Safety Data Sheet

HYDROVANT-*f*A

Date of Issue: 05/28/2019

(Prepared According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations)

SECTION 1: PRODUCT AND COMPANY INFORMATION

Product Identifier

Trade Name: HYDROVANT-*f*A
Product Description: Liquid mixture

Recommended Use of the Chemical and Restrictions on Use

Recommended Use: Agricultural spray adjuvant.
Restrictions on Use: Use only as directed on label.

Details of the Supplier

Company Name: **Corbet Scientific, LLC.**
Address: 680 S Cache Street, Suite 100-8640, Jackson, WY 83001 USA
Emergency Phone: (US)+1 800-424-9300
Information Phone: (US)+1 307-264-2411

SECTION 2: HAZARD IDENTIFICATION

Classification -
This product has been tested as a whole and is not considered hazardous by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012). Product has been tested for toxicity according to the US EPA Guidelines.

OSHA HCS 2012 Classification

Health	Physical
Not classified	Not classified

OSHA HCS 2012 Label Elements

Pictograms: Not applicable
Signal word: Not applicable
Hazard Statements: Not applicable
Precautionary statements: Not applicable
Suggested: P501 Dispose of contents/container in accordance with local, regional, national and/or international regulations.

Hazards not otherwise classified (HNOC)
Not applicable.

Unknown Toxicity
Not applicable. This product was tested as a whole. This information only pertains to untested mixtures.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Proprietary mixture

Other Means of Identification: Polyvinyl polymer in water.

CAS Number/Other Identifiers
CAS Number: Not Applicable for Mixture

The product has been tested as a whole to determine its hazards- see Section 11.

As described in paragraph (i) of 29 CFR 1910.1200, the specific chemical identity and/or the exact percentage of composition has been withheld as a trade secret. Specific chemical identities and exact percentages will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

SECTION 4: FIRST AID MEASURES

Eye Contact: In case of direct eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a physician.

Skin Contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Contact a doctor if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation: Move to fresh air. If breathing problems develop or persist, call a doctor.

Ingestion: If ingestion of a large amount does occur, wash out mouth with water. Call a poison control center.

Notes for the Doctor: Any treatment that might be required for overexposure should be directed at the control of symptoms and the clinical conditions.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water spray, dry chemical, alcohol foam or carbon dioxide to cool containers

Unsuitable Extinguishing Media
No information is available.

Firefighting Procedures
Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Use extinguishing agents appropriate for surrounding fire.

Unusual Fire and Explosion Hazard
Not considered a fire or explosion hazard.

Hazardous Products of Combustion
Incomplete combustion may yield carbon dioxides

Protection of Firefighters
Wear full protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Further Information
No further information is available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not walk on spilled product. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Personal Precautions and Protective Equipment
Use appropriate personal protective equipment, such as, safety goggles, gloves and a NIOSH approved particulate respirator if airborne dust levels exceed occupational exposure limits listed in Section 8.

Environmental Precautions
Avoid pollution of sewers and water.

Methods and Materials for Containment and Clean-up
All spills should be handled according to site requirements and based on precautions cited in the SDS. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood, appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming is required. See Sections 9 and 10 for additional physical, chemical, and hazard information.

Other Information
No further information is available.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

No special precautions are necessary beyond normal good hygiene practices. Wash hands before eating, drinking or smoking. See Section 8 of the SDS for additional personal protection advice when handling this product.

Conditions for Safe Storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from children, feed and food products in an area away from incompatible materials (see Section 10).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Guideline

Exposure Limits: Substances with occupational exposure limit values are listed below:

Chemical Name	ACGIH TLV	OSHA PEL	NOISH IDLH
Polyvinyl alcohol CAS #9002-89-5	No Established Limit	TWA: 15 mg/m^3 (total dust)	No Established Limit
Proprietary Ingredient 1	TWA: 5 mg/m^3	No Established Limit	No Established Limit

Exposure Controls

Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

Environmental Exposure Control: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

General Protective and Hygienic Measures

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132)

Hygiene Measures:	Wash hands, forearms, and face thoroughly after handling chemical products; before eating, smoking, and using the lavatory; and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face Protection:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes or mists. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side shields.
Hand Protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body Protection:	Not normally required when using this product. If necessary, refer to appropriate U.S. OSHA Standards described in 29 CFR 1910.136.
Other Skin Protection:	Not normally required when using this product.
Respiratory Protection:	Respiratory protection is not normally required. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour:	Liquid
Color:	Pinkish white
Odor:	Odorless

pH:	7.46 at 25°C
Melting Point/Freezing Point:	Not Available
Initial Boiling Point and Boiling Range:	Not Available
Flash Point:	Not flammable
Evaporation Rate:	Not Available
Flammability (Solid, Gas):	Not Available
Upper/Lower Flammability or Explosive Limits:	Not Available
Vapor Pressure:	Not Available
Vapor Density:	Not Applicable
Density:	1.01 g/cm^3 at 26°C
Solubility(ies):	Soluble in water
n-Octanol/Water Partition Coefficient:	Not Available
Viscosity @ 26°C (cP):	3.34 centipoise @ 26°C

