SAFETY DATA SHEET
In accordance with UN GHS (9th rev.)

SECTION 01: Identification of the substance/mixture and of the company

1.1 Product identifier
Product Name — UTF Gel (Imagel)

Other means of identification
Product Number — UC-7355; R03-GEL1

1.2 Recommended use of the chemical and restrictions on use
Product Uses — Sound conducting gel
Uses advised against — Not known

1.3 Supplier's details

Tessonics Inc.
597 Ouellette Avenue
Windsor, Ontario
Canada, N9A 4J3
Tel.: +1-866-440-3313
Fax: +1-519-250-5747

1.4 Emergency phone number
In case of chemical emergency, fire, or exposure, calls Tessonics at +1-866-440-3313 (Mon-Fri 09:00-17:00 EST) or your regional Poison Information Service:

China +86 10 831 32 046 / +86 10 660 981 14
China, Hong Kong +852 2772 2211
India 1800 116 117 / +91 112 659 36 77
Japan +81 72 727 2499/+81 29 852 9999
Taiwan 866-2-28757525
Thailand +66 2 419 7007

SECTION 02: Hazards Identification

2.1 GHS Classification of the substance/mixture and any national or regional information
Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

2.2 GHS Label elements

2.3 Other hazards. None.

SECTION 03: Composition /Information on ingredients

3.1 Substances — Mixture. See 3.2.

3.2 Mixtures

Chemical Name:	Identifiers	Classification GHS	Wt/Wt %
Glycerol, USP Kosher Synonyms: Glycerin, 1,2,3-propanetriol, 甘油	CAS # 56-81-5 EC # 200-289-5	Not classified.	60-65

Other components: Components not listed here are not hazardous.

SECTION 04: First-Aid Measures

4.1 Description of necessary measures

After inhalation	Move to fresh air. When symptoms persist, seek medical advice.
After skin contact	Wash with water and soap and rinse thoroughly.
After eye contact	Rinse for several minutes under running water. If wearing contact lenses, remove them. If symptoms persist, consult a doctor.
After ingestion	Remove material from mouth. Drink plenty of water. Do NOT induce vomiting.

4.2 Most important symptoms/ effects, both acute and delayed

Skin	May cause mild irritation for sensitive skin.
Eyes	May cause mild eye irritation. Symptoms may include tearing, redness, and stinging sensation.
Ingestion	Nausea, vomiting, diarrhea. Unlikely to be harmful unless excessive amount.
Long Term Exposure.	None.

4.3 Indication of immediate medical attention and special treatment needed.

The protection of first-aiders	Use personal protective equipment.

Note to physicians.	Treat symptomatically.

SECTION 05: Fire-fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media	Water, foam, CO_2 or dry powder.
Unsuitable extinguishing media	Not known.
Special protective equipment	Wear self-containing breathing apparatus and protective clothing if necessary.

5.2 Specific hazards arising from the chemical

Special Risks	Decomposes when temperature rises. Upon combustion CO and CO_2 and dense smoke are formed.

5.3 Special protective equipment and precautions for fire-fighters

Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident.
Special protective equipment for firefighters	Wear appropriate protective equipment and self-contained breathing apparatus (SCBA).

SECTION 06: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Wipe up with absorbent material (e.g. cloth, fleece). Ventilate spillage area. Keep away from sources of ignition - No smoking.
For emergency responders	Do not attempt to take action without suitable protective equipment.

6.2 Environmental Precautions

Minimize contamination of drains, surface or ground waters. Dilute with water.

6.3 Methods and materials for containment and cleaning up

Absorb spillage onto inert material (e.g. sand or vermiculite). Transfer product to suitably labeled containers for disposal at approved cites. Residues and small spillages may be washed with water and detergent.

For hazardous combustion products: see section 5.
For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.

SECTION 07: Handling and Storage

7.1 Precaution for safe handling

Maintain general industrial hygiene practices. Avoid contact with eyes. Wear eye protection and gloves (nitrile, latex/rubber, butyl, or neoprene) when handling material. See Section 8 for Individual protective measures.

7.2 Conditions for safe storage, including any incompatibilities

Conditions for safe storage	Store in a cool, dry area away from sources of heat, moisture, and incompatible substances. Keep container tightly closed.
Incompatible substances and mixtures	Strong oxidizing agents such as strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate.

