

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 24-Jan-2023 Revision Number 1.1

05932 - ReproRNA™ Transfection Reagent

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

1.1. Product identifier

Document Number 10000005449

Product Name ReproRNA™ Transfection Reagent

Pure substance/mixture Mixture

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

Recommended Use Laboratory reagent

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

STEMCELL Technologies SARL

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STEMCELL Technologies Germany GmbH

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STEMCELL Technologies UK Ltd.

Building 7100, Cambridge Research Park, Beach Drive, Waterbeach, Cambridge, UK, CB25 9TL

+33 (0) 4 76 04 75 30

For further information, please contact

1.4. Emergency telephone number

Emergency Telephone No information available

Emergency Telephone - §45 - (EC)1272/2008		272/2008
	Europe	112

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

rogalation (20) No 127212000		
Chronic aquatic toxicity	Category 2 - (H411)	
Flammable liquids	Category 2 - (H225)	

2.2. Label elements

200-578-6



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 24-Jan-2023 Revision Number 1.1

05932 - ReproRNA™ Transfection Reagent



Signal word Danger

Hazard statements

Hazard statements

H411 - Toxic to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapor

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P370 + P378 - In case of fire: Use .? to extinguish

Additional information

Placed on the market in aerosol containers or in containers fitted with a sealed spray attachment

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Synonyms

Chemical name	EC No.	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Ethyl Alcohol	200-578-6	64-17-5	>99	Flam. Liq. 2 (H225)	No data available

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation Remove to fresh air.

Page 2/13



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

05932 - ReproRNA™ Transfection Reagent

Revision Date 24-Jan-2023 Revision Number 1.1

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.

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 physiciansTreat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

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.

5.2. Special hazards arising from the substance or mixture

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.

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 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



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05932 - ReproRNA™ Transfection Reagent

Revision Date 24-Jan-2023 Revision Number 1.1

(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.

6.2. 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.

6.3. Methods and material for containment 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.

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 Use 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 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.

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.

7.2. 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



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05932 - ReproRNA™ Transfection Reagent

Revision Date 24-Jan-2023 Revision Number 1.1

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.

7.3. Specific end use(s)

Identified Uses

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

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Ethyl Alcohol	-	TWA: 1000 ppm	TWA: 1000 ppm	STEL: 1000 ppm	TWA: 500 ppm
64-17-5		TWA: 1920 mg/m ³	TWA: 1900 mg/m ³	STEL: 1910 mg/m ³	TWA: 960 mg/m ³
		STEL: 3000 ppm	STEL: 5000 ppm		
		STEL: 5760 mg/m ³	STEL: 9500 mg/m ³		
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Ethyl Alcohol	-	TWA: 1000 ppm	TWA: 260 mg/m ³	TWA: 1000 ppm	TWA: 1000 ppm
64-17-5			STEL: 1900 mg/m ³	TWA: 1900 mg/m ³	TWA: 1900 mg/m ³
			H*	STEL: 1300 ppm	
				STEL: 2500 mg/m ³	
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Ethyl Alcohol	TWA: 1000 ppm	TWA: 500 ppm	TWA: 1900 mg/m ³	TWA: 500 ppm	STEL: 1000 ppm
64-17-5	TWA: 1900 mg/m ³	TWA: 960 mg/m ³		TWA: 950 mg/m ³	
	STEL 2000 ppm	STEL: 1000 ppm		STEL: 625 ppm	
	STEL 3800 mg/m ³	STEL: 1920 mg/m ³		STEL: 1187.5	
				mg/m³	

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration No information available.

(PNEC)

8.2. Exposure controls

Personal protective equipment

Eye/face protection Tight sealing safety goggles.



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

05932 - ReproRNA™ Transfection Reagent

Revision Date 24-Jan-2023 Revision Number 1.1

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Antistatic boots.

Respiratory protectionNo protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

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.

