

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Novihum® Dispersa

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Soil conditioners, fertilization  
Recommended use : Fertilizers, Soil treatment  
Restrictions on use : None known

#### 1.3. Supplier

##### Supplier

Novihum Technologies, Inc.  
150 Main Street, Suite 130  
Salinas, CA 93901  
United States  
T 855.668.4486 (855.NOVIHUM)

#### 1.4. Emergency telephone number

Emergency number : US: Chemtrec 24-hours Emergency Response: 1-800-4249300  
Outside U.S. and Canada: 24-hour Emergency Response: +1 703-527-3887

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Signal word (GHS US) : Warning

#### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : May form combustible dust concentrations in air.

If the substance is packed in packages with a volume of more than 3 m<sup>3</sup>, the following label elements shall be used in accordance with under the 2012 OSHA Hazard Communication Standard regulation: H252 Self-heating in large quantities; may catch fire.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.  
First-aid measures after inhalation : Move to fresh air.  
First-aid measures after skin contact : Wash skin with plenty of water and soap.  
First-aid measures after eye contact : Rinse with plenty of water.  
First-aid measures after ingestion : Rinse mouth out with water. Drink plenty of water.

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### 4.2. Most important symptoms and effects (acute and delayed)

No additional information available

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Outside the closed silo: use water with wetting agent (only use spray), fire-extinguishing foam (medium foam only), fire extinguishers approved for use by lignite dust, cover with moist soil, sand or similar.

Unsuitable extinguishing media : Carbon dioxide (CO<sub>2</sub>).

### 5.2. Specific hazards arising from the chemical

Explosion hazard : Explosive dust-air mixtures may form.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not breathe gas/fumes.

Protection during firefighting : Wear a self contained breathing apparatus. Exposure controls / Personal protection equipment.

Other information : On combustion, forms: carbon oxides (CO and CO<sub>2</sub>). Dust may form flammable and explosive mixture with air.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : On combustion, forms: carbon oxides (CO and CO<sub>2</sub>).

#### 6.1.1. For non-emergency personnel

Protective equipment : Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust.

Emergency procedures : Avoid breathing mist or vapor.

#### 6.1.2. For emergency responders

Protective equipment : Avoid breathing dust/fume/gas/mist/vapors/spray. Personal protection equipment. Self-contained breathing apparatus.

### 6.2. Environmental precautions

No special environmental precautions required.

### 6.3. Methods and material for containment and cleaning up

For containment : Avoid creating or spreading dust.

Methods for cleaning up : Avoid dust formation. Pick up mechanically. Use only antistatically equipped (spark-free) tools.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Avoid creating or spreading dust. Dust may form flammable and explosive mixture with air.

Precautions for safe handling : Keep container tightly closed. Avoid generation of dust.

Hygiene measures : Wear personal protective equipment. Wash hands before breaks and after work. Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Do not store in quantities above 3 m<sup>3</sup>, to avoid risk of self-heating.

Storage conditions : Store in a cool dry place. Keep out of direct sunlight. Keep only in the original container in a cool, well-ventilated place away from highly flammable substances. Maintain air gap between stacks/pallets.

Incompatible products : combustible materials. Direct sunlight.

Incompatible materials : Flammable materials.

Maximal quantity : Store in packages with a maximum volume of 3 m<sup>3</sup>.

Storage temperature : ≤ 60 °C

Heat-ignition : Do not smoke while handling product. Keep away from open flames, hot surfaces and sources of ignition.

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Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Storage area : Store roofed, pack airtight and keep container closed.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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ACGIH	Local name	Starch
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
ACGIH	Remark (ACGIH)	TLV® Basis: Dermatitis. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (Total dust) 5 mg/m <sup>3</sup> (Respirable fraction)
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Exposures should be minimized in accordance with good industrial hygiene practices.

