

SAFETY DATA SHEET
01 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
Product identifier

Product Name UTF Gel (Imagel)
 Product Number UC-7355; R03-GEL1

Recommended use of the product and restrictions on use

Product Uses Sound conducting gel
 Restrictions on use Not known

Supplier's details

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

Europe: Tessonics Poland SP. Z. O.O.
 Zatorska 78/7 51-215,
 Wroclaw, Poland
 tel: +0048603518150
 email: mk@tessonics.com

Emergency telephone number

In case of chemical emergency, spill, fire, or exposure, calls Tessonics at+1-866-440-3313 or your regional Poison Information Service.

02 HAZARD(S) IDENTIFICATION
Classification of the substance or mixture

Directive 1999/45/EC and Directive 67/548/EEC and Regulation (EC) No 1272/2008 (CPL). Not classified.
 GHS (Parts 2, 3, and 4). Not classified.

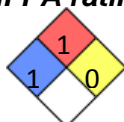
GHS Label Elements

Label according to Regulation (EC) No. 1272/2008, 67/548/EEC or 1999/45/EC. Not required.

Pictogram, hazard statement, and precautionary statement are not required for this product according to GHS classification (refer to Sections 11 and 12 for toxicity data). However, manufacturer voluntary places the following warning statements on the label to ensure customer safety.

GHS: Hazard pictograms: Not required.
Signal word: WARNING.
Hazard statement: H303 May be harmful if swallowed.
 H316+H320 May cause mild skin and eye irritation.
Precautionary statements: P280: Wear protective gloves/eye protection.
 P301 IF SWALLOWED: Rinse mouth. Drink plenty of water. Do NOT induce vomiting.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P305+ P351 IF IN EYES: Rinse cautiously with water for several minutes.

NFPA ratings (scale 0-4) Health = 1
 Flammability = 1
 Reactivity = 0



HMIS rating (scale 0-4)

HEALTH	1
FIRE	1
REACTIVITY	0

Health = 1
 Fire = 1
 Reactivity = 0

Other hazards

The components are not identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

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03 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization Mixture.

Dangerous components

Ingredients:	Identifiers	GHS classification	Wt/Wt %
Glycerol, USP Kosher Synonyms: Glycerin, 1,2,3-propanetriol, 1,2,3-trihydroxopropan	CAS # 56-81-5 EC # 200-289-5	Not classified	60-65
Modified Starch	CAS # 9005-25-8	Not classified	<5

Other components:

Components not listed here are not hazardous or their concentrations do not exceed the limits specified in the OSHA Hazard Communication Standard 29 CFR 1910.1200.

04 FIRST-AID MEASURES

Description of necessary first aid measures

Inhalation	Move to fresh air. Seek medical treatment in case of complaints
Skin contact	Wash with water and soap and rinse thoroughly.
Eye contact	Rinse eye for several minutes under running water. If symptoms persist, consult a doctor.
Ingestion	Remove material from mouth. Drink plenty of water. Do NOT induce vomiting. Call a doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed

Skin	May cause mild irritation for sensitive skin.
Eyes	May cause mild eye irritation. Symptoms may include tearing, redness, swelling, and stinging sensation.
Inhalation	Not applicable at ambient temperature.
Ingestion	Nausea, vomiting, diarrhea. Unlikely to be harmful unless excessive amount.
Long Term Exposure.	None.
Cancer Information	This product is not listed as a carcinogen by the International Agency for Research on cancer, the National Toxicology Program, or the occupational Safety and health Administration.

Indication of any immediate medical attention and special treatment needed

No information available.

05 FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media	Water, foam, CO2 or dry chemical.
Unsuitable extinguishing media	Not known.
Special protective equipment	Wear self-containing breathing apparatus and protective clothing if necessary.

Specific hazards

Special Risks	Decomposes when temperature rises. Upon combustion CO and CO ₂ and dense smoke are formed.
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HMIS/NFPA rating:

Health -1, Flammability – 1, Reactivity - 0.

Precaution for fire-fighters

Special precautions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire
Special protective equipment for fire-fighters	Wear appropriate protective equipment and self-contained breathing apparatus (SCBA). Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear respirator, gloves and eye protection.

For emergency responders No special measures required.

Environmental Precautions

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

Methods and materials for containment and cleaning up

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

Disposal information is listed in Section 13

07 HANDLING AND STORAGE

Handling

Precaution for safe handling Maintain general industrial hygiene practices when using this product. Avoid contact with eyes. Wear eye protection and gloves (nitrile, latex/rubber, butyl, or neoprene) when handling material. Do not take internally.

Technical measures to prevent explosion and fires No special measures required.

Storage

Conditions for safe storage Store in clean tight containers in a cool, dry, well-ventilated area away from sources of heat, moisture, and incompatible substances. Keep container tightly closed when not in use.

VCI Storage class: 12

Incompatible substances and mixtures Strong oxidizing agents such as strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium permanganate.

08 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Permissible concentrations Glycerol (56-81-5)

Country. Organization	Type	OEL value, mg/m ³	Form
France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984	VME	10	Aerosol
Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health of Chemical Compounds in the Work Area (DFG)	TWA	50	Inhalable fraction
Italy. Occupational exposure limits.	TWA	10	Mist
The Netherlands. Ministry of Social Affairs and Employment	TWA	10	Mist
Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment	TWA	10	Aerosol
UK. EH40 Workplace Exposure Limits (WELs)	TWA	10	Mist
USA/Canada. American Conference of Governmental Industrial Hygienists (ACGIH)/ Occupational Safety and Health Administration (OSHA). Occupational exposure limits	TWA	10	Mist
Mexico (NOM-010-STPS-1999)	TWA	10	Fog

Appropriate engineering controls

Adequate ventilation should be provided.

