

VD2021015, RSB, Resuspension Buffer (15054019)

Issuing Date 24-Feb-2021

Revision Date 24-Feb-2021

Revision A

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product identifier****Product Name** RSB, Resuspension Buffer**Other means of identification****Product Codes(s)** 15054019**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended Use** Reagent**Details of the supplier of the safety data sheet****Manufacturer Address**
Verogen, Inc.
11111 Flintkote Avenue
San Diego, CA 92121 USA
www.verogen.com**Company Phone Number**
+1-858-285-4101
+1-833-837-6436 toll free (North America)
+44-(0)-208-054-8706 (UK)
(858)-381-5209 (fax)**E-mail address**
techsupport@verogen.com**2. HAZARDS IDENTIFICATION****GHS Classification****OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

Label elements**Emergency Overview****Signal word: None****Hazard statements**

Not Hazardous

The Product contains no substances which at their given concentrations are considered to be hazardous to health

Appearance Colorless**Physical state** Liquid**Odor** No data available

Precautionary Statements – Prevention

Handle in accordance with good industrial hygiene and safety practice

Precautionary Statements – Storage

Store away from incompatible materials

Precautionary Statements - Disposal

Dispose of in accordance with federal, state and local regulations

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Unknown acute toxicity 1 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

4. FIRST AID MEASURES**Description of first aid measures**

General Advice	Use first aid treatment according to the nature of the injury
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin Contact	Wash skin with soap and water. Get medical attention if irritation develops and persists.
Inhalation	If symptomatic, move to fresh air. Get medical attention if the symptoms persist.
Ingestion	Get medical advice / attention.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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**

Water, Water spray (fog), Foam, Dry chemical, Carbon dioxide (CO₂)

Unsuitable extinguishing media

None known

Specific hazards arising from the chemical

None known

Hazardous combustion products

No information available

Explosion data**Sensitivity to Mechanical Impact** None**Sensitivity to Static Discharge** None**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures**Personal precautions** Use personal protective equipment as required.**For emergency responders** Use personal protection recommended in Section 8. Keep unnecessary personnel away.**Environmental precautions****Environmental precautions** See section 12 for additional Ecological information.**Methods and material for containment and cleaning up****Methods for containment** Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use personal protective equipment as required. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Large spill. Prevent runoff from entering drains, sewers, or streams. Dike far ahead of liquid spill for later disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling** Use personal protective equipment as required. 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. Keep/store only in original container. Store away from incompatible materials.**Incompatible materials** Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash after handling this material and before eating, drinking, and/or smoking. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Colorless
Odor	No data available
Color	Colorless
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	8.5	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	No data available	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limit in Air	No data available	
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	
Vapor density	No data available	
Specific gravity	No data available	
Water solubility	No data available	

Solubility in other solvents	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available
Explosive properties	No unusual fire or explosion hazards noted
Oxidizing properties	No data available

Other Information

Softening point	No data available
Molecular weight	No data available
VOC content (%)	No data available
Liquid density	No data available
Bulk density	No data available

10. STABILITY AND REACTIVITY**Reactivity****Chemical stability**

Stable under normal conditions. Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	Low hazard for usual industrial or commercial handling by trained personnel
Inhalation	Under normal conditions of intended use, this materials is not expected to be an inhalation hazard.
Eye Contact	Direct contact with eyes may cause temporary irritation.
Skin Contact	Prolonged contact may cause temporary irritation.
Ingestion	No harmful effects expected in amounts likely to be ingested by accident.

Information on toxicological effects

Symptoms	None known
----------	------------

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Irritation	Not classified
Corrosivity	Not classified
Sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity	Not classified
STOT - single exposure	Not classified
STOT - repeated exposure	Not classified
Chronic toxicity	Not classified
Target organ effects	Not classified
Target organ effects	Not classified
Aspiration hazard	Not classified
Other adverse effects	No information available

Numerical measures of toxicity - Product Information

Unknown acute toxicity	1 % of the mixture consists of ingredient(s) of unknown toxicity
------------------------	--

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

Not a PBT or vPvB substance or mixture.

Bioaccumulation

No data available

Mobility

No data available

Other adverse effects

No data available

Ozone

Not classified

Ozone depletion potential (ODP)

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT	Not regulated
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDF	Not regulated
RID	Not regulated
ADR	Not regulated
AND	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
INSQ	This product complies with INSQ

Legend

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

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

INSQ—Mexican National 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

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances which are regulated 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 a hazardous substance 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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Water	-	-	X
7732-18-5			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	Health Hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
HMIS	Health Hazards 0	Flammability 0	Physical Hazards 0	Personal Protection X

Prepared By	Verogen Inc.
Issuing Date	23-Feb-2021
Revision Date	24-Feb-2021
Revision Note	Not applicable

Disclaimer

Although reasonable care has been taken in the preparation of this document, Verogen makes no warranties or representations of any kind as to the accuracy or completeness of the information contained herein, and Verogen assumes no responsibility regarding the suitability of this information or the product for the user's intended purposes or for the consequences of use of this information or the use of the product. The user of this (M)SDS and product should make a determination as to the suitability of the information and the product for their particular purpose(s). To the extent provided by applicable law, Verogen shall not be held liable for any damage or expenses of any kind resulting from handling, use, storage, or disposal of the product.

End of Safety Data Sheet