

Revision date 08-Dec-2023

SAFETY DATA SHEET

Version 3

| Section 1: Identification | |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Product identifier | |
| Product name | Dral |
| Product No | R0129 |
| Other means of identification | |
| Synonyms | None |
| Recommended use of the chemical and restrictions on use | |
| Recommended use | This product is for research and development only |
| Uses advised against | No information available |
| Details of the supplier of the safety data sheet | |
| <u>Supplier</u> New England BioLabs (Australia) Pty Ltd 22/270 Ferntree Gully Road Notting Hill, VIC 3168 | |
| E-mail address | info.au@neb.com |
| Emergency telephone number | |
| Company Phone Number | 978-927-5054, 800-632-5227 (toll free) |
| National Poisons Centre | 0800 764 766 (toll free) |
| 24 Hour Emergency Phone Number | Chemtrec +65 3163 8374 |
| | |

Section 2: Hazard identification

GHS Classification

Not classified

Label elements

Hazard statements Not classified

Other hazards which do not result in classification No information available.

| Section 3: Composition/information on ingredients | | | |
|---------------------------------------------------|-------------|---------|--|
| | | | |
| Non-hazardous ingredients | Proprietary | Balance | |

Section 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. | |

Section 5: Fire-fighting measures

Suitable extinguishing media

| 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.

Special exposure hazards in a fire

Specific hazards arising from the No information available. chemical

Protective equipment and precautions for firefighters

Special protective equipment and Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. **precautions for fire-fighters**

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

| Personal precautions | Ensure adequate ventilation. | |
|------------------------------------------------------|--------------------------------------------------------------------------------------|--|
| For emergency responders | Use personal protection recommended in Section 8. | |
| 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. | |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. | |
| Precautions to prevent secondary hazards | | |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. | |

Section 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. | |
| Incompatible materials | None known based on information supplied. | |

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits

Biological occupational exposure This product, as supplied, does not contain any hazardous materials with biological limits

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 | No special protective equipment required. | |
| Hand 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. | |
| Environmental exposure controls | No information available. | |

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

| Physical state | Liquid | |
|---------------------------------------------------|--------------------------------|------------------|
| Appearance | Colorless | |
| Color | No information available | |
| Odor | Mild. | |
| Odor threshold | No information available | |
| <u>Property</u> | Values | Remarks • Method |
| pH | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling rang | je No data available | None known |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | 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(ies) | No data available | None known |
| Partition coefficient Autoignition temperature | No data available 392.78 °C | None known |
| Decomposition temperature | 002.10 0 | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Explosive properties | No information available. | |
| Oxidizing properties | No information available. | |
| Other information | | |
| Softening point | No information available | |
| Molecular weight | No information available | |
| VOC content | No information available | |

Liquid Density No Bulk density No Particle characteristics No

No information available No information available No information available

Section 10: Stability and reactivity Reactivity No information available. Reactivity Chemical stability Stability Stable under normal conditions. Explosion data None. Sensitivity to mechanical impact None. Sensitivity to static discharge Possibility of hazardous reactions Possibility of hazardous reactions None under normal processing. Conditions to avoid

Incompatible materials

Conditions to avoid

Incompatible materials None known based on information supplied.

None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

| Inhalation | Specific test data for the substance or mixture is not available. |
|--------------|-------------------------------------------------------------------|
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | Specific test data for the substance or mixture is not available. |
| Ingestion | Specific test data for the substance or mixture is not available. |
| 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)25,200.00 mg/kg

| ATEmix (dermal) | 20,000.00 | mg/kg |
|-------------------------------|-----------|-------|
| ATEmix (inhalation-gas) | 99,999.00 | ppm |
| ATEmix (inhalation-vapor) | 99,999.00 | mg/l |
| ATEmix (inhalation-dust/mist) | 99,999.00 | mg/l |

Component Information

| Delayed and immediate effects as well as chronic effects from short and long-term exposure | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--|
| Skin corrosion/irritation | No information available. | |
| Serious eye damage/eye irritation | No information available. | |
| Respiratory or skin sensitization | 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. | |
| Data used to identify the health effects | Refer to Section 16 for Key literature references and sources for data used to compile the SDS. | |

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity

| Unknown aquatic toxicity | 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment. |
|-------------------------------|--------------------------------------------------------------------------------------------|
| Terrestrial ecotoxicity | There is no data for this product. |
| Persistence and degradability | No information available. |

Bioaccumulative potential

Bioaccumulation

Component Information

Mobility in soil

Mobility

No information available.

Other adverse effects

No information available.

Section 13: Disposal considerations

Waste treatment methods

| Waste from residues/unused | Not applicable. |
|----------------------------|-----------------------------------|
| products | Not Hazardous. |
| Contaminated packaging | Not applicable. Not Hazardous. |

Section 14: Transport information

IATA Not regulated

Section 15: Regulatory information

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

| Regulatory information | |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPA New Zealand HSNO approval code or group standard | To be determined |
| National regulations | There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances |
| Certified handlers, tracking and controlled substance license requirements | Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information |

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

| International Inventories | |
|---------------------------|---------------------------------------------------|
| NZIoC | Contact supplier for inventory compliance status. |
| TSCA | Contact supplier for inventory compliance status. |
| DSL/NDSL | Contact supplier for inventory compliance status. |
| EINECS/ELINCS | Contact supplier for inventory compliance status. |
| ENCS | Contact supplier for inventory compliance status. |
| IECSC | Contact supplier for inventory compliance status. |
| KECL | Contact supplier for inventory compliance status. |
| PICCS | Contact supplier for inventory compliance status. |
| AIIC | Contact supplier for inventory compliance status. |

Legend:

NZIOC - New Zealand Inventory of Chemicals

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

Section 16: Other information

| Prepared by | ç | Environmental, Health 978-927-5054 | and Safety | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------|---------------------|-----------------------------------------|--|--|
| Revision date | | 08-Dec-2023 | | | | |
| Revision note | | | om revision date. C | ontact info@neb.com for latest revision | | |
| ***Indicates updated | | | | | | |
| | | cronyms used in the | | | | |
| Legend Section 8: | EXPOSURE CONTI | <u>ROLS/PERSONAL PR</u> | OTECTION | | | |
| TWA | TWA (time-weighted | average) | STEL | STEL (Short Term Exposure Limit) | | |
| Ceiling | Maximum limit value | | * | Skin designation | | |
| C | Carcinogen | | | | | |
| | | | | | | |
| | | for data used to con | npile the SDS | | | |
| 0, | | se Registry (ATSDR) | | | | |
| | • • | ChemView Database | | | | |
| European Food Saf | , , , | | | | | |
| EPA (Environmenta | | | | | | |
| Acute Exposure Gu | ideline Level(s) (AEC | GL(s)) | | | | |
| | | ederal Insecticide, Fu | | ticide Act | | |
| U.S. Environmental Protection Agency High Production Volume Chemicals | | | | | | |
| Food Research Jou | rnal | | | | | |
| Hazardous Substance Database | | | | | | |
| International Uniform Chemical Information Database (IUCLID) | | | | | | |
| National Institute of Technology and Evaluation (NITE) | | | | | | |
| 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 | | | / | | | |
| 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 | | | | | | |
| | • | and Development Sci | | 5 | | |
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| | | | | | | |

World Health Organization

Disclaimer

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End of Safety Data Sheet