

# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:  
 Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**Product Name** Plasmid DNA (pTXTL-xxxxxx)  
**Product Number** 502xxx

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended use** For research use only  
**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet

**Supplier Address** Daicel Arbor Biosciences  
 5840 Interface Drive, Suite 101  
 Ann Arbor, MI 48103  
 USA  
**Email** [info@arbor.daicel.com](mailto:info@arbor.daicel.com)  
**Phone** + 1 (734) 998-0751

### 1.4. Emergency telephone number

**Emergency Phone Number** +1 (800) 222-1222 (American Association of Poison Control Centers)  
 Available 24 hours everyday

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

*Regulation (EC) No 1272/2008*

There is no harmonized classification and there are no notified hazards by manufacturers, importers or downstream users for this product.

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Daicel Arbor Biosciences plasmids (vectors) are dissolved in 10 mM Tris/HCl pH 8.0.

Chemical name	EC No	CAS No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH STATUS
Tris base	201-064-4	77-86-1	~1	n/a	01-2119957659-16-0000
Deoxyribonucleic acids	n/a	9007-49-2	99	n/a	n/a

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### **General Advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin Contact** Wash skin with soap and water.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Note to Physician** Treat symptomatically.

## Section 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

**Suitable Extinguishing Media** Substance is non-flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

### 5.2. Special hazards arising from the substance or mixture

**Specific Hazards Arising from the Chemical** Thermal decomposition can lead to release of irritating gases and vapors.

### 5.3. Advice for firefighters

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing.

**For emergency responders** Use personal protection recommended in Section 8.

## 6.2. Environmental precautions

**Environmental Precautions**                      Should not be released into the environment.

## 6.3. Methods and material for containment and cleaning up

**Methods for Containment**                      Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up**                      Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

## 6.4. Reference to other sections

**Reference to other sections**                      See section 8 for more information. See section 13 for more information.

# Section 7: HANDLING AND STORAGE

## 7.1. Precautions for safe handling

**Advice on Safe Handling**                      Handle in accordance with good industrial hygiene and safety practice.

## 7.2. Conditions for safe storage, including any incompatibilities

**Storage Temperature**                      Refer to Product Data Sheet for specific information.

**Storage Conditions**                      Keep/store only in original container. Keep tightly closed in a dry and cool place.

**Incompatible Materials**                      None known based on information supplied.

## 7.3. Specific end use(s)

**Risk Management Methods (RMM)**                      The information required is contained in this Safety Data Sheet.

# Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1. Control parameters

**Exposure Limits**                      This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies

**Derived No Effect Level (DNEL)**                      No information available.

**Predicted No Effect Concentration (PNEC)**                      No information available.

## 8.2. Exposure controls

**Engineering Controls**                      Ensure adequate ventilation, especially in confined areas.  
Ensure that eyewash stations are close to the workstation location.  
Ensure that showers are close to the workstation location.

### Personal protective equipment (PPE)

Eye/face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear suitable protective clothing and gloves.
Respiratory Protection	Use in well ventilated areas.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical State	Dry
Appearance	White
Odor	Odorless

<u>Property</u>	<u>Values</u>	<u>Remarks / Method</u>
pH	Not applicable	
Melting Point/Freezing Point	No information available	
Boiling Point/Boiling Range	Not applicable	
Flash Point	Not applicable	
Evaporation Rate	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air	Not applicable	
Upper Flammability Limit	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	No information available	
Vapor Density	No information available	
Relative Density	No information available	
Specific Gravity	No information available	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition Coefficient	No information available	
Autoignition Temperature	-	Product is not self-igniting
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive Properties	-	Not explosive
Oxidizing Properties	-	Not oxidizing

### 9.2. Other information

Softening Point	No information available
Molecular Weight	
VOC Content (%)	
Density	
Bulk Density	No information available

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity	No data available.
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## 10.2. Chemical stability

**Stability** Stable under Normal Conditions.

## 10.3. Possibility of hazardous reactions

**Possibility of Hazardous Reactions** Non under normal processing.

## 10.4. Conditions to avoid

**Conditions to Avoid** Incompatible materials. Ignition sources. Heat. Exposure to air or moisture over prolonged periods.

## 10.5. Incompatible materials

**Incompatible Materials** Strong Oxidizing Agents.

## 10.6. Hazardous decomposition products

**Hazardous Decomposition Products** None known

# Section 11: TOXICOLOGICAL INFORMATION

## 11.1. Information on toxicological effects

### **Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

### Information on toxicological effects

Inhalation	Avoid breathing vapors or mists. May cause irritation of respiratory tract.
Eye Contact	Redness. May cause slight irritation.
Skin Contact	Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.
Ingestion	May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin Corrosion/Irritation	Mild
Serious Eye Damage/Eye Irritation	Mild
Irritation	Mild
Corrosivity	Mild
Respiratory or skin sensitization	No information available
Germ Cell Mutagenicity	No information available
Carcinogenicity	No information available
Reproductive Toxicity	No information available
STOT - Single Exposure	No information available
STOT - Repeated Exposure	No information available
Aspiration Hazard	No information available

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecotoxicity (aquatic and terrestrial)** Do not empty into drains.

### 12.2. Persistence and degradability

**Persistence and Degradability** No information available

### 12.3. Bioaccumulative potential

**Bioaccumulative Potential** No information available

### 12.4. Mobility in soil

**Mobility in Soil** No information available

### 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** No information available

### 12.6. Other adverse effects

**Other Adverse Effects** *Ozone depletion potential (ODP)*  
No information available

## Section 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Relevant Information** Keep out of drains, sewers, ditches, and waterways.

**Disposal Considerations** Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

**Contaminated Packaging** Empty containers must be tripled rinsed prior to disposal.

## Section 14: TRANSPORT INFORMATION

### IMDG

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	None

### RID

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

**ADR**

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

**IATA****Not regulated**

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

<b>Section 15: REGULATORY INFORMATION</b>
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**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**Authorizations and/or restrictions on use:**

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants** Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009** Not applicable

**International Inventories**

TSCA Complies

DSL Complies

NDSL Complies

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**15.2. Chemical safety assessment**

**Chemical Safety Report** No information available

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Canadian NPRI Not Listed  
WHIMIS (Canada) Not Classified

## Section 16: OTHER INFORMATION

### Training advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

### Prepared by

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### Creation Date

March 01, 2017

### Revision Date

November 5, 2020

### Version

02

**Revision Note** SDS is valid three (3) years from revision date. Contact [info@arbor.daicel.com](mailto:info@arbor.daicel.com) for latest revision.

### **This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

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### Disclaimer

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**End of Safety Data Sheet**