

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

RI

Version
1.0

Revision Date:
2023/12/18

Date of last issue: 2021/05/11
Date of first issue: 2021/05/11

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: RI

Product number: 1000028499

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

Recommended restrictions: For research use only

1.3 Details of the supplier of the safety data sheet

Company

STOmics Tech Co., Ltd.

Address

BGI Center, No. 9 Yunhua Road, Yantian District,
Shenzhen, Guangdong Province, P.R.China

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006

Skin Irrit. 2;H315 Causes skin irritation.

Eye Irrit. 2;H319 Causes serious eye irritation.

2.2. Label elements

According to REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006



Warning

H315 Causes skin irritation.

H319 Causes serious eye irritation.

[Prevention]:

P264 Wash thoroughly after handling.

P280 Wear protective gloves, eye protection, face protection.

[Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P321 Specific treatment (see information on this label).

P332+313 IF SKIN IRRITATION OCCURS: Get medical advice or attention.

P337+313 If eye irritation persists: Get medical advice or attention.

P362 Take off contaminated clothing and wash before reuse.

[Storage]:

No CLP storage statements

[Disposal]:

No CLP disposal statements

2.3. Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

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SECTION 3: Composition/information on ingredients

| Product Name: RI | | | |
|--------------------------------------|-----------|--------------------------|--|
| ingredient | CAS-No. | Concentration (% w/w) | Classification |
| Water | 7732-18-5 | >40% | Non-hazardous |
| Glycerin | 56-81-5 | 15~25% | Not Classified |
| Potassium chloride | 7447-40-7 | 10~25% | Not Classified |
| Dithiothreitol | 3483-12-3 | 1~5% | Acute Tox. 4;H302 Skin Irrit. 2;H315 Eye Irrit. 2;H319 STOT SE 3;H335 |
| Hydrochloric acid | 7647-01-0 | 1~5% | Skin Corr. 1;H314 Acute Tox. 3;H331 Eye Dam. 1;H318 STOT SE 3;H335 |
| Tris (hydroxymethyl) aminomethane | 77-86-1 | 1~5% | Skin Irrit. 2;H315 Eye Irrit. 2;H319 STOT SE 3;H335 |

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SECTION 4: First aid measures

4.1 Description of first aid measures

| | |
|---------------------------|--|
| General advice : | Leave this dangerous place Contact a doctor Present this SDS to the doctor present Don't let the victim be left unattended |
| If inhaled : | Call your doctor immediately or call the National Emergency Advice for Hazardous Chemicals. Transfer to fresh air. If you are unconscious, place it in a recovery position and seek medical advice. |
| In case of skin contact : | If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with tap water. Seek medical advice if there is swelling, redness, blisters or irritation. Seek medical attention promptly |
| In case of eye contact : | If you come into contact with your eyes, rinse your eyes with plenty of water and seek medical advice. Continue to flush your eyes while transporting to the hospital. Remove the contact lens. Protect the eyes without injuries. Keep your eyes wide when you rinse. If you still have eye irritation, consult a specialist. Keep the airway open. |
| If swallowed : | Do not induce vomiting. Do not give milk or alcoholic beverages. Never feed anything that is unconscious to your mouth.. The victim was taken to the hospital immediately. Rinse with water. |

4.2 Most important symptoms and effects, both acute and delayed

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after

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the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

In case of ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

4.3 Indication of any immediate medical attention and special treatment needed

NO DATA.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguish with water mist, alcohol-resistant foam, dry powder or carbon dioxide

Unsuitable extinguishing media

NO DATA

5.2 Special hazards arising from the substance or mixture

NO DATA.

5.3 Advice for firefighters

Special protective equipment for
firefighters :

Wear self-contained breathing apparatus for
firefighting if necessary.

Further information:

Collect contaminated fire extinguishing water
separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing
water must be disposed of in accordance with local
regulations.

For safety reasons in case of fire, cans should be
stored separately in closed containments.

Use a water spray to cool fully closed containers

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions :

Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Refer to protective measures listed in sections 7 and 8.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Environmental precautions :

Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If there is pollution in the sewer or waterway, please report to the local authorities.

