

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity	PML-RARA Calibrators
Alternate Names	A00586, A00587, A00588, A00589
Unique Formula Identifier	

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

Intended Uses and Uses Advised Against	Calibration solution
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1.3. Details of the supplier of the safety data sheet

Company Name	Asuragen, Inc. Manufacturer: Asuragen, Inc. 2150 Woodward Street Austin, Texas 78744 +1 512 681 5200 Supplier: European Union Bio-Techne (DRD) 19 Rue Louis Delourmel, 35230 Noyal Châtillon / Seiche, France +33.2.99.35.19.36
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Customer Service: Asuragen, Inc.

1.4. Emergency telephone number

Emergency 24 hour Emergency Telephone No.	European Union Bio-Techne (DRD) +33.2.99.35.19.36 (Normal Business Hours)
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Section 2. Hazard identification of the product

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

No applicable CLP categories.

2.2. Label elements

According to REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006

No applicable CLP categories.

2.3. Other hazards

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

3.2. Mixtures

There are no ingredients in this product which are classified as hazardous, and/or no hazardous ingredients above the GHS cut off percentage.

Section 4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eye Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Overview No specific symptom data available.
No chronic toxicity or long term toxicity information available. Treat symptomatically. See section 2 for further details.

Inhalation

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

Notes to physician Treat symptomatically.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Unsuitable extinguishing media: Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: No available information

7.3. Specific end use(s)

No available information

Section 8. Exposure controls / personal protection

There are no ingredients in this product which are classified as hazardous, and/or no hazardous ingredients above the GHS cut off percentage.

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Protective safety glasses recommended
Skin	Avoid skin contact. Protective gloves recommended.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid
Color	Clear
Odor	No available information
Odor threshold	No available information
Melting point / freezing point	No available information
Initial boiling point and boiling range	No available information
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: No available information Upper Explosive Limit: No available information
Flash Point	°F °C, Test method: (Open/Close cup)
Auto-ignition temperature	No available information
Decomposition temperature	No available information

pH	No available information
Viscosity (cSt)	No available information
Solubility in Water	No available information
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapor pressure (Pa)	No available information
Relative Density	No available information
Vapor Density	No available information
Evaporation rate (Ether = 1)	No available information
Oxidising properties	No available information
Explosive properties	No available information

9.2. Other information

No other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No available information

10.4. Conditions to avoid

Avoid high temperatures and contact with incompatible material

10.5. Incompatible materials

No available information

10.6. Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

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

Acute toxicity

There are no ingredients in this product which are classified as hazardous, and/or no hazardous ingredients above the GHS cut off percentage.

Classification	Category	Hazard Description
Acute toxicity (oral)	---	---
Acute toxicity (dermal)	---	---
Acute toxicity (inhalation)	---	---
Skin corrosion/irritation	---	---
Serious eye damage/irritation	---	---
Respiratory sensitization	---	---
Skin sensitization	---	---
Germ cell mutagenicity	---	---
Carcinogenicity	---	---
Reproductive toxicity	---	---
STOT-single exposure	---	---
STOT-repeated exposure	---	---
Aspiration hazard	---	---

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

Section 12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

There are no ingredients in this product which are classified as hazardous, and/or no hazardous ingredients above the GHS cut off percentage.

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

No available information

12.4. Mobility in soil

No available information

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

12.6 Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

12.7. Other adverse effects

No available information

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

Section 14. Transport information

	ADR/RID	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	Class: Not Applicable Sub Class: Not Applicable	Class: Not Applicable Sub Class: Not Applicable	Class: Not Applicable Sub Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No;

14.6. Special precautions for user

No available information

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

Section 15. Regulatory information

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

EU Legislation

REGULATIONS (EU) 2023/707, (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). REGULATION (EC) 1272/2008 on the classification, labeling and packaging of substances and mixtures (CLP).

Candidate List of SVHC for Authorisation: Not Applicable

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not Applicable

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16. Other information

Revision Date

15/7/2025

Revision Number

1

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The full text of the phrases appearing in section 3 is:

Not Applicable

ACGIH - American Conference of Governmental Industrial Hygienists
 ADR - International Carriage of Dangerous Goods by Road (Accord Dangereux Routier)
 CAS - Chemical Abstract Service
 CLP - Classification Labeling and Packaging
 DOT - Department of Transportation
 EC50 - European Commission
 EC50 - Half maximal effective concentration
 ErC50 - The concentration of test substance which results in a 50 percent reduction in growth rate (ErC50) relative to the control within 72hrs exposure.
 GHS - Globally Harmonized System
 IARC - International Agency for Research on Cancer
 IATA - International Civil Aviation Organization
 IC50 - The amount of a substance suspended in the air required to kills 50% of a test animals during a predetermined observation period.
 ICAO - International Civil Aviation Organization
 IMDG - International Maritime Dangerous Goods
 IMO - International Maritime Organization
 LC50 - Is the Lethal Concentration of a substance at which 50% of test animals die.
 LD50 - Is the Lethal Dose at which 50% of the animals will be expected to die.
 NIOSH - National Institute for Occupational Safety and Health
 NTP - National Toxicology Program
 OSHA - Occupational Safety and Health Administration
 PBT - Persistent, Bioaccumulative and Toxic Chemicals
 PEL - Permissible Exposure Limit
 REACH - Registration, Evaluation, Authorization and Restriction of Chemicals
 RID - Regulations concerning the international carriage of dangerous goods by rail)
 STEL - Short Term Exposure Limit
 TWA - Time Weighted Average
 vPvB - Very Persistent and very Bio-accumulative
 WGK - Water Hazard Class

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

No applicable GHS categories.Classification

Justification

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

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