

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : Eclipse-N
 Product code : M77913

1.2. Recommended use and restrictions on use

1.3. Supplier

JR Simplot Company
 P.O. Box 70013
 Boise, ID 83707
 T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Serious eye damage/eye irritation, Category 1 H318 Causes serious eye damage.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H318 - Causes serious eye damage.
 H361 - Suspected of damaging fertility or the unborn child.

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P280 - Wear protective gloves, protective clothing, eye protection, face protection.
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 - If exposed or concerned: Get medical attention
 P310 - Immediately call a POISON CENTER
 P405 - Store locked up.
 P501 - Dispose of contents/container to ... in accordance with Federal, state, and local regulations

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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Name	Product identifier	%	GHS-US classification
N-(n-butyl)-thiophosphonic triamide	(CAS-No.) 94317-64-3	15 – 55	Eye Irrit. 2A, H319 Skin Sens. 1B, H317 Repr. 2, H361 STOT SE 3, H335
1,2,3-Propanetriol	(CAS-No.) 56-81-5	5 – 49.5	Eye Irrit. 2B, H320
dimethyl sulfoxide	(CAS-No.) 67-68-5	20 – 40	Flam. Liq. 4, H227
Proprietary*	(CAS-No.) Not Applicable	0.1 – 5	Not classified
benzaldehyde	(CAS-No.) 100-52-7	1 – 5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/effects after eye contact : Serious damage to eyes.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Sand. Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate area.

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6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Store in a well-ventilated place. Keep cool.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Eclipse-N	
No additional information available	
N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
No additional information available	
dimethyl sulfoxide (67-68-5)	
No additional information available	
1,2,3-Propanetriol (56-81-5)	
USA - OSHA - Occupational Exposure Limits	
Local name	Glycerin (mist)
OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
benzaldehyde (100-52-7)	
No additional information available	
Proprietary* (Not Applicable)	
No additional information available	

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

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Eye protection:

Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Slightly hazy to clear golden yellow
Odour	: Ammonia-like odor
Odour threshold	: No data available
pH	: 6 – 8
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 87 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.07 – 1.09
Solubility	: Soluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at room temperature and pressure.

10.2. Chemical stability

Product is stable at ambient temperature and pressure, under normal storage and handling conditions. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Heat and sources of ignition. Extremely high or low temperatures. Direct sunlight.

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10.5. Incompatible materials

Strong oxidizers. reducing agents. Acids. Strong acids. Strong bases.

10.6. Hazardous decomposition products

This product contains components which may decompose to release: methanethiol, formaldehyde, water, bis (methylthio) methane, dimethyl disulfide, dimethyl sulfone, dimethyl sulfide, sulfur dioxide, oxides of carbon, nitrogen, sulfur and other compounds. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
dimethyl sulfoxide (67-68-5)	
LD50 oral rat	14500 mg/kg (Rat)
1,2,3-Propanetriol (56-81-5)	
LD50 oral rat	27200 mg/kg (Rat; Experimental value)
LC50 inhalation rat (mg/l)	> 2.75 mg/l/4h (Rat; Experimental value)
benzaldehyde (100-52-7)	
LD50 oral rat	1300 mg/kg (Rat)
LD50 dermal rat	> 1250 mg/kg (Rat)
LD50 dermal rabbit	5000 mg/kg (Rabbit)

Skin corrosion/irritation : Not classified
pH: 6 – 8
Serious eye damage/irritation : Causes serious eye damage.
pH: 6 – 8
Respiratory or skin sensitisation : Not classified.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified.

N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact : Serious damage to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

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dimethyl sulfoxide (67-68-5)	
LC50 fish 1	32300 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	58200 mg/l (18 h; Daphnia magna)
LC50 fish 2	33500 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	22300 mg/l (Daphnia pulex)
TLM fish 1	33500 ppm (48 h; Lepomis macrochirus)
Threshold limit algae 1	500 mg/l (48 h; Chlorophyta; Growth rate)
1,2,3-Propanetriol (56-81-5)	
LC50 fish 1	54000 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
EC50 Daphnia 1	> 10000 mg/l (24 h; Daphnia magna; Locomotor effect)
LC50 fish 2	> 1000 mg/l (96 h; Pisces)
TLM fish 1	> 1000 ppm (96 h; Pisces)
TLM other aquatic organisms 1	> 1000 ppm (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit algae 1	> 10000 mg/l (8 days; Scenedesmus quadricauda; Turbid water)
Threshold limit algae 2	2900 mg/l (192 h; Microcystis aeruginosa; Toxicity test)
benzaldehyde (100-52-7)	
LC50 fish 1	1.1 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	50 mg/l (24 h; Daphnia magna)
EC50 other aquatic organisms 1	534 mg/l (5 h; Bacteria; Activated sludge)
LC50 fish 2	11.2 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
Threshold limit other aquatic organisms 1	132 mg/l (Pseudomonas putida)
Threshold limit algae 1	100 mg/l (336 h; Chlorella sp.; Inhibitory)
Threshold limit algae 2	34 mg/l (Scenedesmus quadricauda)

