

Eclipse-N+, PHT

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Eclipse-N+, PHT
Product code : M33289

1.2. Recommended use and restrictions on use

No additional information available

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

| | | |
|---|------|--|
| Acute toxicity (oral) Category 4 | H302 | Harmful if swallowed |
| Skin corrosion/irritation Category 2 | H315 | Causes skin irritation |
| Serious eye damage/eye irritation Category 1 | H318 | Causes serious eye damage |
| Reproductive toxicity Category 2 | H361 | Suspected of damaging fertility or the unborn child |
| Specific target organ toxicity (single exposure) Category 3 | H335 | May cause respiratory irritation |
| Specific target organ toxicity (repeated exposure) Category 1 | H372 | Causes damage to organs through prolonged or repeated exposure |

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H361 - Suspected of damaging fertility or the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+P312 - If swallowed: Call a poison center/doctor/... if you feel unwell

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P302+P352 - If on skin: Wash with plenty of water/...
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
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 advice/attention
P312 - Call a poison center/doctor/... if you feel unwell
P321 - Specific treatment (see ... on this label)
P330 - Rinse mouth
P332+P313 - If skin irritation occurs: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P363 - Wash contaminated clothing before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to ...

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

| Name | Product identifier | % | GHS-US classification |
|-------------------------------------|--------------------------|--------------|--|
| ethylene glycol | (CAS-No.) 107-21-1 | Trade Secret | Acute Tox. 4 (Oral), H302 |
| N-(n-butyl)-thiophosphonic triamide | (CAS-No.) 94317-64-3 | Trade Secret | Eye Irrit. 2A, H319 Skin Sens. 1B, H317 Repr. 2, H361 STOT SE 3, H335 |
| Dicyandiamide | (CAS-No.) 461-58-5 | Trade Secret | Eye Irrit. 2B, H320 STOT SE 3, H335 |
| Proprietary* | (CAS-No.) Not Applicable | Balance | Not classified |

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 exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label).

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician 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. Harmful if swallowed.

Symptoms/injuries : Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

No additional information available

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 environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : 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 vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

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 tightly closed.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | | |
|---|------------------------------------|--|
| N-(n-butyl)-thiophosphonic triamide (94317-64-3) | | |
| Not applicable | | |
| Dicyandiamide (461-58-5) | | |
| Not applicable | | |
| ethylene glycol (107-21-1) | | |
| ACGIH | ACGIH Ceiling (mg/m ³) | 100 mg/m ³ (Ethylene glycol; USA; Momentary value; TLV - Adopted Value) |
| Proprietary* (Not Applicable) | | |
| Not applicable | | |

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8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or 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 |
| Color | : Colorless |
| Odor | : characteristic |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Non flammable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| 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 |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

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10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| | |
|---------------|------------------------|
| ATE US (oral) | 1000 mg/kg body weight |
|---------------|------------------------|

N-(n-butyl)-thiophosphonic triamide (94317-64-3)

| | |
|-----------------|--------------|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |

Dicyandiamide (461-58-5)

| | |
|----------------------------|-----------------------|
| LD50 oral rat | > 5000 mg/kg (Rat) |
| LD50 dermal rabbit | > 2000 mg/kg (Rabbit) |
| LC50 inhalation rat (mg/l) | > 0.26 mg/l/4h (Rat) |

ethylene glycol (107-21-1)

| | |
|---------------|--------------------------------------|
| LD50 oral rat | > 5000 mg/kg (Rat; Literature study) |
| ATE US (oral) | 500 mg/kg body weight |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
Specific target organ toxicity – single exposure : May cause respiratory irritation.

N-(n-butyl)-thiophosphonic triamide (94317-64-3)

| | |
|--|-----------------------------------|
| Specific target organ toxicity – single exposure | May cause respiratory irritation. |
|--|-----------------------------------|

Dicyandiamide (461-58-5)

| | |
|--|-----------------------------------|
| Specific target organ toxicity – single exposure | May cause respiratory irritation. |
|--|-----------------------------------|

Specific target organ toxicity – repeated exposure : Causes damage to organs through prolonged or repeated exposure.