SECTION 08: Exposure Controls/ Personal Protection

8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Occupational exposure limit values (workplace exposure limits), Glycerol (56-81-5)

Country. Organization	Type	OEL value, mg/m^3	Form
USA/Canada. American Conference of Governmental Industrial Hygienists (ACGIH)/ Occupational Safety and Health Administration (OSHA). Occupational exposure limits	TWA	15	Mist
Korea	TWA	10	Mist
South Korea	TWA	10	Mist
China	TWA	Not available.	
Taiwan	TWA	Not available.	
Singapore	PEL	10	

Relevant DNEL/ PNEC values

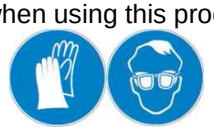
Relevant DNELs (glycerol)				
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	56 mg/m³	human, inhalatory	worker (industry)	chronic - local effects

Environmental values (glycerol)

Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	0.885 mg/l	aquatic organisms	freshwater	short-term (single instance
PNEC	0.0885 mg/l	aquatic organisms	marine water	short-term (single instance
PNEC	1,000 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance
PNEC	3.3 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance
PNEC	0.33 mg/kg	aquatic organisms	marine sediment	short-term (single instance
PNEC	0.141 mg/kg	terrestrial organisms	soil	short-term (single instance
PNEC	8.85 mg/l	aquatic organisms	water	continuous

8.2 Appropriate engineering controls
Adequate ventilation should be provided.

8.3. Individual protective measures
Maintain general industrial hygiene practices when using this product. Gloves. Safety Glasses.



Eye/face protection	Safety glasses are recommended.
Skin protection	Handle with gloves (nitrile, latex/rubber, PVC, butyl, material thickness >0.11 mm). Chemical protection gloves are suitable, which are tested according to EN 374.
Other protective measures	Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.
Respiratory protection	In case of inadequate ventilation wear suitable respiratory protection.

8.3 Control of environmental exposure
Do not let product enter drains.

SECTION 09: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical State	Gel
Color	Clear or light yellow
Odor	Odorless
Odor threshold	No data available.
Other safety parameters	
pH	5.5-7
Freezing/melting point	Not available.
Boiling point	111.3ºC
Flash point	>160°C (320ºF) (glycerin) PMCC
Evaporation rate	No data available.
Flammability	Non-flammable.
Auto ignition temperature	370°C (698ºF) (glycerin)
Decomposition temperature	Not available.
Explosive limits	
Lower explosion limit (LEL)	No data available.
Upper explosion limit (UEL)	No data available.
Vapour pressure	553 mm Hg at 100ºC.
Vapour density	Not available.
Specific density	1.16 at 25ºC
Solubility	water soluble chloroform insoluble
Partition coefficient	Not available.
Viscosity	Not available.

9.2 Other information

VOC content	<0.5% (5.5g/L)

SECTION 10: Stability and Reactivity

10.1 Reactivity
The product is non-reactive under normal conditions.

10.2 Chemical stability
Stable under normal operational procedures.

10.3 Possibility to hazardous reactions
React with: Strong oxidiser. Peroxides. Nitric acid and nitrous acid.

10.4 Conditions to Avoid
Excessive heat. Strong acids, bases, strong oxidizing agents (chromium trioxide, or potassium permanganate).

10.5 Incompatible materials
Strong oxidizers.

10.6 Hazardous decomposition products

Carbon monoxide, dense smoke. Hazardous combustion products: see section 5.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Information on the likely routes of exposure

Ingestion	Unlikely to be harmful unless excessive amount.
Skin contact	May cause skin irritation on sensitive skin
Eye contact	May irritate eyes

Symptoms related to the physical, chemical and toxicological characterization

Skin	May cause mild irritation for sensitive skin.
Eyes	May cause mild eye irritation. Symptoms may include tearing, redness, swelling, and stinging sensation.
Ingestion	Nausea, vomiting, diarrhea if ingested in large quantities.
Long Term Exposure.	None.
Over-exposure signs/symptoms	No data available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Acute toxicity	Not classified.
Skin irritation	May cause mild skin irritation on sensitive skin.
Eye damage	May irritate eyes.
Ingestion	If a large quantity has been ingested, may cause nausea and diarrhea.
Reproductive cell mutagenicity	No data available.
Reproductive toxicity	
Specific target organ toxicity.	No data available.
Carcinogenicity	No data available
Long term and Chronic effect	The components are not listed as carcinogens by the IARC, NTP.
	Negative (sensitization test, guinea pig)

Numerical measures of toxicity (glycerol, 56-81-5)

Acute oral toxicity:	LD_{50}>27200 mg/kg, rat
Acute dermal toxicity:	LD_{50}>56750 mg/kg, rabbit
Skin irritation, rabbit:	500 mg/24 hrs No effect
Eye irritation, rabbit:	126 mg, mild irritation 24h

Additional toxicological information: If used and handled according to specifications, the product does not have any harmful effects according to the information provided to us.

