

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product:** DNazol® Direct  
**Cat. No:** DN 131

Molecular Research Center, Inc.  
5645 Montgomery Rd.  
Cincinnati, Ohio 45212  
USA 1-888-841-0900  
Fax: 513-841-0080

**Product Name:** DNazol® Direct

Application: DNA extraction solution for direct PCR  
Chemical Formula: a formulation

**CHEMTREC EMERGENCY NUMBER:** Only in the event of an emergency involving a spill, leak, fire exposure or accident. USA: 1-800-424-9300; International: 1-703-527-3887; Non-emergency: 1-281-441-4400.

## 2. HAZARD IDENTIFICATION

### OSHA

No known OSHA hazards.

### GHS - Classification

Acute toxicity, oral (Category 5)  
Acute toxicity, dermal (Category 5)

### GHS Label elements

Pictogram none  
Signal word none

### Health Hazard

<u>Hazard Class</u>	<u>Hazard category</u>	<u>Code</u>	<u>Health Hazard Statements</u>
Acute toxicity, oral	Category 5	H303	May be harmful if swallowed
Acute toxicity, dermal skin	Category 5	H313	May be harmful in contact with skin

### Code                      Precautionary statements

#### **Prevention**

P233                      Keep container tightly closed.  
P264                      Wash...thoroughly after handling.  
P270                      Do not eat, drink or smoke when using this product.  
P281                      Use personal protective equipment as required.

#### **Response**

P301+P312+P330                      If swallowed: Call a Poison Center / doctor if you feel unwell. Rinse mouth.

P305+P351+P338

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

**Storage**

P403+P233

Store in well-ventilated place. Keep container tightly closed.

**Disposal**

P501

Dispose of contents/container to an approved waste disposal plant.

**ROUTES OF ENTRY:**

Inhalation: No  
Skin: Yes  
Ingestion: Yes

**EFFECTS OF OVEREXPOSURE:** A slightly hazardous product, which can irritate skin and eyes and possible ingestion toxicity. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**ACUTE EFFECTS**

**EYE EXPOSURE:** May cause reddening and irritation of the eye. Prolonged exposure may be corrosive to eye and mucus membranes.

**SKIN OVEREXPOSURE:** May cause irritation or reddening. Prolonged exposure may be corrosive to skin. Skin inflammation is characterized by itching, scaling, reddening or occasionally blistering.

**INHALATION:** May cause irritation of the throat, coughing and respiratory tract irritation. Avoid inhalation of fumes after heating the solution.

**INGESTION:** May be harmful if swallowed.

**HMIS Classification**

Health Hazard 1  
Flammability 1  
Physical hazards 0  
PPE = C

**NFPA Rating**

Health Hazard 1  
Fire 1  
Reactivity 0

**3. COMPOSITION/Information on Ingredients**

Component	Classification	Concentration
Polyethylene Glycol	25322-68-3	< 70 %
Nonhazardous Ingredients	N/A	Proprietary formulation

**4. FIRST AID**

**FIRST AID FOR EYES:** Check for and remove contact lenses. Flush with water in an eyewash station for at least 15 minutes, holding eyelids open. Obtain medical attention if discomfort or medical symptoms persist.

**FIRST AID FOR SKIN:** Remove contaminated clothing. Flush area with water for 10-15 min. Use deluge safety

shower to decontaminate large areas of body surface with running water and nonabrasive soap. Obtain medical attention if discomfort or symptoms persist.

**FIRST AID FOR INHALATION:** Remove person to fresh air. Monitor for respiratory distress and start artificial respiration, if needed. Obtain medical attention if discomfort or symptoms persist.

**FIRST AID FOR INGESTION:** Remove dentures, if any, and rinse mouth with water provided person is conscious. Have conscious person drink several glasses of water or milk. Do not induce vomiting unless directed to do so by medical personnel. Obtain medical attention.

## 5. FIRE FIGHTING MEASURES

Combustible: May be combustible at high temperature

Flash point: N.D.A.

Autoignition temperature: 320 °C

**EXTINGUISHING MEDIA:** Fire is possible at elevated temperatures. Use water spray, carbon dioxide, dry chemical powder, or polymer foam.

**FIREFIGHTING PROCEDURES:** Wear positive pressure, self-contained breathing apparatus and protective clothing. Prevent contact with skin and eyes. Combustion products include carbon oxides (CO, CO<sub>2</sub>).

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PROTECTIVE EQUIPMENT FOR SPILL CONDITIONS:** Use gloves, boots, and impermeable clothing to avoid skin contact. Use chemical goggles, face shield, or other appropriate eye protection.

