



# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Family</b>	Acella™ Chemically Competent Cells
<b>Products</b>	Acella™ pLysS Chemically Competent Cells, Tubes Acella™ pLysS Chemically Competent Cells, 96-Well Semi-Skirted Plate
<b>Chemical characterization</b>	Pre-dispensed <i>E. coli</i> bacteria
<b>Supplier</b>	Edge BioSystems 201 Perry Parkway, Suite 5 Gaithersburg, MD 20877 Tel: 1.301.990.2685 1.800.326.2685 Fax: 1.301.990.0881 <a href="http://www.edgebio.com">www.edgebio.com</a>
<b>Emergency telephone number</b>	1.800.326.2685
<b>Product use</b>	Used to amplify plasmids
<b>Canadian PIN</b>	N/A

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Hazardous Components</b>	<b>Name</b>	<b>CAS Number</b>	<b>Weight %</b>
	Dimethyl Sulfoxide (DMSO)	67-68-5	>1
<b>Other components</b>	<b>Name</b>	<b>CAS Number</b>	<b>Weight %</b>
	Components not identified are not hazardous, or are below regulatory disclosure limits.	N/A	N/A

See Section 15 of this MSDS for OSHA regulatory status

## 3. HAZARDS IDENTIFICATION

**Primary route(s) of entry** Skin or eye contact from splashes.

## Symptoms of exposure

<b>Inhalation</b>	Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.
<b>Eye contact</b>	Can cause irritation of the eye, but not likely to permanently injure eye tissue.
<b>Skin contact</b>	Can cause moderate skin irritation. Not likely to cause permanent damage. Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause minor systemic damage.
<b>Ingestion</b>	May cause nausea or vomiting.
<b>Medical conditions aggravated by exposure</b>	None known.
<b>Listed as carcinogen or potential carcinogen</b>	Not listed by OSHA, the International Agency for Research on Cancer (IARC), or the National Toxicology Program (NTP).

## 4. FIRST AID

<b>Inhalation</b>	Remove person to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
<b>Eye contact</b>	Flush opened eyes for several minutes under running water. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get medical attention if eyes become irritated.
<b>Skin contact</b>	Wash skin with soap and water, rinsing thoroughly. Remove contaminated clothing.
<b>Ingestion</b>	DO NOT induce vomiting and seek medical attention immediately. Drink 2 glasses of water or milk to dilute.

## 5. FIRE FIGHTING MEASURES

<b>Flash Point and Method</b>	N/A
<b>General hazard</b>	N/A
<b>Extinguishing media</b>	Use media suitable for the material that is burning, such as water spray, carbon dioxide, extinguishing powder or foam.
<b>Extinguishing media to avoid</b>	None
<b>Special firefighting instructions</b>	Move containers from area if it can be done without risk.
<b>Firefighting equipment</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Wear appropriate protective equipment (See Section 8).
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<b>Environmental precautions</b>	Keep out of sewers and waterways.
<b>Clean-up methods</b>	Collect spilled liquid with liquid-binding material or inert absorbent and place it in a suitable container for disposal. Wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Good laboratory technique should be used when handling. Harmful or irritating material. Avoid contact and avoid breathing the material. Use only in a well ventilated area. Keep closed or covered when not in use.
<b>Storage</b>	No special storage measures are necessary. Store at -80°C.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Engineering controls</b>	General ventilation
<b>Personal Protection</b>	
<b>Respirator</b>	Use supplied-air respiratory equipment as required.
<b>Eye Protection</b>	Wear safety glasses or vented safety goggles. Have an eye wash station available.
<b>Gloves</b>	Wear rubber gloves and inspect gloves for chemical break-through and replace at regular intervals. Have a safety shower available.
<b>Clothing</b>	Normal work clothing
<b>Other</b>	Eye wash, emergency shower
<b>Exposure controls</b>	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	Slight odor
<b>Vapor pressure</b>	N/D
<b>Vapor density</b>	N/D
<b>Specific gravity/density</b>	N/D
<b>Evaporation rate</b>	N/D

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	Stable
<b>Conditions to avoid</b>	Strong oxidizing agents. Strong alkalines.
<b>Hazardous decomposition products</b>	Carbon monoxide. Carbon dioxide. Sulfur containing gases.

## 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity</b>	ORL-Rat LD50: 14500 mg/kg. ORL-Mouse LD50: 7920 mg/kg.
<b>Chronic Toxicity</b>	No information available.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	No information on product available.
<b>Persistence/degradability</b>	No information on product available.

## 13. DISPOSAL CONSIDERATIONS

<b>RCRA hazardous waste code</b>	Not applicable.
<b>Special instructions</b>	Observe all federal, state and local laws and regulations.

## 14. TRANSPORT INFORMATION

<b>DOT hazard class</b>	Not regulated
<b>TDG hazard class</b>	Not regulated

## 15. REGULATORY INFORMATION

<b>OSHA regulatory status (29 CFR 1910.1200)</b>	Irritant		
<b>CERCLA reportable quantity (40 CFR 117, 302)</b>	<b>Name</b>	<b>Reportable quantity (lbs)</b>	
	Dimethyl Sulfoxide (DMSO)	N/A	
<b>SARA extremely hazardous substances (40 CFR 355)</b>	<b>Name</b>	<b>Threshold planning quantity (lbs)</b>	<b>Reportable quantity (lbs)</b>
	Dimethyl Sulfoxide (DMSO)	N/A	N/A
<b>SARA hazard categories (40 CFR 370)</b>	None		
<b>SARA toxic chemicals</b>	<b>Name</b>	<b>CAS Number</b>	<b>Percentage</b>

(40 CFR 372)

Dimethyl Sulfoxide (DMSO)

67-68-5

N/A

**Inventory Status**

The chemicals in this product are listed on the US TSCA Chemical Substances Inventory and the Canadian Domestic Substances List.

**Toxic Substance Control Act**

No specific regulations apply. This product is solely for research and development purposes only and may not be used, processed or distributed for a commercial purpose. It may only be handled by technically qualified individuals.

**Controlled Products Regulations**

This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

**WHMIS classification**

D2B

**State regulations**

N/A

**16. OTHER INFORMATION**

**Abbreviations**

C – Ceiling limit  
ERG – Emergency Response Guidebook  
LC<sub>50</sub> – The concentration of a substance in air that will kill 50% of test animals within a certain exposure period.  
LD<sub>50</sub> – The dose that causes death in 50% of test animals.  
N/A – Not applicable  
N/D – Not determined  
N/E – Not established  
N/K – Not known  
PIN – Product Identification Number  
RQ – Reportable Quantity  
STEL – Short Term Exposure Limit  
TPQ – Threshold Planning Quantity  
TWA – Time Weighted Average  
WHMIS – Workplace Hazardous Materials Information System

**Date prepared**

January 18, 2006

**Replaces**

New

**MSDS Number**

6050019, 6050020

**Disclaimer**

The above information is believed correct, but does not purport to be all-inclusive and shall only be used as a guide. Edge BioSystems shall not be held liable for any damage resulting from handling or from contact with the above product.