

# SAFETY DATA SHEET

## IronGEL™ part B



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According to OSHA Hazard Communication Standard 29 CFR 1910.1200;

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Product Identifier

Trade Name: IronGEL part B  
Synonyms: DN-StabiGEL, DN-GEL, DN-stabilizer, DN-viscoGEL  
Product Form: Mixture

#### Recommended use of the chemical and restrictions on use

Recommended Use: Remediation of contaminated groundwater and soils.  
Restrictions on Use: No restriction

#### Details of the supplier and of the safety data sheet

Supplier: DeltaNova s.r.l.  
Corso Castelfidardo, 30/a  
10129 – Torino (TO)  
Tel: +39 338 2506692  
Email: [info@deltanova.it](mailto:info@deltanova.it)

Contact Person: Carlo Bianco  
Phone: +39 338 2506692  
Email: [carlo.bianco@deltanova.it](mailto:carlo.bianco@deltanova.it)

#### Emergency telephone number

For leak, fire, spill or accident emergencies, call:

+1-919-453-5577 (Tersus Office Hours, 8:00 AM to 5:00 PM Eastern)  
+1-800-424-9300 (Chemtrec 24 Hour Service – Emergency Only)  
+1-919-638-7892 Gary M. Birk (Outside office hours)

### 2. HAZARD IDENTIFICATION

#### Classification

Physical Hazards: Not classified.  
Health Hazards: Not classified.  
OSHA defined Hazards: Not classified.

#### GHS Label elements, including precautionary statements

Label elements

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**Hazard Symbol** None

**Signal Word** None.

**Hazard statement** The mixture does not meet the criteria for classification.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practice.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazards not otherwise classified (HNOC)**

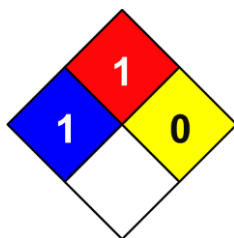
None known.

**Supplemental information**

This substance / mixture does not contain components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

NFPA Ratings (scale 0-4)

Health =1  
 Flammability =1  
 Reactivity =0



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Formula** Mixture

**Hazardous components**

Chemical Name	CAS Number	Concentration (wt. %)	GHS-US classification
Biodegradable carbohydrates	Proprietary	80-100	N/A
Water	7732-18-5	0-20	N/A

\*\* All concentrations are in percent by weight unless otherwise indicated. Components not listed are either non-hazardous or are below reportable limits.

### 4. FIRST AID MEASURES

**First-aid Measures**

**General** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves

**Eye Contact** Rinse with water or physiological solution. Get medical attention if irritation

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Skin Contact	develops and persists. The matter is not classified as dangerous for this contact pathway. However, it is advisable to remove soaked clothes, wash off with soap and water. Do not use solvents. Get medical attention if irritation develops and persists.
Inhalation	The matter is not classified as dangerous for this contact pathway. Move to fresh air. Call a physician if symptoms develop or persist.
Ingestion	Rinse mouth. Get medical attention if symptoms occur. Never induce vomiting and do not give anything by mouth if the person is unconscious or has difficulty breathing.
Most important Symptoms and Effects, both Acute and Delayed	Not expected to present a significant hazard under normal conditions of intended use.
Indication of any Immediate Medical Attention and Special Treatment Needed	Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable Extinguishing Media</b>	Chemical powders or sand (for small fires). None known.
<b>Special Hazard Arising From the Chemical</b>	Vapors can cause dizziness, fainting or choking.
<b><u>Advice for firefighters</u></b>	
<b>Firefighting instructions</b>	Move containers from fire area if you can do so without risk
<b>Protection during firefighting</b>	Gas mask with self-contained breathing apparatus. Complete equipment consisting of helmet with visor and neck protection, jacket and fireproof trousers with bands around the arms, legs and waist.
<b>General fire hazards</b>	This material will not burn until the water has evaporated. Contain and collect the extinguishing water for subsequent disposal. In case of fire, keep upwind and avoid being hit by fumes or vapors.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions, Protective Equipment, and Emergency Procedures</b>	Keep unnecessary personnel away. For personal protection, see Section 8 of the SDS
<b>Environmental Precautions</b>	Avoid discharge into drains, water courses or onto the ground. Water spray can be used to dilute the vapors.
<b>Methods for Containment and Clean Up</b>	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Following product recovery,

