

SAFETY DATA SHEET

1. Identification

Product identifier	VERSATILE® AUTOMATIC 5-0-0		
Other means of identification	None.		
Recommended use	Ag Product - Plant Nutrition		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/Distributor information			
Manufacturer			
Company name	Wilbur-Ellis Company LLC		
Address	16300 Christensen Rd. Ste 135 Tukwila, WA 98188 United States		
Telephone	Branded Products Information	(800) 500-1698	
E-mail	SDS@wilburellis.com		
Emergency phone number	Chemtrec - Domestic	(800) 424-9300	
	Chemtrec - International	+1 703-741-5970	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



Signal word	Warning
Hazard statement	May cause damage to respiratory tract through prolonged or repeated exposure.
Precautionary statement	
Prevention	Do not breathe mist or vapor.
Response	Get medical advice/attention if you feel unwell.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ethylenediaminetetraacetate-zinc-ammonia complex		67859-51-2	10 - < 20
Copper Complex With Ammonia And Ethylene Diamine Tetraacetate		67989-88-2	5 - < 10
Dipotassium Edetate Dihydrate		25102-12-9	3 - < 5
Manganese Oxide		1344-43-0	1 - < 3
Sodium Molybdate		10102-40-6	< 0.3

Chemical name	Common name and synonyms	CAS number	%
Calcium Sulfate		7778-18-9	< 0.2
Other components below reportable levels			70 - < 80

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not breathe mist or vapor. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Aqua Ammonia (CAS 1336-21-6)	PEL	35 mg/m3	
Calcium Sulfate (CAS 7778-18-9)	PEL	50 ppm	Respirable fraction.
		5 mg/m3	
Manganese Oxide (CAS 1344-43-0)	Ceiling	15 mg/m3	Total dust.
		5 mg/m3	
Sodium Molybdate (CAS 10102-40-6)	PEL	5 mg/m3	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aqua Ammonia (CAS 1336-21-6)	STEL	35 ppm	
Calcium Sulfate (CAS 7778-18-9)	TWA	25 ppm	Inhalable fraction.
	TWA	10 mg/m3	
Copper Complex With Ammonia And Ethylene Diamine Tetraacetate (CAS 67989-88-2)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	
Manganese Oxide (CAS 1344-43-0)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	
Sodium Molybdate (CAS 10102-40-6)	TWA	0.5 mg/m3	Respirable fraction.
		0.5 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Aqua Ammonia (CAS 1336-21-6)	STEL	27 mg/m3	
	TWA	35 ppm 18 mg/m3	
Calcium Sulfate (CAS 7778-18-9)	TWA	25 ppm	Respirable.
		5 mg/m3	
Copper Complex With Ammonia And Ethylene Diamine Tetraacetate (CAS 67989-88-2)	TWA	10 mg/m3	Total Dust and mist.
		1 mg/m3	
Manganese Oxide (CAS 1344-43-0)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate 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. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Dark blue opaque liquid.

Physical state Liquid.

Form Liquid.

Color Dark blue.

Odor Not available.

Odor threshold Not available.

pH 8.5 - 9

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Pounds per gallon 10.3

Specific gravity 1.24

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

11. Toxicological information**Information on likely routes of exposure**

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation.

Skin contact No adverse effects due to skin contact are expected.
Eye contact Direct contact with eyes may cause temporary irritation.
Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
Aqua Ammonia (CAS 1336-21-6)		
<u>Acute</u>		
Oral		
LD50	Rat	350 mg/kg, 4 hours
Calcium Sulfate (CAS 7778-18-9)		
<u>Acute</u>		
Inhalation		
LC50	Rat	> 3.26 mg/l, 4 Hours
Oral		
LD50	Rat	> 1581 mg/kg
Copper Complex With Ammonia And Ethylene Diamine Tetraacetate (CAS 67989-88-2)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	300 - 2000 mg/kg
Dipotassium Edetate Dihydrate (CAS 25102-12-9)		
<u>Acute</u>		
Oral		
LD50	Rat	2800 mg/kg
EDTA Acid (CAS 60-00-4)		
<u>Acute</u>		
Oral		
LD50	Rat	4500 mg/kg
Ethylenediaminetetraacetate-zinc-ammonia complex (CAS 67859-51-2)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	>= 2000 mg/kg
Manganese Oxide (CAS 1344-43-0)		
<u>Acute</u>		
Inhalation		
<i>Dust</i>		
LC50	Rat	1 - 5 mg/l, 4 Hours
Oral		
<i>Dust</i>		
LD50	Rat	301 - 1999 mg/kg
Sodium Molybdate (CAS 10102-40-6)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours

Components	Species	Test Results
Oral LD50	Rat	> 2000 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not listed.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
Not regulated.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.	

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are listed on or exempted from the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Aqua Ammonia (CAS 1336-21-6)	Listed.
Copper Complex With Ammonia And Ethylene Diamine Tetraacetate (CAS 67989-88-2)	Listed.
EDTA Acid (CAS 60-00-4)	Listed.
Ethylenediaminetetraacetate-zinc-ammonia complex (CAS 67859-51-2)	Listed.
Manganese Oxide (CAS 1344-43-0)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Acute toxicity (any route of exposure)
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
ZINC COMPOUNDS	67859-51-2	10 - < 20
COPPER COMPOUNDS (WITH EXCEPTIONS)	67989-88-2	5 - < 10
AMMONIA (INCLUDES ANHYDROUS AMMONIA AND AQUEOUS AMMONIA FROM WATER DISSOCIABLE AMMONIUM SALTS AND OTHER SOURCES; 10% OF TOTAL AQUEOUS AMMONIA IS REPORTABLE UNDER THIS LISTING)	1336-21-6	1 - < 3
MANGANESE COMPOUNDS	1344-43-0	1 - < 3

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Manganese Oxide (CAS 1344-43-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

California Proposition 65

WARNING: California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

16. Other information, including date of preparation or last revision

Issue date 02-21-2018
Revision date 04-02-2018
Version # 02

NFPA ratings

Health: 1
Flammability: 0
Instability: 0

NFPA ratings



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