6.3 Methods and material for containment and cleaning up

a lot of leaks:

Use an inert absorbent material such as sand or soil to absorb spillage.
Collect spilled product and place it in a sealable container or bucket for disposal.
Clean contaminated areas and objects with plenty of water and detergent.

Small amount of leakage:

Absorbing materials such as sand or soil absorb spillage.
Collect spilled product and place it in a sealable container for disposal.
Clean contaminated areas and objects with water and detergent

6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid the formation of aerosols.
Do not breathe steam/dust.
Avoid contact - get special instructions before use.
Avoid contact with skin and eyes.
See section 8 for personal protection.
Smoking, eating and drinking areas should be prohibited during use.
Take precautions to prevent electrostatic discharge.
Provide adequate air exchange and/or exhaust in the workroom.
Dispose of rinse water in accordance with local and national regulations.
To prevent leakage or spillage, provide a suitable liquid retention system.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers in a dry, cool and well-ventilated place.
Keep away from heat/sparks/open flames/hot surfaces.
Store away from incompatible materials and foodstuff containers.
Storage temperature generally should be -25°C~ -15°C, relative humidity generally should not be higher than 80%.

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SECTION 8: Exposure controls/personal protection

8.1 Occupational Exposure Limits

| Ingredient | Source | Value |
|-------------------|----------|--|
| Glycerin | OSHA | TWA 15 mg/m ³ (total dust) TWA 5 mg/m ³ (resp) |
| | ACGIH | TWA: 3 mg/m ³ (respirable) 10 mg/m ³ (mist) |
| | NIOSH | No established RELs |
| | Supplier | No Established Limit |
| Hydrochloric acid | OSHA | C 5 ppm (7 mg/m ³) |
| | ACGIH | Ceiling: 2 ppm |
| | NIOSH | C 5 ppm (7 mg/m ³) |
| | Supplier | No Established Limit |

8.2 Biological occupational exposure limits

This product has no specified occupational exposure limits for components.

8.3 Engineering measures

Use only in well ventilated areas.

Keep the container closed when not in use.

8.4 Personal protective equipment

| | |
|---------------------------|---|
| Respiratory protection: | In the case of vapour formation use a respirator with an ap-proved filter. |
| Eye protection: | Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems. |
| Skin and body protection: | Impervious clothing Choose body protection according to the amount and con-centration of the dangerous substance at the work place. |
| Hand protection: | Protective gloves Use specific protective gloves for specific locations. |

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---------------------------------------|-------------------|
| Appearance and shape: | colourless liquid |
| odor: | odorless |
| pH value: | 7.5 |
| Melting point / freezing point: | No data |
| Boiling point: | No data |
| Flash point: | No data |
| Upper explosion limit: | No data |
| Lower explosion limit: | No data |
| Vapor Pressure: | No data |
| Vapor density | No data |
| density | No data |
| Solubility | Soluble in water |
| N-octanol/water partition coefficient | No data |
| Auto-ignition temperature | No data |
| Decomposition temperature | No data |

Other information-None data.

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SECTION 10: Stability and reactivity

10.1 Stability

Stable under the recommended storage conditions.

10.2 Possibility of hazardous reactions

No hazardous reactions when stored and handled within normal conditions of use.

10.3. Conditions to avoid

Avoid extremes of temperature and direct sunlight.

Avoid contact with incompatible
materials.

10.4 Incompatible materials

Oxidising agents and alkalis.

10.5 Hazardous decomposition products

Oxides of carbon and nitrogen, smoke and other toxic fumes

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SECTION 11: Toxicological information

Acute toxicity

For Glycerol

| | |
|----------------------------|-------------------|
| Oral LD50(rats): | 27 mg/kg bw |
| Dermal LD50(rabbit): | 45 mL/kg bw |
| Inhalation LC50(rats)(7h): | 4655 mg-min/liter |

For Tris:

| | |
|-----------------|----------------|
| Oral LD50(rat): | > 5000mg/kg bw |
| Oral LD50(rat): | > 5000mg/kg bw |

For Potassium chloride:

| | |
|------------------|---------------|
| Oral LD50(rats): | 3020 mg/kg bw |
|------------------|---------------|

