SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: **DIFGEL HD 2.0**

Type of product: Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Monomer for polymerization.

Uses advised against: All non-monomeric uses and all uses resulting in aerosols.

1.3. Details of the supplier of the safety data sheet

Company: Concrete Gel Injections Texas, Inc.
4600 Greenville Ave, Suite 288
Dallas, Texas 75206

1.4. Emergency telephone number

24-hour emergency number

National Poison Information Service:

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 1999/45/EC: Not classified.

2.2. Label elements

Symbol(s): None.

Indication of danger: None.

Risk phrase(s): None.

Safety phrase(s): None.

Additional elements: None.

2.3. Other hazards

PBT and vPvB assessment: Does not fulfil the criteria according to Annex XIII of REACH.

SECTION 3. Composition/information on ingredients

3.1 Substances
This product is not a substance.

3.2 Mixtures
This product is a mixture.

Hazardous components

Polyethylene glycol diacrylate

Concentration/ -range:	<20%
EC-No.:	Polymer
REACH Registration Number:	Not applicable (polymer).
Classification according to Directive 67/548/EEC:	Xi;R36
Classification according to Regulation (EC) No.1272/2008:	Eye Irrit. 2;H319

N,N'-methylenediacrylamide

Concentration/ -range:	< 5%
EC-No.:	203-750-9
Classification according to Directive 67/548/EEC:	Xn;R20/22
Classification according to Regulation (EC) No.1272/2008:	Acute Tox. 4;H302, Acute Tox. 4;H332

For explanation of abbreviations see section 16

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:
No hazards which require special first aid measures. Call a physician if symptoms occur.

Skin contact:
Wash off with soap and water.

Eye contact:
If in eyes, rinse with water for 15 minutes. Call a physician if irritation persists

Ingestion:
DO NOT induce vomiting unless directed to do so by a physician or poison control centre. Get medical attention immediately if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed

May cause eye irritation with susceptible persons.

4.3. Indication of any immediate medical attention and special treatment needed.

None.

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:
None.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products:
Thermal decomposition may produce: nitrogen oxides (NOx), carbon oxides (COx).

5.3. Advice for fire-fighters

Protective measures:
Wear full protective clothing and self-contained breathing apparatus.

Other information:
None.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:
Avoid contact with eyes.

Protective equipment:
Safety glasses with side-shields.

Emergency procedures:
Keep people away from spill/leak.

6.2. Environmental precautions

Do not allow contact with soil, surface or ground water.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Prevent further leakage or spillage.

Small spills:
Soak up with inert absorbent material.

Large spills:
Do not flush with water.

Residues:
After cleaning, flush away traces with water.

6.4. Reference to other sections

Section 7 - Handling and Storage, Section 8 - Exposure Controls/ Presonal Protection, Section 13 - Disposal considerations.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities.

Keep in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Monomer for polymerisation.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

National occupational exposure limits:
None.

Derived No and Minimum Effect Levels (DNELs/DMELs)
None.

Predicted no-effect concentrations (PNECs)
None.

8.2. Exposure controls

Appropriate engineering controls:
Not required except in case of aerosol formation.

Individual protection measures, such as personal protective equipment:
a) Eye/face protection: Safety glasses with side-shields.
b) Skin protection: Full protective suit.
i) Hand protection: PVC or other plastic material gloves.
c) Respiratory protection: Not required; except in case of aerosol formation.

d) Additional advice: Wash hands after handling. Wash hands before breaks and at the end of workday.

Environmental exposure controls:

Do not allow contact with soil, surface or ground water.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance: Liquid.
b) Odour: Slight.
c) Odour Threshold: Not applicable.
d) pH: 6 - 8

e) Melting point/freezing point:	< 0°C
f) Initial boiling point and boiling range:	> 100°C
g) Flash point:	Does not flash.
h) Evaporation rate:	No data available.
i) Flammability (solid, gas):	Not applicable.
j) Upper/lower flammability or explosive limits:	Not expected to create explosive atmospheres.
k) Vapour pressure: 2.3 kPa @ 20°C	
l) Vapour density:	Equivalent to water (~0.8 g/l).
m) Relative density:	1.1 - 1.3
n) Solubility(ies):	Completely miscible.
o) Partition coefficient:	No data available.
p) Autoignition temperature:	No data available.
q) Decomposition temperature:	No data available.
r) Viscosity:	See Technical Bulletin.
s) Explosive properties:	Not expected to be explosive based on the chemical structure.
t) Oxidizing properties:	Not expected to be oxidising based on the chemical structure.

