



# SAFETY DATA SHEET

Creation Date 03-Feb-2012

Revision Date 10-Dec-2021

Revision Number 4

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Description: **RAPPAPORT-VASSILIADIS RV ENRICHMENT BROTH**  
Cat No. : **CM0669**

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.  
Uses advised against No Information available

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

Company Oxoid Ltd  
Wade Road  
Basingstoke, Hants, UK  
RG24 8PW  
Tel: +44 (0) 1256 841144

#### **EU entity/business name**

Oxoid Deutschland GmbH  
Postfach 10 07 53  
D-46483  
Wesel  
GERMANY  
Tel: + 49 (0) 281 1520  
Fax: 49 (0) 281 1521

E-mail address mbd-sds@thermofisher.com

### 1.4. Emergency telephone number

Chemtrec US: (800) 424-9300  
Chemtrec EU: 001-703-527-3887  
Chemtrec China: 400 120 4937

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### CLP Classification - Regulation (EC) No 1272/2008

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

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## Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

## 2.2. Label elements

None required

Signal Word None

## 2.3. Other hazards

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

| Component          | CAS No    | EC No             | Weight % | CLP Classification - Regulation (EC) No 1272/2008 |
|--------------------|-----------|-------------------|----------|---------------------------------------------------|
| Magnesium chloride | 7786-30-3 | EEC No. 232-094-6 | 56       | -                                                 |

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                                    |                                                                                                         |
|------------------------------------|---------------------------------------------------------------------------------------------------------|
| Eye Contact                        | Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur. |
| Skin Contact                       | Wash with plenty of soap and water. Get medical attention if symptoms occur.                            |
| Ingestion                          | Clean mouth with water and drink afterwards plenty of water. Get medical attention.                     |
| Inhalation                         | Remove to fresh air. Get medical attention if symptoms occur.                                           |
| Self-Protection of the First Aider | No special precautions required.                                                                        |

### 4.2. Most important symptoms and effects, both acute and delayed

No information available. Ingestion may cause gastrointestinal irritation, nausea, vomiting

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and diarrhea

## 4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

#### **Extinguishing media which must not be used for safety reasons**

No information available.

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

None under normal use conditions.

### 5.3. Advice for firefighters

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Avoid dust formation. Ensure adequate ventilation.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

### 6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Do not breathe dust. Avoid contact with skin, eyes or clothing. Avoid dust formation. Ensure adequate ventilation.

#### **Hygiene Measures**

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Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture. Protect from light.

Technical Rules for Hazardous Substances (TRGS) 510 Class 13  
Storage Class (LGK) (Germany)

## 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

The product does not contain any hazardous materials with occupational exposure limits established.

#### Biological limit values

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

#### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

No information available

| Component                              | Acute effects local (Oral) | Acute effects systemic (Oral) | Chronic effects local (Oral) | Chronic effects systemic (Oral) |
|----------------------------------------|----------------------------|-------------------------------|------------------------------|---------------------------------|
| Magnesium chloride<br>7786-30-3 ( 56 ) |                            |                               |                              | 7 mg/kg bw/day                  |

#### Predicted No Effect Concentration (PNEC)

See values below.

| Component                              | Fresh water     | Fresh water sediment          | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture)         |
|----------------------------------------|-----------------|-------------------------------|--------------------|------------------------------------|----------------------------|
| Magnesium chloride<br>7786-30-3 ( 56 ) | PNEC = 3.21mg/L | PNEC = 288.9mg/kg sediment dw | PNEC = 5.48mg/L    | PNEC = 90mg/L                      | PNEC = 662.77mg/kg soil dw |

| Component                              | Marine water    | Marine water sediment         | Marine water intermittent | Food chain | Air |
|----------------------------------------|-----------------|-------------------------------|---------------------------|------------|-----|
| Magnesium chloride<br>7786-30-3 ( 56 ) | PNEC = 0.32mg/L | PNEC = 28.89mg/kg sediment dw |                           |            |     |

### 8.2. Exposure controls

#### Engineering Measures

None under normal use conditions.

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## Personal protective equipment

### Eye Protection

Wear safety glasses with side shields (or goggles) (European standard - EN 166)

### Hand Protection

Protective gloves

| Glove material    | Breakthrough time                 | Glove thickness | EU standard | Glove comments        |
|-------------------|-----------------------------------|-----------------|-------------|-----------------------|
| Disposable gloves | See manufacturers recommendations | -               | EN 374      | (minimum requirement) |

### Skin and body protection

Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

### Respiratory Protection

No protective equipment is needed under normal use conditions.

### Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Recommended Filter type:** Particle filter

### Small scale/Laboratory use

Maintain adequate ventilation

### Environmental exposure controls

No information available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|                                         |                          |                                   |
|-----------------------------------------|--------------------------|-----------------------------------|
| Physical State                          | Powder Solid             |                                   |
| Appearance                              | Light green              |                                   |
| Odor                                    | No information available |                                   |
| Odor Threshold                          | No data available        |                                   |
| Melting Point/Range                     | No data available        |                                   |
| Softening Point                         | No data available        |                                   |
| Boiling Point/Range                     | Not applicable           |                                   |
| Flammability (liquid)                   | Not applicable           | Solid                             |
| Flammability (solid,gas)                | No information available |                                   |
| Explosion Limits                        | No data available        |                                   |
| Flash Point                             | Not applicable           | Method - No information available |
| Autoignition Temperature                | No data available        |                                   |
| Decomposition Temperature               | No data available        |                                   |
| pH                                      | 5.0 - 5.4 @ 25°C         |                                   |
| Viscosity                               | Not applicable           | Solid                             |
| Water Solubility                        | Soluble in water         |                                   |
| Solubility in other solvents            | No information available |                                   |
| Partition Coefficient (n-octanol/water) |                          |                                   |
| Vapor Pressure                          | No data available        |                                   |
| Density / Specific Gravity              | No data available        |                                   |
| Bulk Density                            | No data available        |                                   |
| Vapor Density                           | Not applicable           | Solid                             |
| Particle characteristics                | No data available        |                                   |

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## 9.2. Other information

Evaporation Rate Not applicable - Solid

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Hygroscopic. Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.  
Hazardous Reactions None under normal processing.

