

SAFETY DATA SHEET



DNA Molecular Weight Marker

1. Identification of the substance/preparation and of the company/undertaking

Product name : DNA Molecular Weight Marker
Manufacturer : Norgen Biotek Corp.
3430 Schmon Parkway
Thorold, Ontario
Canada L2V 4Y6
Tel: (905) 227-8848
Fax: (905) 227-1061

Material Uses : DNA Molecular Weight Markers.
Chemical product name : Not applicable.
Supplier : Norgen Biotek Corp.
3430 Schmon Parkway
Thorold, Ontario
Canada L2V 4Y6
Tel: (905) 227-8848
Fax: (905) 227-1061

Synonyms : Not available.
Chemical Formula : Not applicable.
Emergency telephone number : Canada: CANUTEC-1-613-996-6666
US: CHEMTREC-1-800-424-9300

Catalog#

Category A: DNA Molecular Weight Markers (supplied without loading dye solutions):

Catalogue numbers: 11200; 11300; 11400; 12800; 11500; 11600; 11700; 11800; 11900; 12000; 12100; 13511; 13559; 13513; 13514; 13515; 13516; 13517; 13525

Category B: DNA Molecular Weight Markers (supplied with loading dye solutions):

Catalogue numbers: 11200; 11300; 11400; 12800; 11500; 11600; 11700; 11800; 11900; 12000; 12100; 13511; 13559; 13513; 13514; 13515; 13516; 13517; 13525

2. Composition / information on ingredients

Substance/Preparation : Preparation.

Chemical name	CAS No.	%	EC Number	Classification
United States 1) No hazardous ingredients.				
Germany 1) No hazardous ingredients. See Section 16 for the full text of the R Phrases declared above				
United Kingdom (UK) 1) No hazardous ingredients.				
Japan 1) No hazardous ingredients.				
Canada 1) No hazardous ingredients.				

This material is classified as hazardous under the United States OSHA regulation, the European DSD/DPD Directives and several countries specific requirements, in Japan and under the Canadian WHMIS regulation.

See Section 8 for Exposure Limits.
See Section 11 for Toxicological Data.
See Section 14 for UN Number.

Date of issue : 3/26/2003.

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3. Hazards identification

Physical State and Appearance : Liquid.
Emergency Overview : CAUTION!
MAY CAUSE EYE IRRITATION.
Avoid contact with eyes. Wash thoroughly after handling.

Routes of Entry : Absorbed through skin. Eye contact.

The substance is not classified as dangerous according to Directive 2001/59/EC.

Classification in Europe : Not classified.

Effects and symptoms

Inhalation : Non-irritant for lungs. Non-sensitizer for lungs.

Skin Contact : Non-irritant for skin. Non-sensitizer for skin.

Eye Contact : Hazardous in case of eye contact (irritant).

Aggravating conditions : Repeated or prolonged exposure is not known to aggravate medical condition.

4. First-aid measures

First-Aid measures

Inhalation : If inhaled, remove to fresh air. Get medical attention if symptoms appear.

Ingestion : Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Skin Contact : Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.

Eye Contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 20 minutes. Cold water may be used. Get medical attention.

Notes to physician : Not available.

Protection of first-aiders : Not available.

5. Fire-fighting measures

Extinguishing Media

Suitable : Use extinguishing media suitable for surrounding materials.

Unsuitable. : Not available.

Unusual fire/explosion hazards : Not available.

Hazardous thermal (de)composition products : Not applicable.

Special fire-fighting procedures : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Protection of fire-fighters : Not applicable.

6. Accidental release measures

Personal precautions : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist before handling this product.

Environmental Precautions and Clean-up Methods : Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

Handling : Avoid contact with eyes. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles such as oxidizing agents.

Storage : Keep container tightly closed. Keep container in a cool, well-ventilated area. Preferred storage temperature is 4°C. For long-term storage keep at -20°C.

Germany - Storage Code : Not available.

8. Exposure controls/personal protection

Engineering measures : Good general ventilation should be sufficient to control airborne levels.

Hygiene measures : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Ingredient Name **Occupational Exposure Limits**

United States

1) No hazardous ingredients.

Germany

1) No hazardous ingredients.

United Kingdom (UK)

1) No hazardous ingredients.

Japan

DNA Molecular Weight Marker

1) No hazardous ingredients.

Canada

1) No hazardous ingredients.

Recommended monitoring procedures : Not available.

Personal protective equipment

Skin and body : Lab coat.

Eyes : Splash goggles.

9. Physical and chemical properties

Physical state : Liquid.

Color : Category A: Colorless.
Category B: Purple.

Odor : Odorless.

pH : 7.6 [Basic.]