#### 8.3. Individual protection measures/Personal protective equipment

##### Materials for protective clothing:

Wear suitable working clothes

##### Hand protection:

Use loose-fitting rubber or leather gloves

##### Eye protection:

In case of dust production: protective goggles

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

Wear a respirator conforming to EN140 with Type A/P2 filter or better

##### Other information:

Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Fine granular mixture.
Color	: Black
Odor	: None known
Odor threshold	: No data available
pH	: 7 - 8 20 °C, DIN ISO 10390 :2005-12
Melting point	: not applicable
Freezing point	: not applicable
Boiling point	: not applicable
Critical temperature	: 260 °C Glow temperature (deposited state)
Flash point	: not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: not applicable Non flammable.
Vapor pressure	: not applicable
Relative vapor density at 20 °C	: No data available

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Relative density	: not applicable
Solubility	: Not applicable.
Log Pow	: No data available
Auto-ignition temperature	: 120 °C 266°F; do not store in quantities above 3m <sup>3</sup> to avoid risk of self-heating
Decomposition temperature	: no data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: 60 g/m <sup>3</sup> LEL: 2000 g/m <sup>3</sup>
Explosive properties	: Not explosive.
Oxidizing properties	: No data available.

### 9.2. Other information

Bulk density	: 0.7 - 0.8 kg/m <sup>3</sup>
Dust Explosion Class	: St 1

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions of use.

### 10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

### 10.3. Possibility of hazardous reactions

Not expected to present a significant hazard under anticipated conditions of normal use.

### 10.4. Conditions to avoid

Protect from moisture. Avoid generation of dust.

### 10.5. Incompatible materials

Flammable materials.

### 10.6. Hazardous decomposition products

None under normal conditions. During fire toxic gases (CO, CO<sub>2</sub>) are formed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

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### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

- Waste treatment methods : Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.
- Product/Packaging disposal recommendations : Avoid raising powdered materials into airborne dust.
- Additional information : Empty containers can be dumped after cleaning according to local legislation.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not considered dangerous goods in the sense of these transport regulations, if the product is transported in packages with a volume of 3 m<sup>3</sup> or less. If transported tonnage exceeds 3m<sup>3</sup>, UN number UN3088 Class 4.2 – Spontaneously combustible material 49 CFR 173.124 has to be followed.

### Transportation of Dangerous Goods

Not considered dangerous goods in the sense of these transport regulations, if the product is transported in packages with a volume of 3 m<sup>3</sup> or less. If transported tonnage exceeds 3m<sup>3</sup>, UN number UN3088 Class 4.2 – Spontaneously combustible material 49 CFR 173.124 has to be followed.

### Transport by sea

Not considered dangerous goods in the sense of these transport regulations, if the product is transported in packages with a volume of 3 m<sup>3</sup> or less. If transported tonnage exceeds 3m<sup>3</sup>, UN number UN3088 Class 4.2 – Spontaneously combustible material 49 CFR 173.124 has to be followed.

### Air transport

Not considered dangerous goods in the sense of these transport regulations, if the product is transported in packages with a volume of 3 m<sup>3</sup> or less. If transported tonnage exceeds 3m<sup>3</sup>, UN number UN3088 Class 4.2 – Spontaneously combustible material 49 CFR 173.124 has to be followed.

## SECTION 15: Regulatory information

### 15.1. US Federal regulations


All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

### 15.2. International regulations

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No data has been reported. In case of need contact our Product Safety office.

### 15.3. US State regulations

 WARNING: Cancer and Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## SECTION 16: Other information

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- Data sources : Supplier information.
- Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.
- Other information : Non further information available

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### Abbreviations and acronyms:

	CAS - Chemical Abstracts Service
	GHS - Globally Harmonised System
	HCS - Hazard Communication Standard
	HMIS - Hazardous Materials Identification System
	IARC (International Agency for Research on Cancer)
	NIOSH (National Institute for Occupational Safety and Health)
	OSHA - Occupational Safety and Health Administration
	Overland transport (ADR)
	TSCA - Toxic Substance Control
	UN - United Nations
	UN RTDG
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet

### NFPA health hazard

: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

### NFPA fire hazard

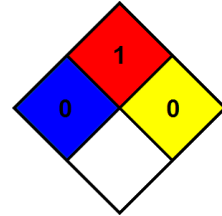
: 1 - Materials that must be preheated before ignition can occur.

### NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.

### NFPA specific hazard

: Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling



### Hazard Rating

#### Health

: 0 Minimal Hazard - No significant risk to health

#### Flammability

: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

#### Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

### SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*