

Safety Data Sheet

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

Identification of the substance or mixture

Product code	27950
Product name	RBS-35 CONCENTRATE

Company/undertaking identification

Life Technologies Corporation 5781 Van Allen Way PO Box 6482 Carlsbad, CA 92008 +1 760 603 7200 Life Technologies 5250 Mainway Drive Burlington, ONT CANADA L7L 6A4 800/263-6236

Thermo Fisher Scientific Pierce Biotechnology P.O. Box 117 Rockford, IL 61105 United States 1.815.968.0747 or 1.800.874.3723

24 hour Emergency Response for Hazardous Materials Within the USA + Canada: 1-800-424-9300 and +1[or Dangerous Goods] Incident. Spill, Leak, Fire,
Exposure, or Accident. Call CHEMTREC703-527-3887
Outside the USA + Canada: +1 703-741-5970

Country Specific Emergency Number (if available): CHEMTREC Brazil (Rio De Janeiro) +(55)-2139581449 (português)

Use as laboratory reagent Scientific research and development

SECTION 2: Hazards identification

GHS - Classification

Signal Word WARNING

Hazard pictograms



Category 2

Physical hazards Not classified

Environmental hazards

Not classified

Hazard Statements

H319 - Causes serious eye irritation

Precautionary Statements

Prevention

P264 - Wash hands thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention

Storage

Not Applicable

Disposal

Not Applicable

Other hazards

Not Applicable

HMIS

Health	1
Flammability	0
Reactivity	0

SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Sodium hypochlorite 7681-52-9(1-5)	7681-52-9	231-668-3	1-5
Sodium hydroxide 1310-73-2 (0.5-2)	1310-73-2	215-185-5	0.5-2
Sodium carbonate 497-19-8(1-5)	497-19-8	207-838-8	1-5
Potassium Pyrophosphate 7320-34-5 (1-5)	7320-34-5	-	1-5

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Description of first aid measures

Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Notes to Physician	Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H319 - Causes serious eye irritation

Indication of any immediate medical attention and special treatment needed None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media Water spray. Carbon dioxide (CO2). Foam. Dry chemical. No information available.

Special hazards arising from the substance or mixture Not known.

Advice for fire-fighters Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation Avoid contact with skin, eyes or clothing Use personal protection equipment See Section 8 for more detail.

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Always wear recommended Personal Protective Equipment. See Section 8 for more detail. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with local regulations.

Specific end use(s)

Use as laboratory reagent. Scientific research and development.

SECTION 8: Exposure controls/personal protection

Control parameters

Chemical Name	OSHA PEL OSHA PEL (Ceiling) ACGI		ACGIH OEL (TWA)	ACGIH OEL (STEL)
Sodium hypochlorite	None	None	None	None
Sodium hydroxide	2 mg/m ³	None	None	None
Sodium carbonate	None	None	None	None
Potassium Pyrophosphate	None	None	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection	In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
Hand protection	Glove material:. Nitrile rubber. with thickness (mm). :5. Break through time. (hours). :1. Recommended glove type has not been tested for use with product. Information is

based on professional Knowledge.

Skin and Body Protection Wear laboratory coat for body protection.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No special environmental precautions required.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance Odor **Odor Threshold** bН Melting point / melting range **Boiling point / boiling range** Flash point **Autoignition Temperature Decomposition temperature Evaporation rate** Flammability (solid, gas) Upper explosion limit Lower explosion limit Vapor Pressure **Relative density** Specific gravity Solubility Partition coefficient: n-octanol/water Viscositv Explosive properties **Oxidizing properties**

Other information

No data available.

liquid Mixture has not been tested Mixture has not been tested 13 [Conc. (%w/w):100%] °C Mixture has not been tested No data available Not Applicable Mixture has not been tested No data available Mixture has not been tested No data available

Mixture has not been tested Mixture has not been tested Mixture has not been tested

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SECTION 10: Stability and reactivity

Reactivity	None known.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous reaction has not been reported.
Conditions to avoid	No information available.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	No known hazardous decomposition products.

SECTION 11: Toxicological information

Information on toxicological effects

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
Sodium hypochlorite	= 8200 mg/kg (Rat)	No data available	No data available
Sodium hydroxide	500 mg/kg	1350 mg/kg (Rabbit)	No data available
Sodium carbonate	= 4090 mg/kg (Rat)	No data available	=2300mg/m3(Rat)
Potassium Pyrophosphate	= 2000 mg/kg (Mouse)	No data available	No data available

Principal Routes of Exposure

Irritation	Irritating to eyes.
Corrosivity	Conclusive but not sufficient for classification
Sensitization	Conclusive but not sufficient for classification .
STOT - Single Exposure	Conclusive but not sufficient for classification
STOT - Repeated Exposure	Conclusive but not sufficient for classification
Carcinogenicity	Conclusive but not sufficient for classification
Mutagenicity	Conclusive but not sufficient for classification .
Reproductive toxicity	Conclusive but not sufficient for classification .
Aspiration hazard	Conclusive but not sufficient for classification

SECTION 12: Ecological information

Toxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Sodium hypochlorite	Skeletonema costatum EC50=0.095 mg/L (24 h)	Daphnia magna EC500.033 - 0.044 mg/L (48 h) Daphnia magna EC50=2.1 mg/L (96 h)	No data available	No data available	No data available
Sodium hydroxide	No data available	No data available	No data available	No data available	No data available
Sodium carbonate	Nitzschia EC50=242 mg/L (120 h)	Daphnia magna EC50=265 mg/L (48 h)	No data available	No data available	No data available
Potassium Pyrophosphate	No data available	water flea EC50>100 mg/L (48 h)	No data available	No data available	No data available

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other adverse effects

No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number UN proper shipping name Transport hazard class(es) Packing group Not Applicable Not Applicable Not Applicable Not Applicable

Environmental hazards Not Applicable

Special precautions for user Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Applicable.

SECTION 15: Regulatory information

Component	US TSCA
Sodium hypochlorite	Listed
7681-52-9 (1-5)	
Sodium hydroxide	Listed
1310-73-2 (0.5-2)	
Sodium carbonate	Listed
497-19-8 (1-5)	
Potassium Pyrophosphate	Listed
7320-34-5 (1-5)	

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D2B - Toxic materials



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

SECTION 16: Other information

Reason for revision	SDS sections updated.
Revision number	6
Revision date	23-Feb-2018

Use as laboratory reagent. Scientific research and development.

References

- ECHA: http://echa.europa.eu/
- TOXNET: http://toxnet.nlm.nih.gov/
- eChemPortal: http://www.echemportal.org/

• LOLI database: https://www.chemadvisor.com/loli-database

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be

used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED,INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet