SAFETY DATA SHEET



1. Identification

1. Identification			
Product identifier	NDemand® MICRO MIX 24-0-0		
Other means of identification	None.		
Recommended use	Ag Product - Plant Nutrition		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/	Distributor information		
Manufacturer			
Company name Address	Wilbur-Ellis Company LLC 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) 424-9300Chemtrec - International+1 703-741-5970		
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Not classified.		
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	None.		
Hazard statement	The mixture does not meet the criteria for classification.		
Precautionary statement			
Prevention	Observe good industrial hygiene practices.		
Response	Wash hands after handling.		
Storage	Store away from incompatible materials.		
Disposal	Dispose of waste and residues in accordance with local authority requirements.		
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	%
Urea		57-13-6	40 - < 50
EDTA Acid		60-00-4	1 - < 3
Proprietary Ingredient		Proprietary	1 - < 3
Other components below reportable levels			50 - < 60

*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. Material name: NDemand® MICRO MIX 24-0-0 SDS US

4556 Version #: 01 Issue date: 01-02-2018

Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	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 (CO2).

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. 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. For waste disposal, see section 13 of the SDS.
	Never return spills to original containers for re-use.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7 Handling and starses	

7. Handling and storage

Precautions for safe handling	Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure.
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

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

Components	Туре	Value	
Proprietary Ingredient	PEL	6 mg/m3	
		3 ppm	
US. ACGIH Threshold Limit Value	Jes		
Components	Туре	Value	
Proprietary Ingredient	STEL	6 ppm	
	TWA	3 ppm	
US. NIOSH: Pocket Guide to Ch	emical Hazards		
Components	Туре	Value	
Proprietary Ingredient	STEL	15 mg/m3	
		6 ppm	
	TWA	8 mg/m3	
		3 ppm	

US. Workplace Environme Components	ntal Exposure Level (WEEL) Guides Type	Value	Form	
Urea (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.	
Biological limit values	No biological exposure limits noted for the i	ngredient(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 measure	s, such as personal protective equipment			
Eye/face protection	Wear safety glasses with side shields (or g	Wear safety glasses with side shields (or goggles).		
Skin protection				
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.			
Other	Wear suitable protective clothing.			
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.			
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	Red liquid.
Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
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 exp	losive 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	9.95

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 exposureInhalationProlonged inhalation may be harmful.Skin contactProlonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.Eye contactDirect contact with eyes may cause temporary irritation.IngestionExpected to be a low ingestion hazard.Symptoms related to the physical, chemical and toxicological characteristicsDirect contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity		
Components	Species Test Results	
EDTA Acid (CAS 60-00-4)		
Acute		
Oral		
LD50	Rat	4500 mg/kg
Proprietary Ingredient		
<u>Acute</u>		
Dermal		
LD50	Rabbit	2881 mg/kg, 24 Hours
		2.46 - 2.83 ml/kg, 24 Hours
Inhalation		
Vapor		
LC50	Rat	> 1.3 mg/l, 6 Hours
Oral		
LD50	Rat	1515 mg/kg
		1089 mg/kg
		1.19 ml/kg
Urea (CAS 57-13-6)		u u u u u u u u u u u u u u u u u u u
Acute		
Oral		
LD50	Mouse	13000 mg/kg
	Rat	15000 mg/kg
* Estimates for product ma	ay be based on additional compone	nt data not shown.
Skin corrosion/irritation	Prolonged skin contact may ca	ause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	

Respiratory or skin sensitization	n	
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	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
Not listed. OSHA Specifically Regulate Not regulated.	Evaluation of Carcinogenicity od Substances (29 CFR 1910.1001-1050) ogram (NTP) Report on Carcinogens	
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	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	May be harmful if absorbed through skin. Prolonged inhalation may be harmful.	
	Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.	
Further information	This product has no known adverse effect on human health.	
12. Ecological information	1	
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 this product.	
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.
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, if applicable, 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.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information	n	
US federal regulations	This product is not known to be 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 Substa		
EDTA Acid (CAS 60-00-4) Listed.		
SARA 304 Emergency relea	se notification	
Not regulated.	ed Substances (29 CFR 1910.1001-1050)	
Not regulated.	a Substances (25 OFT 1510.1001-1000)	
•	eauthorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - No	
	Delayed Hazard - No	
	Fire Hazard - No Pressure Hazard - No	
	Reactivity Hazard - No	
SARA 302 Extremely hazard	dous substance	
Not listed.		
SARA 311/312 Hazardous chemical	No	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Sectior	n 112 Hazardous Air Pollutants (HAPs) List	
Not regulated.		
Clean Air Act (CAA) Sectior	n 112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.		
Safe Drinking Water Act (SDWA)	Not regulated.	
US state regulations		
US. California Proposition 6		
	Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain listed as carcinogens or reproductive toxins.	
16. Other information, inc	luding date of preparation or last revision	
Issue date	01-02-2018	

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Issue date	01-02-2018
Version #	01
NFPA ratings	Health: 0 Flammability: 0 Instability: 0
NFPA ratings	000
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