



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
OSHA 29 CFR 1910.1200

Document Type US - OSHA GHS

Revision date 25-Nov-2019

Version 5

## 1. Identification

### Product identifier

Product name Avrll

### Other means of identification

Product No R0174

### Recommended use of the chemical and restrictions on use

Recommended use This product is for research and development only

Restrictions on use No information available

### Details of the supplier of the safety data sheet

#### Supplier Address

New England BioLabs  
240 County Road  
Ipswich, MA 01938  
USA

Company Phone Number 978-927-5054, 800-632-5227 (toll free)

Telefax 978-921-1350

E-mail address info@neb.com

### Emergency telephone number

24 Hour Emergency Phone Number 978-380-2125

## 2. Hazard(s) identification

### Classification

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

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

**Appearance** Colorless

**Physical state** Liquid

**Odor** Mild

### Other information

Not applicable

**Unknown acute toxicity** 0 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## 3. Composition/information on ingredients

### Substance

Not applicable.

### Mixture

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

**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** Clean mouth with water and drink afterwards plenty of water.

**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.

**Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical** No information available.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Special protective equipment 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 containers tightly closed in a dry, cool and well-ventilated place.

**8. Exposure controls/personal protection****Control parameters****Exposure Limits**

**Other information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**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 suitable protective clothing.

**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** Colorless  
**Odor** Mild  
**Odor threshold** No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	No data available	None known
<b>Melting point / freezing point</b>	No data available	None known
<b>Initial boiling point and boiling range</b>	No data available	None known
<b>Flash point</b>	No data available	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	No data available	None known
<b>Water solubility</b>	No data available	None known
<b>Solubility in other solvents</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	392.8 °C / 739 °F	
<b>Hyphen</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	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 reactivity**

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Incompatible materials</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	No information available.
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### Acute toxicity

#### Numerical measures of toxicity

#### The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	22,445.40 mg/kg
<b>ATEmix (dermal)</b>	19,432.20 mg/kg

#### **Unknown acute toxicity** 0 % of the mixture consists of ingredient(s) of unknown toxicity

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
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Toxicity

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

<b>Skin corrosion/irritation</b>	No information available.
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#### Product Information

<b>Serious eye damage/eye irritation</b>	No information available.
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#### Product Information

<b>Respiratory or skin sensitization</b>	No information available.
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#### Product Information

**Germ cell mutagenicity** No information available.

Product Information

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

Product Information

**STOT - single exposure** No information available.

Product Information

**STOT - repeated exposure** No information available.

Product Information

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

**Ecotoxicity**

Product Information

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

**Component Information**

**Other adverse effects** No information available.

## 13. Disposal considerations

**Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

<u>MEX</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

## 15. Regulatory information

### International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECSC	Complies
KECL	-
PICCS	-
AICS	Complies

#### 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

### 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****U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 0	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 0	<b>Flammability</b> 1	<b>Physical hazards</b> 0	<b>Personal protection</b> X

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**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)  
 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  
 RTECS (Registry of Toxic Effects of Chemical Substances)  
 World Health Organization

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<b>Revision note</b>	SDS is valid 3 years from revision date. Contact info@neb.com for latest revision.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of publication. This information is intended only as a guide for safe handling, use, processing, storage, transportation,



disposal and release and should not be taken as a warranty or quality specification. The information relates only to the specific material and may not be valid for such material used in combination with any other materials or in any process unless expressly specified in the text. New England Biolabs will not be liable for any damages resulting from handling or contact with the product.

**End of Safety Data Sheet**