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. Harmful if swallowed.
Symptoms/injuries : Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes serious eye damage.
Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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SECTION 12: Ecological information

12.1. Toxicity

| Dicyandiamide (461-58-5) | |
|-----------------------------------|---|
| LC50 fish 1 | 7700 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Cool water) |
| EC50 Daphnia 1 | 3177 mg/l (48 h; Daphnia magna) |
| LC50 fish 2 | 7900 mg/l (96 h; Pisces) |
| ethylene glycol (107-21-1) | |
| EC50 Daphnia 1 | > 10000 mg/l (EC50; 24 h) |
| LC50 fish 2 | 40761 mg/l (LC50; 96 h; Salmo gairdneri) |

12.2. Persistence and degradability

| Eclipse-N+, PHT | |
|---|---|
| Persistence and degradability | Not established. |
| N-(n-butyl)-thiophosphonic triamide (94317-64-3) | |
| Persistence and degradability | Not established. |
| Dicyandiamide (461-58-5) | |
| Persistence and degradability | Not readily biodegradable in water. Non degradable in the soil. Photodegradation in the air. Not established. |
| BOD (% of ThOD) | 0.022 % ThOD |
| ethylene glycol (107-21-1) | |
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. Not established. |
| Biochemical oxygen demand (BOD) | 0.47 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.24 g O ₂ /g substance |
| ThOD | 1.29 g O ₂ /g substance |
| BOD (% of ThOD) | 0.36 |
| Proprietary* (Not Applicable) | |
| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

| Eclipse-N+, PHT | |
|---|---|
| Bioaccumulative potential | Not established. |
| N-(n-butyl)-thiophosphonic triamide (94317-64-3) | |
| Bioaccumulative potential | Not established. |
| Dicyandiamide (461-58-5) | |
| BCF fish 1 | < 3.1 (Cyprinus carpio; Test duration: 6 weeks) |
| Log Pow | -1.5 (Experimental value) |
| Bioaccumulative potential | Bioaccumulation: not applicable. Not established. |
| ethylene glycol (107-21-1) | |
| BCF fish 1 | 10 (BCF; 72 h) |
| BCF other aquatic organisms 1 | 0.21 - 0.6 (BCF) |
| BCF other aquatic organisms 2 | 190 (BCF; 24 h) |
| Log Pow | -1.34 (Experimental value) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). Not established. |
| Proprietary* (Not Applicable) | |
| Bioaccumulative potential | Not established. |

12.4. Mobility in soil

| ethylene glycol (107-21-1) | |
|-----------------------------------|-------------------|
| Surface tension | 0.048 N/m (20 °C) |

12.5. Other adverse effects

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Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to ...

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

TDG

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

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 | Balance% |
|--------------|---------|----------------|----------|
|--------------|---------|----------------|----------|

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

| ethylene glycol | CAS-No. | 107-21-1 | Trade Secret% |
|-----------------|---------|----------|---------------|
|-----------------|---------|----------|---------------|

N-(n-butyl)-thiophosphonic triamide (94317-64-3)

| EPA Labeling Requirements | E - E - indicates a substance that is the subject of a Section 5(e) Consent Order under TSCA. P - P - indicates a commenced PMN substance. S - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule. |
|---------------------------|---|
|---------------------------|---|

ethylene glycol (107-21-1)

| EPA Labeling Requirements | T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA. |
|---------------------------|--|
| CERCLA RQ | 5000 lb |

15.2. International regulations

CANADA

N-(n-butyl)-thiophosphonic triamide (94317-64-3)

Listed on the Canadian DSL (Domestic Substances List)

Dicyandiamide (461-58-5)

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)

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EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

| ethylene glycol (107-21-1) | | | | | |
|---|---|---|---|-----------------------------------|-------------------------------------|
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk level (NSRL) | Maximum allowable dose level (MADL) |
| No | Yes | No | No | | |

| Component | State or local regulations |
|---------------------------|---|
| ethylene glycol(107-21-1) | 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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Other information : None.

Full text of H-phrases:

| | |
|------|--|
| H302 | Harmful if swallowed |
| H315 | Causes skin irritation |
| 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 |
| H372 | Causes damage to organs through prolonged or repeated exposure |

SDS US (GHS HazCom 2012)

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