Contact May cause eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Non-flammable. In case of fire in the surroundings: all extinguishing agents allowed.

5.2 Special hazards arising from the substance or mixture

None anticipated.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Cover with absorbent or contain. Collect and dispose.
6.3 Methods and material for containment and cleaning up

- Wear suitable protective clothing, gloves and eye/face protection. Cover with absorbent or contain. Collect and dispose. Dispose of this material and its container to hazardous or special waste collection point. Wash the spillage area with water.

6.4 Reference to other sections

- Wear suitable protective clothing, gloves and eye/face protection. For full text of H/P phrases see section 16. Collect mechanically and dispose of according to Section 13.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

- For professional users only.
- Observe the usage / storage instructions.
- Wear suitable protective clothing, gloves and eye/face protection.
- Avoid contact with skin and eyes.
- Always wash hands before smoking, eating and drinking.

7.2 Conditions for safe storage, including any incompatibilities

- Storage temperature: Storage temperature (°C): 2-8. Do not freeze.
- Storage life: Observe directions on label and instructions for use.
- Incompatible materials: None anticipated.

7.3 Specific end use(s)

- Fluorescent DNA Dye
- SU24 Scientific research and development

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

- Exposure limit values:
  - USA (NIOSH/OSHA): Not determined.
  - BEI: Biological Exposure Indices (ACGIH): Not determined.
  - OEL (Ireland): Not determined.
  - Japan (ENCS): Not determined.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

- Provide adequate ventilation.

8.2.2 Personal protection equipment

- Eye/face protection: Wear protective eyewear (goggles, face shield, or safety glasses).
- Skin protection (Hand protection/ Other): Wear suitable protective clothing and gloves.
- Respiratory protection: Not normally required. Unlikely to be hazardous by inhalation because of the low vapor pressure of the material at ambient temperature.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- Appearance: Colored liquid.
- Color: Blue.
- Odor: Odorless.
- Odor Threshold: Not available.
- pH: Not available.
- Melting Point/Freezing Point: Not available.
- Initial boiling point and boiling range: Not available.
- Flash point: Not available.
- Evaporation Rate: Not available.
- Flammability (solid, gas): Not available.
Upper/lower flammability or explosive limits: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: Not available.
Solubility(ies): Not available.
Partition coefficient: n-octanol/water: Not available.
Auto-ignition temperature: Not available.
Decomposition Temperature: Not available.
Viscosity: Not available.
Explosive properties: Not available.
Oxidizing properties: Not available.

9.2 Other information: None known.

10. SECTION 10: STABILITY AND REACTIVITY
10.1 Reactivity: None known.
10.2 Chemical stability: Stable at ambient temperatures.
10.3 Possibility of hazardous reactions: None known.
10.4 Conditions to avoid: None known.
10.5 Incompatible materials: Strong oxidizing agents. Strong Alkalis.
10.6 Hazardous decomposition product(s): None known.

11. SECTION 11: TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
Mixture
Warning - this preparation contains a substance not yet tested completely.
Acute toxicity: Not determined. No information available.
Irritation: Not determined. No information available.
Corrosivity: Not determined. No information available.
Sensitization: Not determined. No information available.
STOT - single exposure: Not determined. No information available.
Repeated dose toxicity: Not determined. No information available.
Carcinogenicity: Not determined. No information available.
Mutagenicity: Not determined. No information available.
Toxicity for reproduction: Not determined. No information available.
11.2 Other information
Inhalation: May cause irritation to the respiratory system.
Ingestion: Harmful: possible risk of irreversible effects if swallowed.
Skin Contact: May cause irritation.
Eye Contact: May cause eye irritation.

12. SECTION 12: ECOLOGICAL INFORMATION
12.1 Toxicity: Not determined. No information available.
12.2 Persistence and degradability: Not determined. No information available.
12.3 Bioaccumulative potential: Not determined. No information available.
12.4 Mobility in soil: Not determined. No information available.
12.5 Results of PBT and vPvB assessment: Not determined. No information available.
12.6 Other adverse effects: Not determined. No information available.

13. SECTION 13: DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods: Disposal should be in accordance with local, state or national legislation.
13.2 Additional Information: Wear suitable protective clothing, gloves and eye/face protection.

14. SECTION 14: TRANSPORT INFORMATION
14.1 UN number
Not applicable.
14.2 UN proper shipping name
Not applicable.
14.3 Transport hazard class(es)
Not applicable.
14.4 Packing group
Not applicable.
14.5 Environmental hazards
None known.
14.6 Special precautions for user
Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

15. SECTION 15: REGULATORY INFORMATION

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

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Status</th>
</tr>
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<tbody>
<tr>
<td>SARA 313 - Toxic Chemicals</td>
<td>None</td>
</tr>
<tr>
<td>CERCLA (Comprehensive Environmental Response Compensation and Liability Act)</td>
<td>None</td>
</tr>
<tr>
<td>Proposition 65 (California)</td>
<td>None</td>
</tr>
<tr>
<td>Massachusetts MSL</td>
<td>None</td>
</tr>
<tr>
<td>New Jersey Department of Health RTK List</td>
<td>None</td>
</tr>
<tr>
<td>Pennsylvania RTK</td>
<td>None</td>
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15.2 Environmental hazard(s)

<table>
<thead>
<tr>
<th>Hazard</th>
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<tr>
<td>Canadian WHMIS Classification</td>
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15.3 Chemical Safety Assessment
Not determined. No information available.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND

<table>
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<tr>
<th>Abbreviation</th>
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<tr>
<td>LTEL</td>
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<td>STEL</td>
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<tr>
<td>STOT</td>
<td>Specific Target Organ Toxicity</td>
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<tr>
<td>DNEL</td>
<td>Derived No Effect Level</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No Effect Concentration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
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<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
<tr>
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</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable Liquid Category 2</td>
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<tr>
<td>Flam. Liq. 3</td>
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<tr>
<td>Acute Tox. 4</td>
<td>Acute toxicity Category 4</td>
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<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/irritation Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity — single exposure Category 3</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity — repeated exposure Category 1</td>
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Hazard Statement(s) and Precautionary Statement(s)

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