Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Date of Issue: 01/03/2018



SECTION 1: IDENTIFICATION

1.1. Product Identifier Product Form: Mixture

Product Name: Replication-Incompetent Lentiviral Particles

Synonyms: Lentivirus

Each virus stock contains a pure recombinant, replication-defective lentivirus population. The viruses are classified as Risk Group 2 by the World Health Organization (WHO) and Biosafety Level 2 (BL2) or Enhanced BL2 (depending on the circumstances) by the U.S. Centers for Disease Control (CDC) Office of Health and Safety.

1.2. Intended Use of the Product

Use of the Substance/Mixture: For Research Use Only

1.3. Name, Address, and Telephone of the Responsible Party

Company

Cellecta, Inc. 320 Logue Ave

Mountain View, CA 94043

650-938-3910

www.cellecta.com

1.4. Emergency Telephone Number

Emergency Number : 650-938-3910

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Not classified

2.2. Label Elements

GHS-US Labeling

No labeling applicable

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Dulbecco's Phosphate Buffered Saline (DPBS)	(CAS-No.) Not available	< 99	Not classified
Dulbecco's Modification of Eagles Medium (DMEM)	(CAS-No.) Not available	< 89	Not classified
Fetal Bovine Serum (FBS)	(CAS-No.) Not available	< 10	Not classified
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-	(CAS-No.) 7365-45-9	< 0.5	Not classified
Magnesium chloride	(CAS-No.) 7786-30-3	< 0.05	Not classified
Lentiviral particles	(CAS-No.) Not available	< 0.01	Not classified

Full text of H-phrases: see section 16

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

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First-aid Measures After Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: The viruses may cause human infection and may pose a hazard to laboratory personnel, but they are unlikely to spread in the community.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. **Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: The lentivirus preparation may, under certain circumstances, produce disease.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical. **Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Follow biosafety level 2/enhanced biosafety level 2 procedures for proper clean up. Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray. Handle as a biohazardous material under biosafety level 2/enhanced biosafety level 2 containment.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

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Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s) For Research Use Only

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

8.2. Exposure Controls

Appropriate Engineering Controls

: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment : Gloves. Protective clothing. Protective goggles.







Materials for Protective Clothing

Hand Protection
Eye and Face Protection

Skin and Body Protection Respiratory Protection

: Chemically resistant materials and fabrics.

: Wear protective gloves.: Chemical safety goggles.

: Wear suitable protective clothing.

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance: Clear to yellow to redOdor: No data availableOdor Threshold: No data available

pH : 7.4

Evaporation Rate : No data available **Melting Point** : No data available **Freezing Point** : No data available **Boiling Point** : No data available **Flash Point** : No data available **Auto-ignition Temperature** : No data available **Decomposition Temperature** : No data available Flammability (solid, gas) : Not applicable **Vapor Pressure** : No data available Relative Vapor Density at 20°C : No data available **Relative Density** : No data available Solubility : No data available Partition Coefficient: N-Octanol/Water : No data available Viscosity : No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

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- 10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
- **10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products: None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Magnesium chloride (7786-30-3)		
LD50 Oral Rat	2800 mg/kg	
LD50 Dermal Rat	> 2000 mg/kg	
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)		
LD50 Oral Rat	> 2000 mg/kg	
LD50 Dermal Rat	> 2000 mg/kg	

Skin Corrosion/Irritation: Not classified

pH: 7.4

Serious Eye Damage/Irritation: Not classified

pH: 7.4

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. **Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. **Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: The lentivirus preparation may, under certain circumstances, produce disease.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Not classified.

Magnesium chloride (7786-30-3)		
LC50 Fish 1	1970 - 3880 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	
EC50 Daphnia 1	140 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])	
1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)		
LC50 Fish 1	> 100 mg/l (Exposure Time: 96 h - Species: Brachydanio rerio)	
EC50 Daphnia 1	> 100 mg/l (Exposure Time: 48 h - Species:Daphnia magna)	
NOEC Chronic Fish	>= 100 mg/l (Test Duration: 96 h - Species: Brachydanio rerio)	
NOEC Chronic Crustacea	0.0178 g/l (Daphnia magna)	
NOEC Chronic Algae	> 100 mg/l	

12.2. Persistence and Degradability

Replication-Incompetent Lentiviral Particles	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Replication-Incompetent Lentiviral Particles		
Bioaccumulative Potential	Not established.	

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations. Dispose of biohazardous material according to biosafety level 2/enhanced biosafety level 2 containment requirements.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name : BIOLOGICAL SUBSTANCE, CATEGORY B

Hazard Class : 6.2 Identification Number : UN3373 Label Codes : 6.2 ERG Number : 158

14.2. In Accordance with IMDG

Proper Shipping Name : BIOLOGICAL SUBSTANCE, CATEGORY B

Hazard Class : 6.2

Division : 6.2

Identification Number : UN3373

Label Codes : 6.2

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-T



14.3. In Accordance with IATA

Proper Shipping Name : BIOLOGICAL SUBSTANCE, CATEGORY B

Identification Number: UN3373Hazard Class: 6.2Label Codes: 6.2Division: 6.2ERG Code (IATA): 11L



SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Magnesium chloride (7786-30-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)- (7365-45-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations Neither this product nor its chemical components appear on any US state lists.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 01/03/2018

 Other Information
 : This document has been prepared in accordance with the SDS

requirements of the OSHA Hazard Communication Standard 29 CFR

1910.1200

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR

1910.1200].

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

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