Boiling Point : The lowest known value is 100°C (212°F) (Water).

Melting Point : May start to solidify at 0°C (32°F) based on data for: Water.

Flash point : Not applicable.

Explosive properties : Risks of explosion of the product in presence of mechanical impact: Not applicable.
Risks of explosion of the product in presence of static discharge: Not applicable.

Density : The only known value is 1 (Water = 1) (Water).

Solubility : Easily soluble in cold water, hot water, methanol, acetone.

10. Stability and reactivity

Stability : The product is stable at room temperature.

Conditions to avoid : See Section 7 for storage conditions.

Materials to avoid : Reactive with oxidizing agents.

Hazardous Decomposition Products : Not applicable.

11. Toxicological information

Acute toxicity

Ingredient Name

No hazardous ingredients.

Test

Result

Route

Species

Skin irritation

: Non-irritant for skin.

Eye irritation

: Hazardous in case of eye contact (irritant).

Sensitization

: Non-sensitizer for skin. Non-sensitizer for lungs.

Chronic toxicity

: Repeated or prolonged exposure is not known to aggravate medical condition.

Carcinogenic Effects

: Not available.

Mutagenic Effects

: Not available.

Reproduction toxicity

: Not available.

Developmental and Teratogenic Effects

: Not available.

12. Ecological information

Ecotoxicity Data

Ingredient Name

No hazardous ingredients.

Species

Period

Result

Mobility

: Not available.

Persistence/degradability

: Not available.

Bioaccumulative potential

: Not available.

Soil/Water Partition Coefficient (K_{ow})

: Not available.

13. Disposal considerations

Methods of disposal	: Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Classification	: Not applicable.
European Waste Catalogue (EWC)	: Not available.
Hazardous Waste	: To present knowledge of the supplier, this product is not regarded as hazardous waste as defined by EU Directive 94/904/EC.

14. Transport information

International transport regulations

Regulatory Information	Classification
DOT (United States)	Not regulated.
ADR/RID (Europe)	Not regulated.
ADN (Europe)	Not regulated.
Road Law (Japan)	Not regulated.
TDG (Canada)	Not regulated.
IATA-DGR	Not regulated.
IMDG	Not regulated.

15. Regulatory information

HCS (United States)	: Not controlled under the HCS (United States).
U.S. Federal Regulations	: TSCA 8(b) inventory: Components listed. SARA 302/304/311/312 extremely hazardous substances: No ingredient was found. SARA 302/304 emergency planning and notification: No ingredient was found. SARA 302/304/311/312 hazardous chemicals: No ingredient was found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No ingredient was found. SARA 313 toxic chemical notification and release reporting: No ingredient was found. Clean Water Act (CWA) 307: No ingredient was found. Clean Water Act (CWA) 311: No ingredient was found. Clean Air Act (CAA) 112 accidental release prevention: No ingredient was found. Clean Air Act (CAA) 112 regulated flammable substances: No ingredient was found. Clean Air Act (CAA) 112 regulated toxic substances: No ingredient was found.
State Regulations	: California Prop. 65: No ingredient was found.

EU Regulations

Risk Phrases	: This product is not classified according to the EU regulations.
Safety Phrases	: Not applicable.
Contains	: No hazardous ingredients at or above concentration to be considered.
Product Use	: Classification and labeling have been performed according to EU directives 67/548/EEC, 88/379/EEC including amendments and the intended use. - Consumer applications.

National regulations

Germany

Employment restrictions in accordance with § 15b of the Hazardous Substance Ordinance	: No.
Hazardous Incident Ordinance	: No.
Ordinance on Combustible Liquids	: Class: Omitted
Hazard class for water (GWK)	: 1

United Kingdom (UK)

VOC Content (Retail Use)	: Not applicable.
VOC Content (Industrial Use)	: Contains 0 wt% VOC.

DNA Molecular Weight Marker

Japan Control Laws : Does not contain any ingredient listed in Japan as hazardous and present at a concentration level to be considered.

WHMIS (Canada) : Not controlled under WHMIS (Canada).
DSL/NDSL: Components listed.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

16. Other information

US Label Requirements : MAY CAUSE EYE IRRITATION.

Hazardous Material Information System (U.S.A.)

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	J

National Fire Protection Association (U.S.A.)



Europe Label :

Japan Label : Does not contain any ingredient listed in Japan as hazardous and present at a concentration level to be considered.

WHMIS Label :

HISTORY

Date of printing : 3/26/2003.

Date of issue : 3/26/2003.

Date of Previous Issue : No Previous Validation.

Version : 1

Prepared by : Kemika XXI inc.

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.