

SAFETY DATA SHEET

According to Regulation (EU) No. 2020/878

RI

Version
2.0

Revision Date:
2025/08/01

Date of last issue: 2025/08/01
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	International conference center B601,BGI Center, No.9 Yunhua Road,Yantian District,Shenzhen, 518085, China
Zip code	518085
Web	https://www.stomics.tech
E-mail	services@stomics.tech
TEL.	None

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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.

Adverse physicochemical, human health and environment

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

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

EUH-statements:

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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%.

7.3 Specific end use(s)

No additional information available

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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

Biological occupational exposure limits

This product has no specified occupational exposure limits for components.

8.2 Exposure controls

Appropriate engineering controls

Safety shower. Eyewash station. Ensure good ventilation of the work station.

Personal protection equipment

Eye and face protection

Safety glasses with side shields.

Skin protection

Wear suitable protective clothing.

Hand protection

Protective gloves.

Respiratory protection

[In case of inadequate ventilation] wear respiratory protection.

Thermal hazard protection

No information available.

Environmental exposure controls

Avoid release to the environment.

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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

9.2 Other information

Information with regard to physical hazard classes

No additional information available

Other safety characteristics

No additional information

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SECTION 10: Stability and reactivity

10.1 Reactivity

Contact with incompatible substances can cause decomposition or other chemical reactions.

10.2 Chemical Stability

Stable under the recommended storage conditions.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

Avoid extremes of temperature and direct sunlight.

Avoid contact with incompatible materials.

10.5 Incompatible materials

Oxidising agents and alkalis.

10.6 Hazardous decomposition products

Oxides of carbon and nitrogen, smoke and other toxic fumes

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SECTION 11: Toxicological information

11.1 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
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For Hydrochloric acid:

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

For DL-Dithiothreitol:

Oral LD50(rats):	400 mg/kg bw
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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

11.2 Additional information

No data

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SECTION 12: Ecological information

12.1 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

12.2 Persistence and degradability

No data available

12.3 Potential bioaccumulation

No data available

12.4 Soil migration

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No data available

12.5 Other environmental harmful effects

No data available

12.6 Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties:

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

No additional information 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

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1 UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4 Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5 Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6 Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

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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

Abbreviations and acronyms

DSL/NDSL - 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

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

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.

Training advice

NO data.

Further information

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

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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.

END OF SDS.