SECTION 12: Ecological Information

12.1 Toxicity
No ecological problems to be expected when the product is handled and used with due care and attention.
Aquatic toxicity Mild water pollutant (surface water).

Harmful effect for aquatic organisms	WGK water hazard class – VwVwS: WGK 1 - low hazard to water Not harmful for fish, aquatic organisms, algae, bacteria (EC_{50} >1000mg/L).
Ecotoxicity data (glycerol, 56-81-5):	
Oncorhynchhus mykiss (Rainbow trout)	96 hrs LC_{50} =51000-57000 mg/L
Daphnia magna	24hrs EC_{50} >10000 mg/L
12.2 Persistence and degradability	Readily biodegradable. OECD 301D: 82%; 20 days.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.6 Other adverse effects	Not known.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Dispose in accordance with applicable local, state, and federal regulations. Do not dispose via drains. Small quantities can be disposed of with solid waste.

13.2 Contaminated packaging

Disposal in compliance with local official regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

13.3 Recommended cleansing agent

Water, if necessary with cleansing agents.

13.4 Disposal method/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local, regional, national, international regulations.

SECTION 14: Transportation Information

14.1 UN number.	Not dangerous goods.
14.2 UN proper shipping name.	Not relevant.
14.3 Transport hazard class.	Not dangerous goods.
14.4 Packing group.	Not dangerous goods.
14.5 Environmental hazards.	None (DOT, ADR, ADN, IMDG, IATA).
14.7 Transport in bulk.	Not intended to be carried in bulk.
14.6 Special precautions for user	None.

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations

Relevant provisions of the United States:

TSCA

Section 8(b). Glycerol is listed.
Section 12(b) Export Notification (40 CFR 707, Subpt. D). Not listed.
Health & Safety Reporting List / TSCA Significant New Use Rule Not listed.
US OSHA (29 CFR 1910.1001-1050). Not on regulatory list.
Clean Air Act (CAA) Section 112

Chemical name	CAS#	HAPs data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Glycerin	56-81-5	-	SCAQMD M 313 Volatile* ASTM E1868 Non-Volatile* U.S. EPA M24 Semi-Volatile* EPA, CARB & OTC Non-Volatile* Green Seal Non-Volatile*	-	-

*Uyên-Uyên T. Võ, Michael P. Morris Non-Volatile, Semi-Volatile, or Volatile: Redefining Volatile for Volatile Organic Compounds, South Coast Air Quality Management District, http://www.aqmd.gov

Clean Water Act 40 CFR 122.21 and 40 CFR 122.42. Not regulated.
SARA
CERCLA Not on regulatory list under CERCLA (40 CFR 302) or the Superfund SARA (40 CFR 355).
SARA 313 Act and Title 40 of the Code of Federal Regulations, Part 372. Not regulated.
SARA 311/312 Hazard Categories. Immediate Health Hazard (glycerol).
State Regulations
Glycerol can be found on the Pennsylvania, Minnesota, and Massachusetts right to know lists.

Relevant provisions of Canada:
HMIS/NFPA: Health -1, Flammability – 1, Reactivity – 0
Hazardous Product Act. Not controlled substance.
Domestic Substances List. Listed (Glycerol).
Ingredient Disclosure List. Not listed.

Relevant provisions of Taiwan:
TCSI inventory. Glycerol (56-81-5). Listed.
Toxic Chemical Substance List. Not listed.

Relevant provisions of Korea:
Korea Existing Chemicals Inventory (KECI). Glycerol. Listed.

Relevant provisions of China:
Inventory of Existing Chemical Substances in China (IECSC). Glycerin. Listed.
Catalog of Hazardous Chemicals (2015). Glycerol. Not listed.

Relevant provisions of Japan:
List of Existing and New Chemical Substances (CSCL-ENCS). Glycerol. Listed.

International Inventories
TSCA, EINECS/ELINCS, ENCS, IECSC, PICCS, AICS. Listed

15.2 Chemical Safety Assessment
No Chemical Safety Assessment has been carried out by the supplier for this mixture.

SECTION 16: Other Information

Date of issue: April 16, 2009.

Date of revision: September 20, 2024

Reason for revision: Comply with GHS (9th editition)

Prepared by Tessonics Inc.

Key literature references and sources for data
Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

The submission of the MSDS may be required by law but this is not an assertion that the product is hazardous when used in accordance with proper safety practice and normal handling procedures. Data supplied are for use only in connection with occupational safety and health.
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. This information should not constitute a guarantee for any specific product properties. Tessonics Corporation assumes no responsibility for injury to the recipient or third person or for any damage to any property resulting from misuse of the product.

End of the SDS