9.2. Other information

None.

SECTION 10. Stability and reactivity

10.1. Reactivity
Stable under recommended storage conditions. Polymerization is initiated by: free radicals, peroxides.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.4. Conditions to avoid
Incompatible with strong acids and bases. Incompatible with oxidizing agents.

10.5. Incompatible materials
Incompatible with strong acids and bases. Incompatible with oxidizing agents.

10.6. Hazardous decomposition products
Thermal decomposition may produce: nitrogen oxides (NOx), carbon oxides (COx).

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Information on the product as supplied:

Acute oral toxicity:	LD50/oral/rat > 2000 mg/kg (Estimated)
Acute dermal toxicity:	LD50/dermal/rat > 2000 mg/kg (Estimated)
Acute inhalation toxicity:	The product is not expected to be toxic by inhalation.
Skin corrosion/irritation:	Not irritating
Serious eye damage/eye irritation:	May cause slight eye irritation.
Respiratory/skin sensitisation:	The product is not expected to be sensitizing.
Mutagenicity:	Not mutagenic.
Carcinogenicity:	Not carcinogenic.
Reproductive toxicity:	Not toxic for reproduction.
STOT - single exposure:	No known effects.
STOT - repeated exposure:	No known effects.
Aspiration hazard:	No hazards resulting from the material as supplied.

Relevant information on hazardous components:

Polyethylene glycol diacrylate

Acute oral toxicity:	No data available.
Acute dermal toxicity:	No data available.
Acute inhalation toxicity:	No data available.
Skin corrosion/irritation:	Not irritating (OECD 404).
Serious eye damage/eye irritation:	Severely irritating to eyes.
Respiratory/skin sensitisation:	No data available.
Mutagenicity:	No data available.
Carcinogenicity:	No data available.
Reproductive toxicity:	No data available.
STOT - single exposure:	No data available.
STOT - repeated exposure:	No data available.
Aspiration hazard:	No known effects.

N,N'-methylenediacrylamide

Acute oral toxicity:	LD50/oral/rat = 390 mg/kg
Acute dermal toxicity:	No data available.
Acute inhalation toxicity:	Harmful by inhalation.
Skin corrosion/irritation:	No data available.
Serious eye damage/eye irritation:	No data available.
Respiratory/skin sensitisation:	No data available.
Mutagenicity:	No data available.
Carcinogenicity:	No data available.
Reproductive toxicity:	No data available.
STOT - single exposure:	No data available.
STOT - repeated exposure:	No data available.
Aspiration hazard:	No known effects

SECTION 12. Ecological information

12.1. Toxicity

Information on the product as supplied:

Acute toxicity to fish:	LC50/Fish/96 hours > 100 mg/L (Estimated)
Acute toxicity to invertebrates:	EC50/Daphnia/48 hours > 100 mg/L (Estimated)
Acute toxicity to algae:	IC50/Algae/72 hours > 100 mg/L (Estimated)
Chronic toxicity to fish:	No data available.
Chronic toxicity to invertebrates:	No data available.
Toxicity to microorganisms:	No data available.
Effects on terrestrial organisms:	No data available.
Sediment toxicity:	No data available.

Relevant information on the hazardous components:

Polyethylene glycol diacrylate

Acute toxicity to fish:	No data available.
Acute toxicity to invertebrates:	No data available.
Acute toxicity to algae:	No data available.
Chronic toxicity to fish:	No data available.
Chronic toxicity to invertebrates:	No data available.
Toxicity to microorganisms:	No data available.
Effects on terrestrial organisms:	No data available.
Sediment toxicity:	Exposure to sediment is unlikely.

