

Safety Data Sheet

Date: April 2019

Version:2019-04

1. Chemical Product and Company identification

Product Name: Nu Film P®

Chemical name: Adjuvant

Common Name, Synonym: Mixture of Terpene polymers and emulsifiers

Material uses: Agricultural Adjuvant

Manufacturer: Miller Chemicals and Fertilizer, LLC. Phone: (717) 632-8921

FAX: (717) 646-1104 CHEMTREC: (800) 424-9300

Details of Supplier:

Hygrotech Properties (Pty) Ltd, 1 Gerard Braak street, Pyramid, Pretoria, 0120

Emergency Telephone numbers:

Griffon Poison Information Centre: 082 446 8946

Hygrotech Head Office: 012 545 8000 (o/h)

| | 2. Hazard Identification |
|----------------------------|--|
| 2.1 | Classification of the substances or mixture |
| GHS Classification (29 CFR | Not a hazardous substance or mixture according to 29 CFR |
| 1910.1200) | 1910.1200 (OSHA HCS) |
| 2.2 | Label elements |
| Pictogram | Not applicable |
| Signal word | Not applicable |
| Hazard Statements | Not applicable |
| Precautionary Statements | Not applicable |

3. Composition/Information of ingredients

| | Ingredient name | CAS no, | % |
|--|-----------------|---------|---|
|--|-----------------|---------|---|

| This product has been tested as a whole to | 100 |
|--|-----|
| determine its hazards | |

| | 4. First Aid measures |
|--------------|---|
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes, while |
| , | holding eyelids apart to ensure flushing of entire surface, Call physician |
| | Immediately flush skin with plenty of water for at least 15 minutes, while |
| Skin contact | removing contaminated clothing and shoes. Thoroughly clean clothing |
| | and shoes before reuse. Call a physician |
| Inhalation | Remove to fresh air. If not breathing give artificial respiration, preferably |
| Innalation | mouth to mouth. If breathing is difficult give oxygen. Call a physician |
| | If swallowed. DO NOT induce vomiting. Rinse mouth with water. Dilute |
| | stomach content by drinking water. If vomiting occurs spontaneously, |
| Ingestion | keep head below hips to prevent breathing vomit into lungs. NEVER GIVE |
| | ANYTHING BY MOUTH TO MOUTH TO AN UNCONSCIOUS PERSON. Call a |
| | physician immediately |

| 5 | . Fire fighting measures |
|-----------------------------------|--|
| Flash point (Method) | >100°C |
| Auto-Ignition | Not available |
| Flammable limits | Not available |
| Extinguishing media | Dry chemical, carbon dioxide (CO_2), water spray or sand/earth |
| Special firefighting procedures | None currently known |
| Unusual fire and explosion hazard | Generates CO ₂ , CO and smoke. Combustion products may be toxic |

| | 6. Accidental release measures | | |
|---------------------------------------|--|--|--|
| Personal precaution | Evacuate non-essential personnel, eliminate ignition sources, and wear protective equipment (See Section VIII). Shut off | | |
| · · · · · · · · · · · · · · · · · · · | source of leak only if safe to do so. Wear respiratory | | |
| | equipment if exposure limits are exceeded. | | |
| Contain spill | Shut off leak if safe to do so. Dike area, recover and reclaim | | |
| | material if possible. This material should be prevented from | | |
| | contaminating soil or from entering sewage and drainage | | |
| | systems and bodies of water. Absorb the liquid on material | | |
| | such as sand, vermiculite, or other inert non-combustible | | |
| | absorbent and place in a clean, dry container suitable for | | |
| | disposal. Containers should be closed and segregated for later | | |
| | disposal. Scrub the area with detergent and water. | | |
| | Solids must be disposed of in a permitted wate management | | |
| | facility. Recovered liquids may be reprocessed or incinerated. | | |
| Disposal method | Incineration must be handled in a permitted facility. Dispose | | |
| | of material in accordance with all Federal, state and local | | |
| | regulaitons. Local regulations may be more stringent than | | |

