



05932 - ReproRNA™ Transfection Reagent

Revision Date 24-Jan-2023 Revision Number 1.1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier			
Product Name	ReproRNA™ Transfection Reagent		
Other means of identification			
Catalog Number	05932		
UN/ID no.	1170		
Document Number	1000005449		
Synonyms	None		
Recommended use of the chemica	l and restrictions on use		
Recommended Use	Laboratory reagent		
Details of the supplier of the safety data sheetManufacturer/SupplierSTEMCELL Technologies Canada Inc.Suite 500 - 1618 Station StreetVancouver, British Columbia V6A 1B6 CanadaEmergency telephone numberEmergency Telephone1-800-667-0322			
2. HAZARDS IDENTIFICATION			
<u>Classification</u>			
-			

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Category 2

Hazards not otherwise classified (HNOC) Not applicable

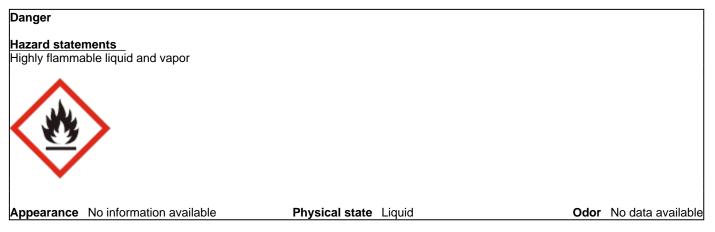
Label elements





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Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof electrical/ventilating / lighting/ .? / equipment Use only non-sparking tools Take precautionary measures against static discharge Wear protective gloves/eye protection/face protection

Precautionary statements - Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

Toxic to aquatic life with long lasting effects Toxic to aquatic life

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)





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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No.	Weight-%
Ethyl Alcohol	64-17-5	>99

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation	Remove to fresh air.		
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.		
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.		
Ingestion	Clean mouth with water and drink afterwards plenty of water.		
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information.		
Most important symptoms and effects, both acute and delayed			
Symptoms	No information available.		
Indication of any immediate medical attention and special treatment needed			
Note to physicians	Treat symptomatically.		
5. FIRE-FIGHTING MEASURES			

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.	
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.	
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.	





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Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge Yes.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.
Other Information	Ventilate the area.
Environmental precautions	
Environmental precautions	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
Methods and material for containm	ent and cleaning up
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handlingAdvice on safe handlingUse personal protection equipment. Avoid contact with skin and eyes. Avoid breathing
vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition





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sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Store in accordance with information listed on the Product Information Sheet (PIS). Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl Alcohol	STEL: 1000 ppm	TWA: 1000 ppm	IDLH: 3300 ppm
64-17-5		TWA: 1900 mg/m ³	TWA: 1000 ppm
		(vacated) TWA: 1000 ppm	TWA: 1900 mg/m ³
		(vacated) TWA: 1900 mg/m ³	_

Appropriate engineering controls

Engineering controls	Showers
	Eyewash stations
	Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles.	
Hand protection	Wear suitable gloves. Impervious gloves.	
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	





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General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical an	d chemical properties	
Physical state	Liquid	
Appearance	No information available	
Color	Clear	
Odor	No data available	
Odor threshold	No data available	
<u>Property</u>	Values_	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	
Boiling point / boiling range	78.3 °C / 172 °F	
Flash point	13 °C / 55 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing properties	No information available	
Other Information		
Softening point	No information available	
Molecular weight	No information available	
Molecular formula	No information available	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity

No information available.





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Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.
Symptoms related to th	e physical, chemical and toxicological characteristics
Symptoms	No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

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0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Product Information

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl Alcohol	= 7060 mg/kg(Rat)	-	= 124.7 mg/L (Rat)4 h
64-17-5			





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

Skin corrosion/irritation Product Information	No informatio	on available.		
Serious eye damage/eye Product Information	irritation No informatic	on available.		
Respiratory or skin sens Product Information	itization No information	on available.		
Germ cell mutagenicity Product Information	No informatic	on available.		
Carcinogenicity	No informatic	on available.		
The table below indicates				00114
Chemical name Ethyl Alcohol 64-17-5	ACGIH A3	IARC Group 1	NTP Known	OSHA X
Reproductive toxicity	No informatio	on available.		
		Product Information		
STOT - single exposure	No informatio			
		Product Information		
STOT - repeated exposu	re No informatio			
		Product Information		
Target organ effects	liver, Respira	tory system, Eyes, Skin, C	entral nervous system, blo	ood, Reproductive System.
Aspiration hazard	No informatic	on available.		

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product Information				
Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Ethyl Alcohol	-	LC50: 12.0 - 16.0mL/L	-	EC50: =10800mg/L (24h,
64-17-5		(96h, Oncorhynchus		Daphnia magna) LC50:
		mykiss) LC50: >100mg/L		9268 - 14221mg/L (48h,
		(96h, Pimephales		Daphnia magna) EC50:
		promelas) LC50: 13400 -		=2mg/L (48h, Daphnia





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	15100mg Pimephales		magna)	
Persistence and degradability	No information available.			
Bioaccumulation	cumulation There is no data for this product.			
Component Information				
Chemical	name	Parti	ition coefficient	
Ethyl Alc 64-17-			-0.32	
Other adverse effects	No information available.			
13. DISPOSAL CONSIDERATIONS				

Waste from residues/unused products	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.
US EPA Waste Number	D001.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status	
Ethyl Alcohol	Toxic	
64-17-5	Ignitable	

14. TRANSPORT INFORMATION

DOT

UN/ID no.	1170
Proper shipping name	ETHANOL
Hazard class	Class 3
Packing Group	II





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<u>TDG</u> UN/ID no. Proper shipping name Hazard class Packing Group	1170 ETHANOL Class 3 II
MEX	Not regulated
ICAO (air)	Not regulated
IATA UN Number UN proper shipping name Transport hazard class(es) Packing Group	1170 ETHANOL Group 3 II
IMDG UN Number UN proper shipping name Transport hazard class(es) Packing Group	1170 ETHANOL Class 3 II
RID	Not regulated
ADR	Not regulated
ADN	Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

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

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

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

- **PICCS** Philippines Inventory of Chemicals and Chemical Substances
- AICS Australian Inventory of Chemical Substances





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US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories	
Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65	
Ethyl Alcohol - 64-17-5	Carcinogen	
	Developmental	

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethyl Alcohol	Х	Х	Х
64-17-5			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable





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16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By,

Quality Control. STEMCELL Technologies Canada Inc.

Revision Date 24-Jan-2023

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.

End of Safety Data Sheet