

# SAFETY DATA SHEET

## 1. Product and company identification

Product name: InnoTyper® 21 Human DNA Typing Kit  
Product code: 21109  
Material uses: Analytical reagent  
Supplier/Manufacturer: InnoGenomics Technologies  
1441 Canal Street  
Suite #307  
New Orleans, LA 70112  
+1 504-598-5235

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

## 2. Hazard Identification

GHS – Classification: Flammable Liquid 4 Acute Toxicity Oral 4 Skin Irritant 2 Eye Irritant 2  
Signal Word: Warning

### Health Hazard

Skin Corrosion/Irritation	Category 3
---------------------------	------------

Physical state: liquid  
Odor: not available  
Physical hazards: not hazardous  
Hazard statements: H316 – causes mild skin irritation H227 - Combustible liquid H315 - Causes skin irritation  
H319 - Causes serious eye irritation H335 - May cause respiratory irritation H302 - Harmful if swallowed  
Precautionary statements: P332+P313 – If skin irritation occurs, get medical advice/attention P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - IF ON SKIN: Wash with plenty of soap and water P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

### Principle routes of exposure/

Potential health effects:  
Eyes: May cause eye irritation with susceptible persons.  
Skin: May cause skin irritation in susceptible persons.  
Inhalation: May be harmful by inhalation.  
Ingestion: May be harmful if swallowed.

Specific effects:  
Carcinogenic effects: none  
Mutagenic effects: none  
Reproductive toxicity: none  
Sensitization: none

# SAFETY DATA SHEET

Target Organ Effects:

No known effects under normal use conditions.

## HMIS

Health	1
Flammability	0
Reactivity	0

### 3. Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
Glycerol	56-81-5	200-289-5	10-30
TRIS Base	77-86-1	201-064-4	<1.0
Sodium azide	26628-22-8	247-852-1	<0.1
Tween 20	9005-64-5	500-018-3	<0.1
Dimethyl Sulfoxide	67-68-5	200-664-3	<1.0

### 4. First aid measures

**Skin contact:** Rinse with plenty of water. If symptoms arise, call a physician.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

**Ingestion:** Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.

**Inhalation:** Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

**Notes to physician:** Treat symptomatically.

### 5. Fire-fighting measures

**Suitable extinguishing media:** Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus and protective suit.

### 6. Accidental release measures

**Personal precautions:** Use personal protective equipment.

**Methods for clean up:** Soak up with inert absorbent material.

**Environmental precautions:** Prevent further leakage or spillage, if safe to do so.  
See Section 12 for additional information.

### 7. Handling and storage

**Handling:** Always wear recommended Personal Protective Equipment. No special handling advice required.

**Storage:** Keep in a dry, cool and well-ventilated place.

# SAFETY DATA SHEET

## 8. Exposure controls/personal protection

### Exposure limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Glycerol	15mg/m <sup>3</sup> 5 mg/m <sup>3</sup>	none	10 mg/m <sup>3</sup>	none
TRIS BASE	none	none	none	none
Sodium azide	none	none	none	none
Tween 20	none	none	none	none
Dimethyl Sulfoxide	none	none	none	none

### Engineering measures

Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection:	Impervious gloves.
Eye protection:	Safety glasses with side-shields.
Skin and body protection:	Lightweight protective clothing.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice.

### Environmental exposure controls

Prevent product from entering drains.

## 9. Physical and chemical properties

### General Information

Form	liquid	
Appearance	No information available	
Odor	No information available	
Boiling Point/Range	°C no data available	°F no data available
Melting Point/Range	°C no data available	°F no data available
Flash Point	°C no data available	°F no data available
Autoignition Temperature	°C no data available	°F no data available
Oxidizing Properties	No information available	
Water Solubility	Soluble	

## 10. Stability and reactivity

### Stability:

Stable under normal conditions.

### Materials to avoid:

No dangerous reaction known under conditions of normal use. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides.

### Hazardous decomposition products:

None under normal use.

### Polymerization:

Hazardous polymerization does not occur.

# SAFETY DATA SHEET

## 11. Toxicological information

### Acute toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LD50 (inhalation, rat/mouse)
Glycerol	= 12600mg/kg Oral	No data available	No data available
TRIS Base	= 5900 mg/kg (Rat)	No data available	No data available
Sodium azide	= 27 mg/kg (Rat)	No data available	No data available
Tween 20	= 40554 mg/kg (Rat)	No data available	No data available
Dimethyl Sulfoxide	= 14500 mg/kg (Rat)	= 40g/kg (Rat)	No data available

### Principle Routes of Exposure/ Potential Health effects

<b>Eyes</b>	May cause eye irritation with susceptible persons.
<b>Skin</b>	May cause skin irritation in susceptible persons.
<b>Inhalation</b>	
<b>Ingestion</b>	May be harmful if swallowed.
<b>Carcinogenic effects:</b>	none
<b>Mutagenic effects:</b>	none
<b>Reproductive toxicity:</b>	none
<b>Sensitization:</b>	none
<b>Target Organ Effects:</b>	No known effects under normal use conditions.

## 12. Ecological information

<b>Ecotoxicity effects:</b>	No information available.
<b>Mobility:</b>	No information available.
<b>Biodegradation:</b>	Inherently biodegradable.
<b>Bioaccumulation:</b>	Does not bio-accumulate.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	Log Pow
Glycerol 56-81-5		Daphnia magna EC50 > 500mg/L (24 h)			= -1.76
Tween 20 9005-64-5			LC50 – other fish – 350mg/L (24h)		
Dimethyl Sulfoxide 67-68-5	EC50 12350 – 25500mg/L (96h)	EC50 = 7000mg/L (24h)	LC50 33-37g/L Oncorhynchus mykiss (96h) LC50 = 41.7g/L Cyprinus carpio (96h) LC50 = 34mg/L Pimephales promelas (96 h) LC50 > 40g/L Lepomis macrochirus (96 h)		= -2.03

# SAFETY DATA SHEET

## 13. Disposal considerations

Dispose of in accordance with local regulations.

## 14. Transportation information

### IATA

**Proper Shipping Name:** Not classified as dangerous in the meaning of transport regulations.

**Hazard Class:** None

**Subsidiary Class:** None

**Packing Group:** None

**UN-No:** None

## 15. Regulatory Information

Component	TSCA
Glycerol 56-81-5 (10-30)	Listed
Tris Base 77-86-1 (<1.0)	Listed
Sodium azide 26628-22-8 (<0.1)	Listed
Tween 20 9005-64-5 (<0.1)	Listed
Dimethyl Sulfoxide 67-68-5 (<1.0)	Listed

### U.S. Federal Regulations

#### **SARA 313**

This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers:

Chemical Name	CAS-No	Weight %	SARA 313 – Threshold Values
Sodium azide	26628-22-8	<0.1	1.0

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain HAPs.

### U.S. State Regulations

Chemical Name	Massachusetts-RTK	New Jersey-RTK	Pennsylvania-RTK	Illinois-RTK	Rhode Island-RTK
Glycerol	Listed	-	Listed	-	Listed
TRIS Base	-	-	-	-	-
Sodium azide	Listed	Listed	Listed	-	Listed
Tween 20	-	Listed	Listed	-	-
Dimethyl Sulfoxide	-	Listed	-	-	-

# SAFETY DATA SHEET

---

## California Proposition 65

This product does not contain chemicals listed under Proposition 65.

## WHMIS Hazard Class

D2B Toxic materials



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required.

## 16. Other information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

### Notice to reader

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information contained in this document is based on InnoGenomics' state of knowledge at the time of preparation.

THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

**End of Safety Data Sheet**