| Federal or state |
|------------------|
|------------------|

| | 7. Handling and storage |
|----------|--|
| | Wear protective equipment when handling. Wash thoroughly after |
| Handling | handling. Do not get in eyes. Do not breathe vapor, mist, or dust. Avoid |
| | prolonged or repeated contact with skin. Do not swallow. |
| | For industrial use only. Keep container closed when not in use. Store at |
| Storage | temperatures between 5°C and 40°C and in well-ventilated areas away |
| | from heat or flame. Keep out of reach of children |

| 8. E | xposure controls/personal protection |
|----------------------------|--|
| Engineering controls | |
| Mechanical | General ventilation is usually adequate |
| Respiratory Protection | If exposure limits are exceeded, of if exposure may occur, use a NOISHA/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSHA publication concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in compliance with OSHA requirements in 29 CFR 1910.134. for emergencies, A NOISHA/MSHA approved positive pressure-breathing apparatus should be readily available |
| Eye protection | Chemical goggles or face shield. Always wear eye protection when working with chemicals. Never wear contact lenses when working with chemicals |
| Sin protection | Rubber gloves. Clean protective body covering, rubber apron, and rubber boots |
| Work hygienic practices | Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking or smoking, If contact occurs remove contaminated clothing. If needed, take First Aid action shown in Section VI. Launder contaminated clothing before use |
| Other protective equipment | Safety shower, eye wash fountain, and washing facility should be readily available |

| 9. Physical an | d chemical properties |
|---------------------|----------------------------|
| Appearance | Red – reddish amber liquid |
| Odour | Moderate terpene |
| pH (5% in DW) | 6.0-7.0@ 20°C |
| Boiling point | Not determined |
| Freeze point | Not determined |
| Flash point | >100°C |
| Vapour pressure | Not determined |
| Vapour density | Not determined |
| Solubility in water | Emulsifies |

| Specific gravity | 0.92-0.93 g/ml |
|------------------|----------------|

| 1 | 0. Stability and reactivity |
|--|---|
| Chemical stability | Stable |
| Materials/conditions to avoid | Strong oxidizing agents, excessive heat and sources of ignition |
| Hazardous decomposition of by- products | At high temperatures may release oxides of carbon |
| Hazardous polymerization | Will not occur |

| 11. Toxicology information | | |
|----------------------------|---|--|
| Toxic data | | |
| Acute eye irritation | May cause irritation | |
| Acute dermal effects | LD ₅₀ >5050 mg/kg (rabbit); may cause skin irritation | |
| Acute oral effects | LD ₅₀ >5050 mg/kg (rat); large doses ma cause nausea, vomiting, and stomach pain or cramps | |
| Acute inhalation effects | LC_{50} >5260 mg/m ³ (rat): may cause slight irritation if mist occurs | |
| Carcinogenicity | None found | |
| Mutagenicity | None found | |
| Teratogenicity | None found | |
| Chronic effects | Not known | |

| 12. Ecological information | | |
|----------------------------|---|--|
| Ecotoxicity | This product is a spray adjuvant. Large spills could possible damage vegetation. Contamination of waterways could possibly cause fish kills. Prevent spread of runoff into drains, storm sewers and diches that lead to waterways | |
| Aquatic toxicity | Data not available | |
| Environmental fate | Data not available | |

| 13. Disposal considerations | | |
|----------------------------------|--|--|
| Disposal | If uncontaminated, recover and reuse as product. If contaminated with other materials, the nature and extent of contamination may require use of specialized disposal methods. Consult local, country, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations | |
| Disposal regulatory requirements | Consult local, country, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations | |
| Container cleaning and disposal | Consult local, country, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations | |

| 14. Transport information | | |
|---------------------------|---------------|--|
| UN No. | Not regulated | |
| UN proper shipping name | | |
| Transport hazardous class | | |
| Packing group | | |
| Environmental hazard | | |
| Trem card no. | 2015-12-15 | |

| 15. Regulatory information | | |
|----------------------------|----------------|--|
| EPA regulations | Not applicable | |
| State regulations | Not applicable | |
| | | |
| | | |
| | | |

| 16. Other information | | |
|------------------------|---------------|--|
| Date of issue | April 2019 | |
| Date of previous issue | December 2014 | |
| Version | 2019-04 | |
| Prepared by | User2005 | |

Notice to the reader

To the best of our knowledge the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist