

Order Number **4039002-0**Customer Number **6111956****1. Identification of the substance/preparation and of the company/undertaking****Product name** : GeneJuice™ Transfection Reagent**Catalog #** 70967
Supplier : EMD Biosciences, Inc.
 10394 Pacific Center Court
 San Diego, CA 92121
 PHONE: (858)450-5558/(800)854-3417
 FAX: (858)453-3552
Synonym Not available.
Emergency telephone number : Call Chemtrec®
 (800)424-9300 (within U.S.A.)
 (703)527-3887 (outside U.S.A.)
2. Composition / information on ingredients**Substance/Preparation** : Substance

Chemical name*	CAS No.	EC Number	Symbol	R-Phrases
GENEJUICE TRANSFECTION REAGENT	64-17-5 (Ethanol)	Not available.	F	R11

3. Hazards identification**Physical/chemical hazards** : Highly flammable.**4. First-aid measures**First-Aid measures

- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
- Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
- Skin Contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
- Eye Contact** : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- Aggravating conditions** : Repeated or prolonged exposure is not known to aggravate medical condition.

5. Fire-fighting measures**Flammability of the Product** : Flammable.Extinguishing Media

- Suitable** : SMALL FIRE: Use DRY chemical powder.
 LARGE FIRE: Use alcohol foam, water spray or fog.

Special fire-fighting procedures : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.**Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Small Spill and Leak** : Absorb with an inert material and put the spilled material in an appropriate waste disposal.
- Large Spill and Leak** : Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed.

7. Handling and storage

- Handling** : Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals, acids.
- Storage** : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above 4°C (39.2°F).
- Packaging materials**
- Recommended use** : Use original container.

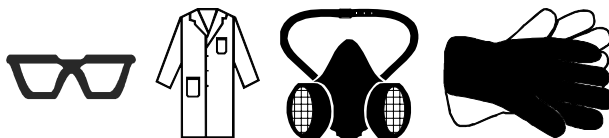
8. Exposure controls/personal protection

- Engineering measures** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
GeneJuice™ Transfection Reagent	Not available.

Personal protective equipment

- Respiratory system** : Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- Skin and body** : Lab coat.
- Hands** : Gloves.
- Eyes** : Safety glasses.
- Protective Clothing (Pictograms)** :



9. Physical and chemical properties

- Physical state** : Liquid. (Supplied in ethanol.)
- Color** : Not available.
- Molecular Weight** : Not available.
- Solubility** : Not available.
- Flash point** : Not available.
- Explosive properties** : Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to avoid** : Incompatible with ammonia.
- Materials to avoid** : Reactive with oxidizing agents, metals, acids.

11. Toxicological information

RTECS #	: KQ630000 (Ethanol)
Local effects	
Skin irritation	: Not available.
Acute toxicity	: LD50: Not available. LC50: Not available.
Chronic toxicity	: Repeated or prolonged exposure is not known to aggravate medical condition.
Other Toxic Effects on Humans	: Not available. Not considered to be toxic for humans. Not available. Not available.
Carcinogenic effects	: Not available.
Mutagenic effects	: Not available.
Reproduction toxicity	: Not available.
Teratogenic effects	: Not available.

12. Ecological information

Ecotoxicity	: Not available.
Toxicity of the Products of Biodegradation	: Not available.

13. Disposal considerations

Methods of disposal; Waste of residues; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

International transport regulations

UN number	: UN1170
Land - Road/Railway	
Proper shipping name	: Ethanol solution
ADR/RID Class	: CLASS 3: Flammable liquid A.
Packing Group	: II
ADR/RID label	:



Sea

Proper shipping name	: Ethanol solution
IMDG Class	: Not controlled under IMDG.
Packing Group	: II

Air


Proper shipping name	: Ethanol solution
UN/ID Number	: UN1170
IATA-DGR Class	: CLASS 3: Flammable liquid.
Packing Group	: II
IATA label	:



Special Provisions for Transport : Not available.

15. Regulatory information

EU Regulations

- Hazard symbol(s)** : 
- Classification** : Highly flammable
- Risk Phrases** : R11- Highly flammable.
- Safety Phrases** : S7- Keep container tightly closed.
S16- Keep away from sources of ignition - No smoking.

U.S. Federal Regulations

- : TSCA: Listed on inventory (Ethanol.)
- SARA 302/304/311/312 extremely hazardous substances: No products were found.
- SARA 302/304 emergency planning and notification: No products were found.
- SARA 302/304/311/312 hazardous chemicals: No products were found.
- SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
- SARA 313 toxic chemical notification and release reporting: No products were found.
- Clean Water Act (CWA) 307: No products were found.
- Clean Water Act (CWA) 311: No products were found.
- Clean air act (CAA) 112 accidental release prevention: No products were found.
- Clean air act (CAA) 112 regulated flammable substances: No products were found.
- Clean air act (CAA) 112 regulated toxic substances: No products were found.

HCS Classification

- : CLASS: Flammable liquid having a flash point lower than 37.8°C (100°F).

State Regulations

:

WHMIS (Canada)

- : Not controlled under WHMIS (Canada).
No products were found.

16. Other information

Hazardous Material Information System (U.S.A.)

Health	1
Fire Hazard	3
Reactivity	0
Personal Protection	G

National Fire Protection Association (U.S.A.)



Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. **This product is intended for research use only.***

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Date of issue 12/28/2006.

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