For Hydrochloric acid:

| | |
|-------------------------|--------------|
| Inhalation Vapour LC50: | 781 mg/L/4hr |
| Inhalation Gas LC50: | 3124ppm |

For DL-Dithiothreitol:

| | |
|------------------|--------------|
| Oral LD50(rats): | 400 mg/kg bw |
|------------------|--------------|

Skin corrosion/irritation

Causes skin irritation. Skin Irrit. 2

Serious eye damage/eye irritation

Causes serious eye irritation. Eye Irrit. 2

Respiratory or skin allergies

No data available.

Germ cell mutagenicity

No data available.

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Carcinogenicity

No data available.

Reproductive toxicity

No data available

Specific target organ toxicity (one exposure)

No data available

Specific target organ system toxicity (repeated exposure)

No data available

Aspiration hazard

No data available

Additional information

No data

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SECTION 12: Ecological information

Ecotoxicity

For Potassium chloride:

| | |
|---------------------------------------|---------------|
| Fish LC50 : | 880 mg/L/96h |
| Aquatic Invertebrates EC50/LC50 : | 660 mg/L/48h |
| aquatic algae and cyanobacteria EC50: | >100 mg/L/72h |

For DL-Dithiothreitol:

| | |
|---------------------------------------|---------------|
| Aquatic Invertebrates EC50/LC50 : | 34.8 mg/L/48h |
| Aquatic algae and cyanobacteria EC50: | 24.3 mg/L/72h |

For Hydrochloric acid:

| | |
|---------------------------------------|---------------|
| Fish LC50 : | 20.5 mg/L/96h |
| Aquatic Invertebrates EC50/LC50 : | 0.45 mg/L/48h |
| aquatic algae and cyanobacteria EC50: | 0.73 mg/L/72h |

For Tris:

| | |
|-------------------------------------|-----------|
| Fish LC50(96h): | 25000mg/L |
| Aquatic invertebrates EC50(48h): | 980mg/L |
| algae and cyanobacteria EC50 (96h): | 397 mg/L |

For Glycerin:

| | |
|-------------------------------------|-----------|
| Fish LC50(96h): | 885 mg/L |
| Aquatic invertebrates EC50(48h): | 1955 mg/L |
| algae and cyanobacteria EC50 (96h): | 2900 mg/L |

Persistence and degradability

No data available

Potential bioaccumulation

No data available

Soil migration

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No data available

Other environmental harmful effects

No data available

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

The product should not be allowed to enter drains, water courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-cal or used container.

Send to a licensed waste management company.

Contaminated packaging

Empty remaining contents.

Dispose of as unused product.

Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

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SECTION 14: Transport information

UNRTDG: Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

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SECTION 15: Regulatory information

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

| | |
|---------------------------------------|-------|
| <i>Regulation (EC) No. 1272/2008:</i> | Exist |
| <i>Regulation (EC) No. 1907/2006:</i> | Exist |

15.2 Other regulations

Please note that waste disposal should also comply with local regulations.

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SECTION 16: Other information

16.1 Abbreviations and acronyms

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

EINECS/ELINCS - European INventory of Existing Commercial chemical Substances/European List of Notified Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korea Existing Chemicals List

PICCS - The Philippine Inventory of Chemicals and Chemical Substances

AICS - The Australian Inventory of Chemical Substances

16.2 Key literature references and sources for data

ECHA: <http://echa.europa.eu/>

IFA GESTIS:

[http://gestis-en.itrust.de/nxt/gateway.dll?f=templates\\$fn=default.htm\\$vid=gestiseng:sdbeng](http://gestis-en.itrust.de/nxt/gateway.dll?f=templates$fn=default.htm$vid=gestiseng:sdbeng)

eChemPortal: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

HSDB: <http://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

ICSC: <http://www.ilo.org/dyn/icsc/showcard.home>

NITE-CHIRP: http://www.nite.go.jp/en/chem/chrip/chrip_search/srhInput

16.3 Full text of H-Statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

16.4 Training advice

NO data.

16.5 Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge,

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END OF SDS.