Safety Data Sheet

Revision Date 2023-12-28



	1. Identification		
Product identifier			
Product Name	RT 2		
Other means of identification			
Product Code	ST1492		
Synonyms	No information available		
Recommended use of the chemical	and restrictions on use		
Identified uses	For research use only. Not for use in diagnostic procedures		
Restrictions on use	No information available		
Details of the supplier of the safety	data sheet		
Supplier USA: Takara Bio USA, Inc. 2560 Orchard Parkway San Jose, CA 95131, USA Phone: 800.662.2566/888.251.6618 Web: www.takarabio.com			
Emergency telephone	In case of emergency, call PERS (Professional Emergency Resource Services) 1-800-633-8253 (US) or 801-629-0667 (international).		
2. Hazard(s) identification			
Product Classification Data This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). Hazards not otherwise classified (HNOC) Not applicable			

Label elements

Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Clear, colorless

Physical state Liquid

Odor Unpleasant

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Trade secret
Potassium chloride	7447-40-7	1 - 5	*

4. First-aid measures

Description of first aid measures

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Rinse mouth.

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	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Explosion Data	

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters 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 Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.	
Conditions for safe storage, including any incompatibilities		

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Appropriate engineering controls				
Engineering controls	Showers Eyewash stations Ventilation systems.			
Individual protection measures, such as personal protective equipment				
Eye/face protection	No special protective equipment required.			
Skin and body protection	No special protective equipment required.			
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.			
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.			

9. Physical and chemical properties

Information on basic physical and chemical properties				
Physical state	Liquid			
Appearance	Clear, colorless			
Color	No information available			
Odor	Unpleasant			
Odor Threshold	No information available			
Property	Values	Remarks • Method		
рН	No data available	None known		
Melting point / freezing point	No data available	None known		
Boiling point/boiling range (°C)	No data available	None known		
Flash point	No data available	Open cup		
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		None known		
Kinematic viscosity	No data available	None known		
Dynamic Viscosity	No data available	None known		
Other information				
Explosive properties	No information available			
Oxidizing properties	No information available			
Softening point	No information available			
Molecular weight	No information available			
VOC content	No information available			
Liquid Density	No information available			
Bulk Density	No information available			
	10. Stability and re	eactivity		

Reactivity	No information available.	
Chemical stability	Stable under normal conditions.	
Possibility of hazardous reactions	None under normal processing.	
Conditions to Avoid	None known based on information supplied.	
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

Inhalation

Specific test data for the substance or mixture is not available.

Eye contact	Specific test data for the su	Specific test data for the substance or mixture is not available.			
Skin contact	Specific test data for the su	Specific test data for the substance or mixture is not available.			
Ingestion	Specific test data for the su	Specific test data for the substance or mixture is not available.			
Symptoms related to the physic	cal, chemical and toxicological	characteristics_			
Symptoms	No information available.				
Acute toxicity					
Numerical measures of toxicity					
The following values are calculated based on chapter 3.1 of the GHS documentATEmix (oral)62,956.40 mg/kgATEmix (dermal)165,098.20 mg/kgComponent Information					
Chemical name	Oral LD50	Dermal LD50	Inhalation LC50		
Potassium chloride 7447-40-7	= 2600 mg/kg (Rat)	-	-		
Delayed and immediate effects	as well as chronic effects from	short and long-term exposur	<u>e_</u>		
Skin corrosion/irritation	No information available.				
Serious eye damage/eye irritati	on No information available.				
Respiratory or skin sensitizatio	n No information available.				
Germ cell mutagenicity	No information available.				
Carcinogenicity	No information available.				
Reproductive toxicity	No information available.				
STOT - single exposure	No information available.				
STOT - repeated exposure	No information available.				
Aspiration hazard	No information available.				
Other adverse effects	No information available.				
Interactive effects	No information available.				

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Potassium chloride 7447-40-7	EC50: =2500mg/L (72h, Desmodesmus subspicatus)	LC50: =1060mg/L (96h, Lepomis macrochirus) LC50: 750 - 1020mg/L (96h, Pimephales promelas)	-	EC50: =825mg/L (48h, Daphnia magna) EC50: =83mg/L (48h, Daphnia magna)
Persistence and degradability No information available.				
Bioaccumulation	Bioaccumulation There is no data for this product.			
Other adverse effects	adverse effects No information available.			
13. Disposal considerations				
Waste treatment methods				
Waste from residues/un products		Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.		
Contaminated packaging	Intaminated packaging Do not reuse empty containers.			
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14. Transport information

DOT

Not regulated

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15. Regulatory information

International Inventories

TSCA

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDSL	
EINECS/ELINCS	
ENCS	
IECSC	
KECL	

PICCS AICS

Legend:

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

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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

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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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 does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information							
<u>NFPA</u> <u>HMIS</u>	Health hazards 0 Health hazards 1	Flammability Flammability		ility 0 cal hazards 0	Special hazards Personal protect		
Key or legend to abbreviations and acronyms used in the safety data sheetLegendSection 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONTWATime weighted averageSTELCeilingMaximum limit value*Short term exposure limit							

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) U.S. National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

Revision Date	2023-12-28
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.

End of Safety Data Sheet