None known

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available

Color Clear

Odor No data available.
Odor threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pHNo data availableNone known

Melting point / freezing point No data available

 $\begin{array}{lll} \textbf{Boiling point / boiling range} & 78.3 \ ^{\circ}\textbf{C} \\ \textbf{Flash point} & 13 \ ^{\circ}\textbf{C} \\ \end{array}$

Flammability Limit in Air

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone 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 No data available None known Water solubility No data available None known Solubility(ies) **Partition coefficient** No data available None known No data available **Autoignition temperature** None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known **Dvnamic viscosity** No data available None known



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

05932 - ReproRNA™ Transfection Reagent

Revision Date 24-Jan-2023 Revision Number 1.1

Explosive propertiesNo information available

Oxidizing properties No information available

9.2. Other information

Softening point
Molecular weight
Molecular formula
VOC Content (%)
Liquid Density
No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Yes. 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Page 7/13



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 24-Jan-2023 Revision Number 1.1

05932 - ReproRNA™ Transfection Reagent

Information on likely routes of exposure

Product Information

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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 the 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 100 % 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).

Product Information

Component Information

Component information					
Chemical name	Oral LD50	Dermal LD50	Inhalation LC50		
Ethyl Alcohol	= 7060 mg/kg (Rat)		= 124.7 mg/L (Rat) 4 h		

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

Skin corrosion/irritationNo information available.

Product Information

Serious eye damage/eye irritation No information available.

Product Information

Page 8 / 13



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 24-Jan-2023 Revision Number 1.1

05932 - ReproRNA™ Transfection Reagent

Respiratory or skin sensitization No information available.

Product Information

Germ cell mutagenicity No information available.

Product Information

Carcinogenicity No information available.

Product Information

Reproductive toxicity No information available.

Product Information

STOT - single exposure

No information available.

Product Information

STOT - repeated exposure No information available.

Product Information

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Toxic to aquatic life with long lasting effects.

Unknown aquatic toxicityContains 0 % of components with unknown hazards to the aquatic environment.

Product Information							
Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea			
			microorganisms				
Ethyl Alcohol	-	LC50: 12.0 - 16.0mL/L	-	EC50: =10800mg/L (24h,			
		(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			
		15100mg/L (96h,		magna)			
		Pimephales promelas)					

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Page 9/13



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 24-Jan-2023 Revision Number 1.1

05932 - ReproRNA™ Transfection Reagent

Component Information

Chemical name	Partition coefficient
Ethyl Alcohol	-0.32

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment	
Ethyl Alcohol	The substance is not PBT / vPvB PBT assessment does	
	not apply	

12.6. Other adverse effects

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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 pote

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld

containers.

Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN Number 1170
14.2 UN proper shipping name ETHANOL
14.3 Transport hazard class(es) Class 3

14.4 Packing Group

14.5 Marine pollutant Not applicable

14.6 Special Provisions None

14.7. Transport in bulk according to No information available

Annex II of MARPOL and the IBC

Code

RID



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 24-Jan-2023 Revision Number 1.1

05932 - ReproRNA™ Transfection Reagent

14.1	UN Number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing Group	Not regulated
14.5	Environmental hazard	Not applicable
14.6	Special Provisions	None

ADR

14.1 UN NumberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing GroupNot regulated14.5 Environmental hazardNot applicable

14.6 Special Provisions None

IATA

14.5 Environmental hazard Not applicable

14.6 Special Provisions None

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Ethyl Alcohol	RG 84	-
64-17-5		

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



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 24-Jan-2023 Revision Number 1.1

05932 - ReproRNA™ Transfection Reagent

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Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

P5a - FLAMMABLE LIQUIDS P5b - FLAMMABLE LIQUIDS P5c - FLAMMABLE LIQUIDS

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

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

International Inventories

TSCA Does not comply DSL/NDSL Does not comply **EINECS/ELINCS** Does not comply **ENCS** Does not comply Does not comply **IECSC KECL** Does not comply Does not comply **PICCS 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

15.2. Chemical safety assessment

Chemical Safety Report No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H225 - Highly flammable liquid and vapor

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 24-Jan-2023 Revision Number 1.1

05932 - ReproRNA™ Transfection Reagent

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Revision Date 24-Jan-2023

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

Disclaimer

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