12.2. Persistence and degradability

Eclipse-N	
Persistence and degradability	Not established.
N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
Persistence and degradability	Not established.
dimethyl sulfoxide (67-68-5)	
Persistence and degradability	Not readily biodegradable in water. Photolysis in the air.
1,2,3-Propanetriol (56-81-5)	
Persistence and degradability	Readily biodegradable in water. Not established.
Biochemical oxygen demand (BOD)	0.87 g O ₂ /g substance
Chemical oxygen demand (COD)	1.16 g O ₂ /g substance
ThOD	1.217 g O ₂ /g substance
BOD (% of ThOD)	0.71 % ThOD
benzaldehyde (100-52-7)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	1.62 g O ₂ /g substance
Chemical oxygen demand (COD)	1.98 g O ₂ /g substance
ThOD	2.42 g O ₂ /g substance
BOD (% of ThOD)	0.67 % ThOD
Proprietary* (Not Applicable)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

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N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
Bioaccumulative potential	Not established.
dimethyl sulfoxide (67-68-5)	
BCF fish 1	< 0.4 (Cyprinus carpio; Test duration: 6 weeks)
Partition coefficient n-octanol/water (Log Pow)	-2.03
Bioaccumulative potential	Bioaccumulation: not applicable.
1,2,3-Propanetriol (56-81-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.75 (Experimental value; Equivalent or similar to OECD 107)
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
benzaldehyde (100-52-7)	
BCF other aquatic organisms 1	4.2 – 7.8 (Estimated value)
Partition coefficient n-octanol/water (Log Pow)	1.48 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Proprietary* (Not Applicable)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

1,2,3-Propanetriol (56-81-5)	
Surface tension	0.0634 N/m (20 °C; 1000 g/l)
benzaldehyde (100-52-7)	
Surface tension	0.04 N/m (20 °C)

12.5. Other adverse effects

Other information : Avoid unintentional release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
 Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
 Ecology - waste materials : Avoid unintentional release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Class (DOT) : Comb Liq - Combustible liquid
 DOT Packaging Bulk (49 CFR 173.xxx) : Over 250 gallons bulk
 Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

Eclipse-N		
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:		
Proprietary*	CAS-No. Not Applicable	0.1 – 5%
Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S		
N-(n-butyl)-thiophosphonic triamide	CAS-No. 94317-64-3	15 – 55%
N-(n-butyl)-thiophosphonic triamide (94317-64-3)		
EPA Labeling Requirements	PMN - PMN - indicates a commenced PMN substance. S - S - indicates a substance that is identified in a final Significant New Use Rule.	

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15.2. International regulations

CANADA

N-(n-butyl)-thiophosphonic triamide (94317-64-3)
Listed on the Canadian DSL (Domestic Substances List)
dimethyl sulfoxide (67-68-5)
Listed on the Canadian DSL (Domestic Substances List)
1,2,3-Propanetriol (56-81-5)
Listed on the Canadian DSL (Domestic Substances List)
benzaldehyde (100-52-7)
Listed on the Canadian DSL (Domestic Substances List)
Proprietary* (Not Applicable)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Component	State or local regulations
dimethyl sulfoxide(67-68-5)	U.S. - New Jersey - Right to Know Hazardous Substance List
1,2,3-Propanetriol(56-81-5)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
benzaldehyde(100-52-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

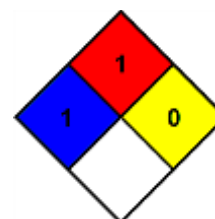
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Revision date	: 10/15/2021
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

Full text of H-statements:

H227	Combustible liquid
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.

NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



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SDS US (GHS HazCom 2012)

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