### 10.4. Conditions to avoid

Avoid dust formation. Exposure to moisture.

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

None under normal use conditions.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information Product does not present an acute toxicity hazard based on known or supplied information

#### (a) acute toxicity;

Oral Based on available data, the classification criteria are not met  
Dermal No data available  
Inhalation No data available

#### Toxicology data for the components

| Component          | LD50 Oral                 | LD50 Dermal               | LC50 Inhalation |
|--------------------|---------------------------|---------------------------|-----------------|
| Magnesium chloride | LD50 = 2800 mg/kg ( Rat ) | LD50 > 2000 mg/kg ( Rat ) | -               |

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

#### (d) respiratory or skin sensitization;

Respiratory No data available  
Skin No data available

(e) germ cell mutagenicity; No data available

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|                             |                                                                                |
|-----------------------------|--------------------------------------------------------------------------------|
| (f) carcinogenicity;        | No data available<br>There are no known carcinogenic chemicals in this product |
| (g) reproductive toxicity;  | No data available                                                              |
| (h) STOT-single exposure;   | No data available                                                              |
| (i) STOT-repeated exposure; | No data available                                                              |
| Target Organs               | No information available.                                                      |
| (j) aspiration hazard;      | Not applicable<br>Solid                                                        |

**Symptoms / effects, both acute and delayed** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

## 11.2. Information on other hazards

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity effects

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

| Component          | Freshwater Fish                            | Water Flea           | Freshwater Algae    |
|--------------------|--------------------------------------------|----------------------|---------------------|
| Magnesium chloride | Pimephales promelas: EC50:<br>2.12 g/L:96H | EC50 : 1400 mg/L/24h | EC50: 2200 mg/L/72h |

| Component          | Microtox                                                                                                                                                  | M-Factor |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Magnesium chloride | EC50 Pseudomonas putida: EC50:26,14 g/L/h<br>Photobacterium phosphoreum: EC50: 36,3<br>mg/L/30 min<br>Photobacterium phosphoreum: EC50: 77,2<br>mg/L/24 h |          |

### 12.2. Persistence and degradability

#### Persistence

Soluble in water, Persistence is unlikely, based on information available.

### 12.3. Bioaccumulative potential

Bioaccumulation is unlikely

### 12.4. Mobility in soil

The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils

### 12.5. Results of PBT and vPvB assessment

No data available for assessment.

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## 12.6. Endocrine disrupting properties

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

## 12.7. Other adverse effects

**Persistent Organic Pollutant** This product does not contain any known or suspected substance  
**Ozone Depletion Potential** This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste from Residues/Unused Products** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**Contaminated Packaging** Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

**European Waste Catalogue (EWC)** According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

**Other Information** Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: TRANSPORT INFORMATION

**IMDG/IMO** Not regulated

### 14.1. UN number

### 14.2. UN proper shipping name

### 14.3. Transport hazard class(es)

### 14.4. Packing group

**ADR** Not regulated

### 14.1. UN number

### 14.2. UN proper shipping name

### 14.3. Transport hazard class(es)

### 14.4. Packing group

**IATA** Not regulated

### 14.1. UN number

### 14.2. UN proper shipping name

### 14.3. Transport hazard class(es)

### 14.4. Packing group

**14.5. Environmental hazards** No hazards identified

**14.6. Special precautions for user** No special precautions required

**14.7. Maritime transport in bulk** Not applicable, packaged goods

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according to IMO instruments

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component          | CAS No    | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|--------------------|-----------|-----------|--------|-----|-------|------|----------|------|------|
| Magnesium chloride | 7786-30-3 | 232-094-6 | -      | -   | X     | X    | KE-22691 | X    | X    |

| Component          | CAS No    | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|--------------------|-----------|------|-----------------------------------------------|-----|------|------|-------|-------|
| Magnesium chloride | 7786-30-3 | X    | ACTIVE                                        | X   | -    | X    | X     | X     |

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

#### Authorisation/Restrictions according to EU REACH

| Component          | CAS No    | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|--------------------|-----------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Magnesium chloride | 7786-30-3 | Not applicable                                                                            | Not applicable                                                                           |

#### Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

#### National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

#### WGK Classification

Water endangering class = 1 (self classification)

| Component          | Germany - Water Classification (VwVwS) | Germany - TA-Luft Class |
|--------------------|----------------------------------------|-------------------------|
| Magnesium chloride | WGK1                                   |                         |

| Component                              | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Magnesium chloride<br>7786-30-3 ( 56 ) | Prohibited and Restricted Substances                                                                           |                                                                                 |                                                                                             |

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## 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

Not applicable

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

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

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer  
Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

**Physical hazards** On basis of test data

**Health Hazards** On basis of test data

**Environmental hazards** Calculation method

### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Creation Date** 03-Feb-2012

**Revision Date** 10-Dec-2021

**Revision Summary** Not applicable.

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.  
COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No  
1907/2006**

### 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

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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**