

HYDROVANT[®] fA

SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product: **HYDROVANT-fA**
Product Use: Agricultural spray adjuvant.
Restriction of Use: Refer to Section 15

New Zealand Supplier: **Corbet Scientific, LLC.**
Address: 680 S. Cache Street, Suite 100-8640
Jackson, WY 83001 USA

Website: www.hydrovant.com
Emergency No: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 09 July 2020

Section 2. Hazards Identification

This substance is **NOT** hazardous according to the EPA Hazardous Substances (Classification) Notice 2017.

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.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Polyvinyl polymer	0.1	Proprietary
Other ingredients not contributing to the overall hazard classification including water.	To 100	Proprietary

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes: Rinse cautiously with water for 15 minutes. If eye irritation persists: Get medical advice.

If on Skin: Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.

If Swallowed: Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.

If Inhaled Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms: HYDROVANT-fA contains a dilute non-toxic polymer adhesive, however skin and eye contact should be avoided. If skin, hair or eye contact occurs, remove contaminated clothing and flush skin, hair and/or eyes with running water for several minutes.

Notes to 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

Hazard Type	Non Flammable
Hazards from combustion products	Incomplete combustion may yield carbon dioxides.
Suitable Extinguishing media	Water spray, dry chemical, alcohol foam or carbon dioxide to cool containers
Precautions for firefighters and special protective clothing	Wear full protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Use extinguishing agents appropriate for surrounding fire.
HAZCHEM CODE	None Allocated

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.

Section 7. Handling and Storage

Precautions for 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.

Precautions for Storage:

Store products at temperatures above 2°C and below 35°C. Keep product stored in cool, dry areas to avoid temperature extremes. Store in original container only. Keep container tightly sealed. Do not contaminate water, food or feed by storage or disposal. Do not allow water to be introduced into the contents of this container. Store away from children, feed and food products in an area away from incompatible materials (Sec 10).

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

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.

Personal Protection Equipment



Eyes	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.
Hands	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.
Skin	Not normally required when using this product.
Respiratory	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.
General	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.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Pinkish white
Odour	Odourless
Odour Threshold	Not available
pH	7.46 at 25°C
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Density	1.01 g/cm ³ at 26°C
Specific Gravity	Not available
Water Solubility	Soluble in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	3.34 centipoise @ 26°C
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable at normal temperature and storage conditions.
Possibility of hazardous reactions	Not available
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

Acute Effects:

Swallowed	Not applicable. Oral LD50 > 5,000 mg/kg (female Albino rats)
Dermal	Not applicable. LD50 > 5,050 mg/kg (Albino rats)
Inhalation	Not applicable. Inhalation (aerosol) LC50 > 2.28 mg/L (Albino rats) Mists and vapours may be mildly irritating to the mucous membranes of the respiratory tract.
Eye	Product is not an eye irritant when tested in rabbits. Method: EPA OPPTS 870.2400
Skin	Product is not a skin irritant when tested in rabbits. Method: EPA OPPTS 870.2500

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological 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 LC50 (Pimephales promelas (fathead minnow)) >1,000 mg/L.
Method: EPA OPPTS 850.1075

Acute toxicity to aquatic invertebrates

48-hour LC50 (Daphnia magna (Water flea)) > 1,000mg/L
Method: EPA OPPTS 850.1010

Product:	
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Section 13. Disposal Considerations

Disposal Method:

PRODUCT DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water sources by runoff when cleaning equipment, or disposing of equipment wash waters, or spray waste.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Recycling decontaminated containers is the best option of container disposal. If unable to recycle, puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by governing authorities, by burning. If burning, stay out of smoke.

Precautions or methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Section 15 Regulatory Information

This substance is NOT classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

Section 16 Other Information

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

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