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable at normal temperature and storage conditions.
Conditions to Avoid:	Keep product from heating above ambient conditions.
Incompatible Materials:	Strong oxidizing materials and strong acids and bases.
Hazardous Decomposition Products:	Upon decomposition, this product may yield gaseous carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

The following toxicity data have been determined for the HYDROVANT-*f*A product:

Acute Toxicity (Product Information)

Acute Oral Toxicity	Not classified, oral LD_{50} > 5,000 mg/kg (female Albino rats) Method: EPA OPPTS 870.1100

Acute Dermal Toxicity Not classified, dermal LD_{50} > 5,050 mg/kg (Albino rats)
Method: EPA OPPTS 870.1200

Acute Inhalation Toxicity Not classified, Inhalation (aerosol) LC_{50} > 2.28 mg/L (Albino rats)
Method: EPA OPPTS 870.1300

Eye Irritation: Product is not an eye irritant when tested in rabbits.
Method: EPA OPPTS 870.2400

Skin Irritation: Product is not a skin irritant when tested in rabbits.
Method: EPA OPPTS 870.2500

Respiratory Irritation: Mists and vapours may be mildly irritating to the mucous membranes of the respiratory tract.

Respiratory Sensitization: No data are available for the mixture.

Skin Sensitization: No data are available for the mixture.

Chronic Effects

Repeated Dose Toxicity: No data are available for the mixture.

Carcinogenicity: None of the components in this mixture are found on the National Toxicology Program Report on Carcinogens or has been found to be a possible carcinogen in IARC or OSHA.

Mutagenicity: No data are available for the mixture.

Reproductive Effects: No data are available for the mixture.

Target Organs: Eyes, Skin

Routes of Exposure: Dermal, Ocular, Inhalation

Signs and Symptoms of Exposure:
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. To the best of our knowledge, this product is not toxic or and does not present an ecological risk.

Ecotoxicity (Aquatic and Terrestrial); Product Information
Material is not toxic to aquatic organisms on an acute basis (LC50/EC50 greater than 100 mg/L fish and daphnia).

Acute toxicity to fish 96-hour LC_{50} (Pimephales promelas (fathead minnow)) > 1,000 mg/L.

	Method: EPA OPPTS 850.1075
Acute toxicity to aquatic invertebrates	48-hour LC_{50} (Daphnia magna (Water flea)) > 1,000 mg/L Method: EPA OPPTS 850.1010
Persistence/Degradability:	No data are available.
Bioaccumulation/Accumulation:	No data are available.
Mobility in Soil:	No data are available.
Results of PBT and vPvB Assessment:	No data are available.
Other Adverse Effects:	No data are available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods:
The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

DOT:	Not Regulated
TDG:	Not Regulated
ICAO:	Not Regulated
IATA:	Not Regulated
IMDG/IMO:	Not Regulated
Special Precautions for User:	Always transport in closed containers that are upright and secure within user's premises. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: REGULATORY INFORMATION

Chemical Inventories

TSCA: All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

DSL/NDSL: All components are on the DSL or NDSL.

US Federal Regulations

SARA 313 (TRI):

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA): This product does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312:

Classification Immediate (Acute) and Delayed (Chronic) Health Hazard

Composition/Information on Ingredients

Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immediate (Acute) Health Hazard	Delayed (Chronic) Health Hazard
Proprietary Ingredient 1	2	No	No	No	No	Yes
Proprietary Ingredient 2	< 1	No	No	No	Yes	No

U.S. State Regulations

California Proposition 65:

To the best of our knowledge, this product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

U.S. State Right-to-Know Regulations (RTK):

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Proprietary Ingredient 1	x	x	x		
Proprietary Ingredient 2	x	x	x		

SECTION 16: OTHER INFORMATION

Issue Date:
05/28/2019

Disclaimer:
The information in this Safety Data Sheet (SDS) was obtained from sources which we believe are reliable; however, the information is provided without any representation or warranty, expressed or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of this product.

Glossary:
ACGIH – American Conference of Governmental Industrial Hygienists
CAS – Chemical Abstract Service
CFR – Code of Federal Regulations
DOT – Department of Transportation
DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List
EC50 – Effective Dose 50
GHS – Globally Harmonized System
HEPA – High Efficiency Particulate Arresting
IARC – International Agency for Research on Cancer
IDLH – Immediately Dangerous To Life or Health
LC50 – Lethal Concentration 50
LD50 – Lethal Dose 50
NFPA – National Fire Protection Association
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OSHA – Occupational Safety and Health Administration
PEL – Permissible Exposure Limit
PBT – Persistent Bioaccumulative Toxic
PPE – Personal Protective Equipment
SARA – Superfund Authorization and Reauthorization Act
STEL – Short-Term Exposure Limit
TLV – Threshold Limit Value
TSCA – Toxic Substances Control Act
TWA – Total Weight Average
UN – United Nations
vPvB – Very Persistent and Very Bioaccumulative