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Section 1. Identification

Product identifier

Product Identity
Other means of identification

RT Enzyme Mix

A01035

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

Lab reagents

Details of the supplier of the safety data sheet

Company Name Asuragen, Inc.

2150 Woodward Street Austin, Texas 78744 +1 512 681 5200

Emergency

24 hour Emergency Asuragen, Inc.

Telephone No. +1 512 681 5200 US, Toll-free Tel: 1-877-777-1874 (Normal

Business Hours)

Customer Service:

Section 2. Hazard(s) identification

Classification of the substance or mixture under US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17) (GHS revision 7)

Aquatic toxicity (chronic), category 3;H412 Harmful to aquatic life with long lasting effects.



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Label elements

H412 Harmful to aquatic life with long lasting effects.

[Prevention]

P273 Avoid release to the environment.

[Response]

No GHS response statements

[Storage]

No GHS storage statements

[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

This product contains no PBT/vPvB/vPvM chemicals.

| 9016-45-9 | Nonylphenol polyethylene glycol ether | Endocrine disruptor |
|-----------|---------------------------------------|---------------------|

Does not contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per the Organisation for Economic Co-operation and Development (OECD) list of Per- and Polyfluoroalkyl Substances (PFASs).

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17) (GHS revision 7)



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| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|----------------------------------|----------|--------------------|-------|
| Glycerin | 45 - 70 | Not Classified | |
| CAS Number: 56-81-5 | | | |
| Synonyms: Glycerol | | | |
| | | | |

The actual concentration or concentration range is withheld as a trade secret.

Section 4. First aid measures

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.

Eyes 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.

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.

Section 5. Fire-fighting measures

Extinguishing media

^{*}PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.



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

Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

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.

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Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8). Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions

Do not allow spills to enter drains or waterways.

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.



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Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage. See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Incompatible materials: No available information See section 2 for further details. - [Storage]

Specific end use(s)

No available information

Section 8. Exposure controls / personal protection

Control parameters

Exposure Limits

| CAS No. | Ingredient | Source | Value |
|------------------|------------|---------------------------|--|
| 56-81-5 Glycerin | | ACGIH | TWA: 3 mg/m³(respirable) 10 mg/m³(mist) |
| | | OSHA | 5 mg/m³(Respirable fraction), 15 mg/m³(total dust) |
| | | NIOSH | No established RELs |
| | | Alberta | 10 mg/m³TWA (mist) |
| | | British Columbia | 10 mg/m³TWA (mist); 3 mg/m³TWA (mist, respirable) |
| | | Manitoba | No Established Limit |
| | | New Brunswick | 10 mg/m³TWA (mist) |
| | | Newfoundland and Labrador | No Established Limit |
| | | Nova Scotia | No Established Limit |
| | | Northwest Territories | 10 mg/m³TWA (mist) 20 mg/m³STEL (mist) |
| | | Nunavut | 10 mg/m³TWA (mist) 20 mg/m³STEL (mist) |
| | | Ontario | No Established Limit |
| | | Prince Edward Island | No Established Limit |
| | | Quebec | 10 mg/m³TWAEV (mist) |
| | | Saskatchewan | 10 mg/m³TWA (mist) 20 mg/m³STEL (mist) |
| | | Yukon | 30 mppcf TWA (mist); 10 mg/m³TWA (mist) |

Contains mineral oil. The exposure limits for oil mist are 5 mg/m³OSHA PEL and 5 mg/m³ACGIH.



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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 Provide adequate ventilation. Where reasonably practicable this should be

Controls 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 Use good personal hygiene practices. Wash hands before eating, drinking,

Practices smoking or using toilet. Promptly remove soiled clothing and wash

thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State Liquid

ColorNo available informationOdorNo available informationOdor thresholdNo available informationMelting point / freezing pointNo available informationInitial boiling point and boiling rangeNo available information

Flammability (solid, gas) Not Applicable

Upper/lower flammability or explosive Lower Explosive Limit: No available

limits information

Upper Explosive Limit: No available

information

Flash Point °F °C, Test method: (Open/Close cup)

Auto-ignition temperatureNo available informationDecomposition temperatureNo available informationpHNo available information



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Viscosity (cSt)

Solubility in Water

Partition coefficient n-octanol/water (Log

No available information

No available information

Kow)

Vapor pressure (Pa)No available informationRelative DensityNo available informationVapor DensityNo available informationEvaporation rate (Ether = 1)No available informationOxidising propertiesNo available informationExplosive propertiesNo available information

Other information

No other relevant information.

Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No available information

Conditions to avoid

Avoid high temperatures and contact with incompatible material

Incompatible materials

No available information

Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

Acute toxicity



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Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LC50, mg/L/4hr | Inhalation Dust/Mist LC50, mg/L/4hr | Inhalation Gas LC50, ppm |
|--------------------|----------------------------|-----------------------------------|---------------------------------------|---|--------------------------------|
| Glycerin - (56-81- | 27,200.00, Rat - Category: | 45,000.00, Guinea Pig - Category: | No data | No data | No data |
| 5) | NA | NA | available. | available. | available. |

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|---------|------------|--------|----------------------|
| 56-81-5 | Glycerin | IARC | No |
| | | ACGIH | No Established Limit |

| Classification | Category | Hazard Description |
|-------------------------------|----------|--------------------|
| Acute toxicity (oral) | | Not Applicable |
| Acute toxicity (dermal) | | Not Applicable |
| Acute toxicity (inhalation) | | Not Applicable |
| Skin corrosion/irritation | | Not Applicable |
| Serious eye damage/irritation | | Not Applicable |
| Respiratory sensitization | | Not Applicable |
| Skin sensitization | | Not Applicable |
| Germ cell mutagenicity | | Not Applicable |
| Carcinogenicity | | Not Applicable |
| Reproductive toxicity | | Not Applicable |
| STOT-single exposure | | Not Applicable |
| STOT-repeated exposure | | Not Applicable |
| Aspiration hazard | | Not Applicable |

Possible routes of entry:

No available information

Symptoms and effects, both acute and delayed:

No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically.



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Section 12. Ecological information

Toxicity

Harmful to aquatic life with long lasting effects.

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

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, | 48 hr EC50 crustacea, | ErC50 algae, |
|----------------------|--------------------------------|-------------------------|--------------------|
| | mg/L | mg/L | mg/L |
| Glycerin - (56-81-5) | 54,000.00, Oncorhynchus mykiss | 1,955.00, Daphnia magna | No data available. |

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

No available information

Mobility in soil

No available information

Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

Other adverse effects

No available information

Section 13. Disposal considerations

Waste treatment methods

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

Section 14. Transport information



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Classification Method: Classified as per Part 2, Sections 2.1-2.8 of the Transportation of Dangerous Goods Regulations.

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| | IMO / IMDG (Ocean | ICAO/IATA |
|--------------------------------|--------------------------|----------------------|
| | Transportation) | |
| UN number | Not Regulated | Not Regulated |
| UN proper shipping name | Not Regulated | Not Regulated |
| Transport hazard | Class:Not Applicable | Class:Not Applicable |
| class(es) | Sub Class:Not Applicable | Sub Class: Not |
| | | Applicable |
| Packing group | Not Applicable | Not Applicable |

Environmental hazards

IMDG Marine Pollutant: No;

Special precautions for user

No available information

Section 15. Regulatory information

Regulatory The regulatory data in Section 15 is not intended to be all-inclusive, only **Overview** selected regulations are represented.



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This product has been classified in accordance with US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17 amended 2022-12-15) (GHS revision 7) and the SDS contains all of the information required by those regulations.

Toxic Substance Control Act (TSCA)

Glycerin

Nonylphenol polyethylene glycol ether (SP)

Water

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Canadian Domestic Substance List (DSL):

Glycerin

Nonylphenol polyethylene glycol ether

Water

Canadian Non-Domestic Substance List (NDSL):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



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Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

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

Not Applicable

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.



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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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