


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 (TM) - 0.5 mM
	Product Code	NBP2-81129
	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	Novus Biologicals, LLC 10771 E Easter Ave Centennial, CO 80112 USA
	Telephone	1-888-506-6887
	Fax	303-730-1966
	E-Mail	technical@novusbio.com
1.4 Emergency telephone number	Emergency Phone No.	1-888-506-6887

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	Product Description	Mixture Blue. Clear. Liquid. Odorless.
	OSHA HCS (29 CFR 1910.1200)	Hazardous Ingredient(s)
	WHMIS Classification	Class D, Division 2, Subdivision B, Toxic Material
2.2 Label elements	Product Name	According to Regulation (EC) No. 1272/2008 (CLP) DRAQ5 (TM) - 0.5 mM
	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.

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- 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

Hazardous Ingredient(s)	%	CAS No.	OSHA HCS (29 CFR 1910.1200)	WHMIS Classification
1,5-BIS[[2-(DIMETHYLAMINO)ETHYL]AMINO]-4,8-DIHYDROXYANTHRACENE-9,10-DIONE	<1	None assigned	Irritant.	Class D, Division 2, Subdivision B, Toxic Material

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.

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- 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 life
Incompatible materials
Storage temperature (°C): 2-8. Do not freeze.
Observe directions on label and instructions for use.
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)
BEI: Biological Exposure Indices (ACGIH)
OEL (Ireland)
Japan (ENCS)
Not determined.
Not determined.
Not determined.
Not determined.
Not determined.
 - 8.2 **Exposure controls**
 - 8.2.1 **Appropriate engineering controls**
Provide adequate ventilation.
 - 8.2.2 **Personal protection equipment**
- Eye/face protection

Skin protection (Hand protection/ Other)

Respiratory protection



Wear protective eyewear (goggles, face shield, or safety glasses).

Wear suitable protective clothing and gloves.

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
Color.
Odor
Odor Threshold
pH
Melting Point/Freezing Point
Initial boiling point and boiling range
Flash point
Evaporation Rate
Flammability (solid, gas)
Colored liquid.
Blue.
Odorless.
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.

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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

NOT CLASSIFIED AS DANGEROUS FOR TRANSPORT.

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'. (IMDG, ICAO/IATA , ADR/RID).

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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	
	SARA 313 - Toxic Chemicals	None
	CERCLA (Comprehensive Environmental Response Compensation and Liability Act) Proposition 65 (California) Massachusetts MSL	None
	New Jersey Department of Health RTK List	None
	Pennsylvania RTK	None
	Canada	
	WHMIS Classification	Class D, Division 2, Subdivision B, Toxic Material
	PIN Number	Not applicable.
	CANADA INGREDIENT DISCLOSURE LIST	None
15.2	Chemical Safety Assessment	Not determined. No information available.

16. SECTION 16: OTHER INFORMATION

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

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative
Flam. Liq. 1	Flammable Liquid Category 1
Flam. Liq. 2	Flammable Liquid Category 2
Flam. Liq. 3	Flammable Liquid Category 3
Acute Tox. 4	Acute toxicity Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Irrit. 2	Serious eye damage/irritation Category 2
STOT SE 3	Specific target organ toxicity — single exposure Category 3
STOT RE 1	Specific target organ toxicity — repeated exposure Category 1

Hazard Statement(s) and Precautionary Statement(s)

H319: Causes serious eye irritation.	P280: Wear protective gloves/protective clothing/eye protection/face protection.
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H335: May cause respiratory irritation.	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.
	P362: Take off contaminated clothing.

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