

# SAFETY DATA SHEET



## 1. Identification

**GHS product identifier** Denali-EA  
**Version #** 01  
**Issue date** 01-10-2019  
**CAS #** Mixture  
**Recommended use** Ag Product - Adjuvant  
**Recommended Restrictions** Not available.  
**Manufacturer information** Wilbur-Ellis Company LLC  
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## 2. Hazards identification

**GHS classification**  
**Physical hazards** Not classified.  
**Health hazards** Serious eye damage/eye irritation Category 2B  
**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 2  
  
**GHS label elements**  
**Signal word** Warning  
**Hazard symbols** None.  
**Hazard statement** Causes eye irritation. Toxic to aquatic life.  
  
**Precautionary statement**  
**Prevention** Wash thoroughly after handling. Avoid release to the environment.  
**Response** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Storage** Store away from incompatible materials.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Other hazards which do not result in classification** None known.  
**Supplemental information** None.

## 3. Composition/information on ingredients

Components	CAS #	Percent
Proprietary Alkoxylate(s)	Proprietary	30 - < 40
Proprietary Alcohols Ethoxylated	Proprietary	20 - < 30
2-Hydroxy-1,2,3-propanetricarboxylic acid	77-92-9	5 - < 10
Other components below reportable levels		30 - < 40

## 4. First aid measures

**First aid procedures**  
**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.  
**Skin** Wash off with soap and water. Get medical attention if irritation develops and persists.  
**Eye** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Ingestion** Rinse mouth. Get medical attention if symptoms occur.  
**Most important symptoms and effects, both acute and delayed** Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Notes to physician** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General advice** 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<sub>2</sub>).

**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.

**Protective equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Protection of fire-fighters** Move containers from fire area if you can do so without risk.

**General fire hazards** No unusual fire or explosion hazards noted.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## 6. Accidental release measures

**Personal precautions** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. 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. For personal protection, see section 8 of the SDS.

**Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**Methods for containment** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

**Methods for cleaning up** Ventilate the contaminated area. Wear appropriate protective equipment and clothing during clean-up. Prevent product from entering drains. Do not allow material to contaminate ground water system.

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.

## 7. Handling and storage

**Handling** Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

**Storage** Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls / personal protection

### Control parameters

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Formaldehyde (CAS 50-00-0)	Ceiling	0.3 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**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. Provide eyewash station.

### Personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection** Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection**

Wear appropriate chemical resistant gloves.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Liquid.
<b>Color</b>	Yellow/Amber (Munsell 2.5 GY 9/6)
<b>Form</b>	Liquid.
<b>Odor</b>	Slight, mild acrid
<b>Odor threshold</b>	Not available.
<b>pH</b>	2.6 - 2.9 1% dilution, in 342 ppm* water (*WHO Standard water hardness)
<b>Melting point/Freezing point</b>	Not available.
<b>Boiling point</b>	Not available.
<b>Flash point</b>	> 212.0 °F (> 100.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	154 cP (Brookfield LVT, 40 RPM, spindle 62, 21°C.)
<b>Specific gravity</b>	1.05
<b>Other data</b>	
<b>Explosive properties</b>	Not explosive.
<b>Miscible (water)</b>	Miscible with water
<b>Oxidizing properties</b>	Not oxidizing.
<b>Pounds per gallon</b>	8.79

**10. Stability and reactivity**

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	No change in product performance (surface tension, spreading, pH) and physical integrity after accelerated storage testing of 2 weeks at 54 °C. Stable for greater than 1 year in an unopened container.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

**11. Toxicological information****Toxicological data**

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
2-Hydroxy-1,2,3-propanetricarboxylic acid (CAS 77-92-9)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Routes of exposure</b>	Inhalation. Eye contact.	

<b>Toxicological information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Acute toxicity</b>	Not known.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Causes eye irritation.
<b>Respiratory sensitizer</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

#### Carcinogenicity

##### ACGIH Carcinogens

Formaldehyde (CAS 50-00-0)

A2 Suspected human carcinogen.

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Formaldehyde (CAS 50-00-0)

1 Carcinogenic to humans.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.
<b>Symptoms</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

## 12. Ecological information

<b>Ecotoxicity</b>	Toxic to aquatic life.
<b>Environmental effects</b>	Toxic to aquatic organisms. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
<b>Persistence / degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>Bioaccumulation</b>	No data available.
<b>Aquatic toxicity</b>	Toxic to aquatic organisms.
<b>Mobility</b>	No data available for this product.
<b>Other adverse effects</b>	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

<b>Disposal methods</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	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

#### ADR

<b>UN number</b>	3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHOXYLATED ALCOHOLS)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Hazard No. (ADR)</b>	90
<b>Tunnel restriction code</b>	E
<b>Packing group</b>	III
<b>Environmental hazards</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### RID

<b>UN number</b>	3082
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**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHOXYLATED ALCOHOLS)

**Transport hazard class(es)**

**Class** 9

**Subsidiary risk** -

**Label(s)** 9

**Packing group** III

**Environmental hazards** Yes

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IATA**

**UN number** 3082

**UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (Ethoxylated Alcohols)

**Transport hazard class(es)**

**Class** 9

**Subsidiary risk** -

**Packing group** III

**Environmental hazards** No.

**ERG Code** 9L

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**UN number** 3082

**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethoxylated Alcohols), MARINE POLLUTANT

**Transport hazard class(es)**

**Class** 9

**Subsidiary risk** -

**Packing group** III

**Environmental hazards**

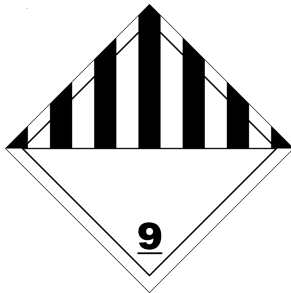
**Marine pollutant** Yes

**EmS** F-A, S-F

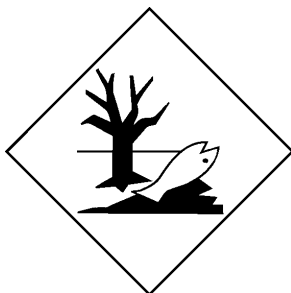
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

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

**ADR; IATA; IMDG; RID**



**Marine pollutant**



**General information**

IMDG Regulated Marine Pollutant.

## 15. Regulatory information

## 16. Other information

### Disclaimer

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