

MATERIAL SAFETY DATA SHEET

Product	
Item #	Title
RT-CSK-Reactions	RTScript cDNA Synthesis Kit
Components	
RT-CSK-Reactions	RTScript cDNA Synthesis Kit

MATERIAL SAFETY DATA SHEET

Product Title: RTScript cDNA Synthesis Kit

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Title: RTScript cDNA Synthesis Kit
Item number: RT-CSK-100
Document Number: MSDS-027 Version 001
Relevant identified uses of the substance or mixture and uses advised against
Application of the substance / the mixture
Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Empirical Bioscience
2007 EastCastle Drive SE
Grand Rapids, MI 49508 U.S.A
1-877.479.9949
MSDS author; customer.service@empiricalbioscience.com

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients (<i>specific</i>)	%	CAS Number
VOID		

SECTION 3 — HAZARDS IDENTIFICATION

Classification of the substance or mixture Classification according to the Hazard Communication Standard (HCS).
The product is not classified as hazardous according to the HCS regulation.
Labelling according to Regulation (EC) No 1272/2008 Void
Hazard pictograms Void **Signal word** Void
Hazard statements Void
Classification system: NFPA ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
HMS-ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown
Other hazards This substance is not classified as dangerous according to Directive 67/548/EEC and Regulation (EC) No. 1272/2008 (EU-GHS/CLP)
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable

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SECTION 4 — FIRST AID MEASURES

Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints. If person is not breathing, give artificial respiration.

After skin contact: Wash off with soap and plenty of water.

After eye contact: Flush opened eye for several minutes under running water.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed None

Indication of any immediate medical attention and special treatment needed No further relevant information available

SECTION 5 — FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing agents: Use CO₂, water spray, dry chemical or carbon dioxide. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture None known

Advice for firefighters No special advice

Protective equipment: Wear self-contained breathing apparatus for fire fighting if necessary.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Avoid dust formation.

Environmental precautions: Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up: Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

SECTION 7 — HANDLING AND STORAGE

Handling:

Precautions for safe handling Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventative fire protection.

Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage: Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature is at -20°C.

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

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SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameters

Components with limit values that require monitoring at the workplace:

Additional information:

Exposure controls

Personal protective equipment: General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Protection of hands:

Protective gloves Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Eye protection: Goggles recommended during refilling.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties**General Information**

Appearance:

Form: Fluid

Color: Colorless

Odor: Characteristic

Odour threshold: Not Determined

pH-value at 20 °C (68 °F): Not determined

Change in condition

Melting point/Melting range: Undetermined

Boiling point/Boiling range: Undetermined

Flash point: Not applicable

Flammability (solid, gaseous): Not applicable

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Not determined

Danger of explosion: Not determined

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor pressure at 20 °C (68 °F): Not determined

Density at 20 °C (68 °F): Not determined

Relative density: Not determined

Vapour density: Not determined

Evaporation rate: Not determined

Solubility in / Miscibility with Water: Not determined.

Partition coefficient (n-octanol/water): Not determined

Viscosity:

Dynamic: Not determined

Kinematic: Not determined

Solvent content:

Organic Solvents: Not Determined

Water: Not determined

Solids content: Not determined

Other information No further relevant information available.

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SECTION 10 — STABILITY AND REACTIVITY

Reactivity**Chemical stability**

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid Strong oxidizing reagents.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon oxides, nitrogen oxides (NOx), Oxides of phosphorous, and lithium oxides.

SECTION 11 — TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: No data available

LD/LC50 values that are relevant for classification: No data available

Primary irritant effect:

on the skin: May be harmful if absorbed through skin. May cause skin irritation.

on the eye: May cause eye irritations.

Sensitization: no data available.

Additional toxicological information: May be harmful if swallowed. Target organs are liver and kidney.

Carcinogenic categories IARC (International Agency for Research on Cancer)

None of the ingredients are listed

NTP (National Toxicology Program)

None of the ingredients are listed.

SECTION 12 — ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: Not Determined

Persistence and degradability Not available

Behavior in environmental systems:

Bioaccumulative potential Not available

Mobility in soil No further relevant information available.

Ecotoxic effects: Remark: Not available

Additional ecological information:

General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

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SECTION 13 — DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation: Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

SECTION 14 — TRANSPORT INFORMATION

UN-Number None

DOT, ADR, ADN, IMDG, IATA Not dangerous goods

UN proper shipping name Not dangerous goods

DOT, ADR, ADN, IMDG, IATA Not dangerous goods

Transport hazard class(es) Not dangerous goods

DOT, ADR, ADN, IMDG, IATA Class Not dangerous goods

Packing group None

DOT, ADR, IMDG, IATA Not dangerous goods

Environmental hazards: No

Marine pollutant: No

Special precautions for user Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC code Not applicable

UN "Model Regulation": -

SECTION 15 — REGULATORY INFORMATION

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

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Specific toxic chemical listings): None of the ingredients are listed.

TSCA (Toxic Substances Control Act): All of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.

Chemicals known to cause developmental toxicity: None of the ingredients are listed.

Carcinogenicity categories

EPA (Environmental Protection Agency) None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH) None of the ingredients are listed.

MAK (German Maximum Workplace Concentration) None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients are listed.

National regulations:

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Product Title: RTScript cDNA Synthesis Kit

SECTION 16 — OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS
Empirical Bioscience
2007 EastCastle Drive SE
Grand Rapids, MI 49508 U.S.A.
1-877.479.9949

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50

* **Data compared to the previous version altered.**