N,N'-methylenediacrylamide

Acute toxicity to fish:	LC50/Oncorhynchus mykiss/96 hours = 240 mg/L
Acute toxicity to invertebrates:	No data available.
Acute toxicity to algae:	No data available.
Chronic toxicity to fish:	No data available.
Chronic toxicity to invertebrates:	No data available.
Toxicity to microorganisms:	No data available.
Effects on terrestrial organisms:	No data available.
Sediment toxicity:	No data available.

12.2. Persistence and degradability

Information on the product as supplied:

Degradation:	No data available.
Hydrolysis:	No data available.
Photolysis:	No data available.

Relevant information on the hazardous components:

Polyethylene glycol diacrylate

Degradation:	No data available.
Hydrolysis:	No data available.
Photolysis:	No data available.

N,N'-methylenediacrylamide
Degradation: No data available.
Hydrolysis: No data available.
Photolysis: No data available.

12.3. Bioaccumulative potential

Information on the product as supplied:
Partition co-efficient (Log Pow): No data available.
Bioconcentration factor (BCF): No data available.

Relevant information on the hazardous components:

Polyethylene glycol diacrylate
Partition co-efficient (Log Pow): No data available.
Bioconcentration factor (BCF): No data available.

N,N'-methylenediacrylamide
Partition co-efficient (Log Pow): No data available.
Bioconcentration factor (BCF): No data available.

12.4. Mobility in soil

Information on the product as supplied:
Exposure to soil is not to be expected.
Koc: No data available.

Relevant information on the hazardous components:

Polyethylene glycol diacrylate
Koc: No data available.

N,N'-methylenediacrylamide
Koc: No data available.

12.5. Results of PBT and vPvB assessment

PBT assessment:
Does not fulfill the criteria according to Annex XIII of REACH.

vPvB assessment:
Does not fulfill the criteria according to Annex XIII of REACH.

12.6. Other adverse effects

None known.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products:
Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging:
Dispose of in accordance with local regulations.

Recycling:
If recycling is not practicable, dispose of in compliance with local regulations.

SECTION 14. Transport information

Land transport (ADR/RID)
Not classified.

Sea transport (IMDG)
Not classified.

Air transport (IATA)
Not classified.

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
All components of this product have been registered or pre-registered with the European Chemicals Agency or are exempt from registration.

15.2. Chemical safety assessment
A Chemical Safety Assessment for this product has been carried out by the person responsible for producing this Safety
Data Sheet. All relevant information used to conduct this assessment are included in this Safety Data Sheet as well any
as any resulting Risk Reduction Measures.

SECTION 16. Other information

This data sheet contains changes from the previous version in section(s):

SECTION 1. Identification of the substance/mixture and of the company/undertaking, SECTION 2. Hazards identification, SECTION 3. Composition/information on ingredients, SECTION 4. First aid measures, SECTION 5. Fire-fighting measures, SECTION 6. Accidental release measures, SECTION 7. Handling and storage, SECTION 8. Exposure controls/personal protection, SECTION 9. Physical and chemical properties, SECTION 10. Stability and reactivity, SECTION 11. Toxicological information, SECTION 12. Ecological information, SECTION 13. Disposal considerations, SECTION 14. Transport information, SECTION 15. Regulatory information, SECTION 16. Other Information.

Key or legend to abbreviations and acronyms used in the safety data sheet:

Abbreviations
Xi - Irritant
Xn - Harmful

Acute Tox. 4 = Acute toxicity Category Code 4
Eye Irrit. 2 = Serious eye damage/eye irritation Category Code 2

R-Phrases
R36 - Irritating to eyes
R20/22 - Harmful by inhalation and if swallowed

H-Phrases
H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H332 - Harmful if inhaled

Training advice:
Do not handle until all safety precautions have been read and understood

This MSDS was prepared in accordance with the following:
Regulation (EU) No. 453/2010
Regulation (EC) No. 1907/2006
Regulation (EC) No. 1272/2008

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the
date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,
transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The data in this Material Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

ANNEX(ES)

This product is not hazardous as supplied and does not contain:

- hazardous components which require REACH registration; or,
- demonstrate relevant effects which would require a chemical safety assessment; or,
- are present at concentrations above their cut-off value.

Therefore, according to Regulation (EC) No 1907/2006, Article 31, paragraph 7, an Exposure Scenario is not required as an annex to the Safety Data Sheet.