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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

### Precautions for Safe handling

- Avoid prolonged exposure. Observe good industrial hygiene practices
- Check the integrity of the containers before handling them.
- Handle containers with care.
- When carrying out operations with the material outdoors, operate upwind.
- Always avoid contact with skin and eyes, inhalation of vapors and fumes
- Once the containers have been emptied, they must be transferred without delay to the area identified for their collection, pending disposal or for reuse.
- Never reuse empty containers before they have undergone industrial cleaning or reprocessing.
- Before carrying out transfer operations into other containers, make sure that there are no residues of incompatible substances inside them.
- Do not smoke in work and storage areas.
- Food and drinks must only be consumed in the areas specifically identified after removing contaminated clothing and protective equipment and after washing hands. In any case, wash hands after handling the substance.
- Store in original tightly closed container.
- Protect containers from damage, knocks and falls.
- Properly ventilate the storage area so that any leaking vapors from the containers can be diluted.
- Store in a well-ventilated, dry and cool place. Store away from incompatible materials, such as strong oxidizing agents. (see Section 10 of the SDS).

### Conditions for Safe Storage, including any Incompatibilities

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

### Control parameters

Biodegradable carbohydrates			
USA OSHA	TWA	15 mg/m <sup>3</sup>	29 CFR 1910.1000 Table Z-1 Limits for Air Contaminants
US (ACGIH)	TWA	15 mg/m <sup>3</sup>	ACGIH Threshold Limit Value

### Exposure Control

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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. Do not allow uncontrolled discharge of product into the environment.
Personal protective equipment	Gloves. Safety glasses. Protective clothing. 
Biological Limit	No biological exposure limits noted for the ingredient(s).
Hand protection	Wear appropriate chemical resistant gloves. Nitrile rubber gloves (thickness 0.11 mm, breakthrough time > 6 hours) - Tested material: KCL 741 Dermatril® L.
Eye protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wear suitable protective clothing. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment
Environmental exposure controls	Ensure adequate ventilation, especially in confined areas.
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

### Information on basic physical and chemical properties

Physical state	Liquid – Gel
Appearance	Viscous gel or paste
Molecular mass	Not available.
Color	Creamy white – beige
Odor	Odorless
Odor threshold	Not available.
pH	5.5 - 8
Relative evaporation rate (butylacetate=1)	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	Not available.
Self-ignition temperature	Not flammable
Decomposition temperature	Not available.
Flammability (solid, gas)	Not flammable

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Vapor pressure	Not available.
Relative vapor density at 20 °C	Not available.
Relative density	Not available.
Density	Not available.
Bulk Density	Not available.
Solubility	Not available.
Log Pow	Not available.
Log Kow	Not available.
Viscosity	Not available.
Explosive properties	Not explosive
Oxidizing properties	No oxidizing properties
Explosive limits	Not available.

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	<ul style="list-style-type: none"> <li>The product is stable and non-reactive under normal conditions of use, storage, and transport</li> </ul>
<b>Chemical Stability</b>	<ul style="list-style-type: none"> <li>Hygroscopic</li> </ul>
<b>Possibility of Hazardous Reactions</b>	<ul style="list-style-type: none"> <li>Stable under normal conditions</li> <li>None</li> </ul>
<b>Conditions to Avoid</b>	<ul style="list-style-type: none"> <li>Exposition to heat.</li> </ul>
<b>Incompatible Materials</b>	<ul style="list-style-type: none"> <li>Strong oxidizing agents.</li> </ul>
<b>Hazardous Decomposition Products</b>	<ul style="list-style-type: none"> <li>Low toxicity in original state and not considered hazardous to human beings. On heating/burning it can cause toxic and / or irritating fumes and substances such as carbon oxides, aldehydes, ketones and alcohols.</li> </ul>