**SPILL AND LEAK RESPONSE:** Evacuate area, allowing trained personnel to use pre-planned procedures to perform cleanup. Wear personal protective equipment as required and provide adequate ventilation. Contain liquid with absorbent material such as sand or vermiculite and transfer to appropriate waste container. Decontaminate spill area by washing surface with soap and water. Dispose of contaminated material in accordance with federal, state and local hazardous waste disposal regulations.

## 7. HANDLING AND STORAGE

**IRRITANT:** Keep container tightly closed in a cool, dry area. Avoid contact with acids. Avoid skin contact and eye contact. Wear eye protection and gloves when handling. Store the reagent at room temperature (15-30 C), under standard atmospheric conditions. Keep container tightly sealed. The reagent is suitable for most laboratory storage areas. Avoid eating and smoking in work areas. Wash hands thoroughly after using this material.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**GENERAL PROTECTION AND PRECAUTIONS:** Ensure availability of safety shower and eyewash before using. Provide exhaust ventilation to minimize airborne vapors.

**ROUTINE OPERATIONS:** For routine use latex gloves, chemical safety goggles, and lab coat are considered the minimum body protection. Avoid generation of aerosols. Wash hands thoroughly after handling

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor:	Clear liquid with no odor.
Vapor density:	N.D. A
Evaporation rate:	N.D.A.
Melting point:	-55 to -40 °C (-67 to -40 °F)
Specific gravity:	>1
Vapor press.mm HG at 20 °C	1 hPA (1 mm HG)
Solubility:	Easily soluble in cold water, hot water and methanol.
pH	> 13.5

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal temperature and pressure. May corrode metal containers and metal surfaces.

**INCOMPATIBILITIES:** Strong oxidizing agents and strong acids. Incompatible with polymerization catalysts such as peroxides and persulfates.

**HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide may form when heated to decomposition. Hazardous polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

**TOXICITY DATA:** Causes eye and skin irritation. Material is an irritant to mucous membranes and upper respiratory tract. Only selected data is presented here. To the best of our knowledge, the properties of this formulation have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE:** Possible hazardous short-term degradation products are not likely. However, more toxic long-term degradation products may arise.

## 13. DISPOSAL CONSIDERATIONS

Note that treatment and disposal activities may be subject to laws and regulations that may include before-the-fact permitting as well as reporting requirements. It is the purchaser's responsibility to comply.

**DISPOSAL BY INCINERATION:** Keep in sealed containers between use and final disposal. The reagent may be incinerated in a hazardous waste incinerator equipped with appropriate controls for oxides. All waste disposal activities are subject to federal, state and local laws and regulations.

## 14. TRANSPORTATION INFORMATION

**DOT:** This material is not a hazardous material as defined by 49CFR 172.101 by the U.S. DOT.

**IATA:** Non-hazardous for air transport.

IMDG: Not dangerous goods

## 15. REGULATORY INFORMATION

Note that it is the responsibility of the purchaser and of those handling this material to comply with applicable laws and regulations that are site and activity specific.

### International Inventories

TSCA: United States Toxic Substance Control Act Section 8(b) Polyethylene glycol 200	Complies
DSL/NDSL: Canadian Domestic Substance List/Non-Domestic Substance List	Complies
EINECS/ELINCS: European Inventory of Existing Commercial Chemical Substances EU list of Notified Chemical Substances	Complies
ENCS: Japan Existing and New Chemical Substances	Complies
IECSC: China Inventory of Existing Chemical Substances	Complies
KECL: Korean Existing and Evaluated Chemical Substances	Complies
PICCS: Philippines Inventory of Chemicals and Chemical Substances	Complies
AICS: Australian Inventory of Chemical Substances	Complies

### OSHA Hazards: Irritant

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA: Section 302

**SARA 313:** This solution does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA III, Section 313.

**SARA 311/312:** No SARA hazards.

**CAS 25322-68-3** can be found on the following state right to know lists: Pennsylvania, Massachusetts and New Jersey.

**California Prop. 65 Components:** This chemical does not contain any chemical known to the state of California to cause birth defects, or any other reproductive harm.

SAFETY PHRASE: S24/25 AVOID CONTACT WITH SKIN AND EYES.

## 16. OTHER INFORMATION

Reviewed by	BW, SP
Creation date	1/10/06
Revision date	01/01/18

Reason for Revision: Update to Globally Harmonized System of Chemical Classification.

This information is believed to be accurate and represents the information currently available to us. However, we make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.