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

Not expected to be acutely toxic

Ingredient	Oral LD50, mg/L	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Biodegradable carbohydrates	Oral - Species: Rat = 27200 mg/kg	Species: Rat > 10000 mg/kg	No data available	No data available	No data available

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation
Serious eye damage/irritation	Direct contact with eyes may cause temporary irritation
Respiratory or skin sensitization	Not a respiratory sensitizer. 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.
Reproductive toxicity	This product is not expected to cause reproductive or developmental

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	effects.
Specific target organ toxicity (single exposure)	Not classified.
Specific target organ toxicity (repeated exposure)	Not classified

Additional information: Not an aspiration hazard. The pathways of potential exposure are: inhalation, skin contact and ingestion.

## 12. ECOLOGICAL INFORMATION

### Aquatic 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.

### Ingredient

**Fish CL50,  
mg/L**

Biodegradable carbohydrates

> 54000 mg/l - Duration (h): 96

Persistence and degradability	No data is available on the degradability of this product
Bioaccumulative potential	The information for the components of the mixture is either not available or is not significantly relevant in relation to the hazard of the product.
Mobility in soil	The information for the components of the mixture is either not available or is not significantly relevant in relation to the hazard of the product.
Other adverse effects	The information for the components of the mixture is either not available or is not significantly relevant in relation to the hazard of the product.

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal Instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Disposal via the wastewater drain or discharge into surface water is not permitted. Waste is suitable for incineration.
<b>Local Disposal Regulations</b>	Dispose in accordance with all applicable regulations
<b>Hazardous Waste Code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<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). Take up liquid spill into absorbent material, e.g.: sand, earth, or powdered limestone. Scoop absorbed substance into closing containers. Wash down leftovers with plenty of water. Wash clothing and equipment after handling.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue. Take up liquid spill into absorbent material and wash down leftovers with

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plenty of water. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORTATION INFORMATION

### DOT

Not classified as dangerous in the meaning of transport regulations.

### IATA

Not classified as dangerous in the meaning of transport regulations.

### IMDG

Not classified as dangerous in the meaning of transport regulations.

### Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not Applicable.

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### **TSCA - Toxic Substances Control Act**

Not regulated.

### **CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**

This material does not contain any components with a CERCLA RQ.

### **SARA 304 Emergency release notification**

Not regulated.

### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

No listed.

### **SARA Superfund Amendments and Reauthorization Act.**

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard Categories**

#### **SARA 302 Extremely hazardous substance**

Not listed

#### **SARA 311/312 Hazardous**

Not listed

#### **SARA 313 (TRI reporting)**

Not regulated.

### Other Federal Regulations

#### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) Lis**

Not regulated.

#### **Clean Water Act (CWA) Section 112(r) Accidental Release Prevention (40 CFT 68.130)**

Not regulated.

#### **Safe Drinking Water Act (SDWA)**

Not regulated.

### **US. California Proposition 65**

#### **California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):**



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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](http://www.P65Warnings.ca.gov).

## 16. OTHER INFORMATION

**Disclaimer:** The information contained in this Safety Data Sheet (SDS), as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions are made without warranty, express or implied, or guarantee. Tersus Environmental, LLC urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. Since we cannot control the application, use or processing of the product, we do not accept responsibility. Therefore, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product and assure that the intended use of the product will not infringe in any party's intellectual property right. The information presented here pertains only to the product as shipped.

All recommendations for the use of our products, whether given by us, orally or to be implied from data or lab tests results by us, are based on the current state of our knowledge at the time those recommendations are made. When additional information is obtained, these recommendations may be updated. They may also be influenced by circumstances outside our control. Notwithstanding, such recommendation the user is responsible that the product as supplied by us is suitable to the process or purpose he/she intends to use it.

Due to the proliferation of sources for information such as manufacturer specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.