Individual protective measures

Maintain general industrial hygiene practices when using this product. Gloves. Safety Glasses.



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Respiratory protection	Not required with normal use	(Contd. on page 3)
Hand protection	Handle with gloves (nitrile, latex/rubber, PVC, butyl, or neoprene).	
Material of gloves	The selection of the suitable gloves depends on the material and varies from manufacturer to manufacturer. The resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. A maximum wearing time, which corresponds to 50% of the penetration time, is recommended.	
Eye protection	Safety glasses are recommended.	
Control of environmental exposure	Do not let product enter drains.	

09 PHYSICAL AND CHEMICAL PROPERTIES
Information on basic physical and chemical properties

Physical State	Gel
Color	Clear or light yellow
Odor	Odorless
Odor threshold	Not available.
pH	5.5-7
Freezing/melting point	Not available.
Boiling point	111.3°C
Flash point	>160°C (320°F) (glycerin) PMCC
Evaporation rate	Not available.
Flammability	Non-flammable.
Upper/lower flammability limits	Not available.
Vapour pressure	553 mm Hg at 100°C.
Vapour density	Not available.
Specific density	1.16 at 25°C
Solubility	water soluble chloroform insoluble
Partition coefficient	Not available.
Auto ignition temperature	370°C (698°F) (glycerin)
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

VOC content <0.5% (5.5g/L)

10 STABILITY AND REACTIVITY
Reactivity

Reacts with (strong) oxidizers (nitric acids, peroxides). No decomposition if used according to specifications. Decomposes on exposure to temperature rise. Upon combustion CO and CO₂ are formed.

Chemical stability Stable under normal operational procedures.

Possibility to hazardous reactions Does not occur.

Conditions to Avoid Excessive heat. Strong acids, bases, strong oxidizing agents like chromium trioxide, potassium chlorate, or potassium permanganate.

Incompatible materials Strong oxidizers, strong acids.

Hazardous Decomposition Products Carbon monoxide, dense smoke.

11 TOXICOLOGICAL INFORMATION
Information on likely routes of exposure

Ingestion	Unlikely to be harmful unless excessive amount.
Inhalation	No data available.

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Skin contact May cause skin irritation on sensitive skin (Contd. on page 4)
 Eye contact May irritate eyes.

Symptoms related to physical, chemical and toxicological characteristics

Skin May cause mild irritation for sensitive skin.
 Eyes May cause mild eye irritation. Symptoms may include tearing, redness, swelling, and stinging sensation.
 Inhalation Not applicable at ambient temperature.
 Ingestion Nausea, vomiting, diarrhea if ingested in large quantities.
 Long Term Exposure. None.
 Over-exposure signs/symptoms No data available.

Delayed, immediate and chronic effects

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, vomiting, and diarrhea.
 Respiratory No data available.
 Reproductive cell mutagenicity No data available.
 Carcinogenicity The components are not listed as carcinogens by the IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), and OSHA-Ca (Occupational Safety and Health Administration).
 Reproductive toxicity No data available.
 Specific target organ toxicity. No data available.
 Aspiration hazard. No data available.

Long term and Chronic effect Negative (sensitization test, guinea pig)

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

LD₅₀ oral, rat: 12600 mg/kg,
 Skin contact, rabbit: 500 mg/24 hrs No effect
 Eye contact, rabbit: 126 mg, mild irritation 24h
 Dermal rabbit LD₅₀: >10000 mg/kg

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.

12 ECOLOGICAL INFORMATION

Ecotoxicity

Components of this product have been identified as having potential environmental concerns. 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). Not harmful for fish, aquatic organisms, algae, bacteria.
 Readily biodegradable in water.
 WGK water hazard class – VwVwS: WGK 1 - low hazard to water

Harmful effect for aquatic organisms Not classified.

Ecotoxicity data (glycerol, 56-81-5):

Carrassuis Auratus (Goldfish) 24Hrs LC₅₀ >5000 mg/L
 Oncorhynchus mykiss (Rainbow trout) 96 hrs LC₅₀ =51000-57000 mg/L
 Daphnia magna 24hrs EC₅₀ >1000mg/L

Persistence and degradability Readily biodegradable (OECD 301).

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects Not known.

Results of PBT and vPvB assessment Not a PBT or vPvB (Annex XII of Regulation 1907/2006).

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SARA 311/312 Hazard Categories

(Contd. on page 6)

Immediate Health Hazard: Yes
 Chronic Health Hazard: No
 Fire Hazard: No
 Sudden Release of Pressure Hazard: No
 Reactive Hazard: No

State Regulations

Glycerol and starch can be found on the Pennsylvania, Minnesota, and Massachusetts right to know lists.

Canada:

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

This product is not a controlled substance within the meaning of the Hazardous Product Act.

Material	DSL List	Ingredient Disclosure List
Glycerin (56-81-5)	Listed.	Not listed.
Starch (9005-25-8)	Listed	Not listed

HMIS/NFPA rating: Health -1, Flammability – 1, Reactivity - 0.

Mexico:

NOM-018-STPS-2000: Glycerin (fog).
 PPE ID-E (Safety glasses, gloves and dust respirator).
 NOM-028-STPS-2012. Not listed

EU:

Regulation (EC) No. 1005/2009, Annex I, II. Not listed.
 Regulation (EC) No. 850/2004, Annex I as amended. Not listed.
 Regulation (EC) No. 689/2008, Annex I as amended. Not listed.
 Regulation (EC) No. 689/2008 Annex V as amended. Not listed.
 Regulation (EC) No. 166/2006 Annex II. Not listed.
 Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA. Not listed.
 Regulation 10/2011 (Annex I). FCM 103 (CAS 56-81-5) glycerol

REACH Title VII Restrictions

Dangerous substances	Not classified
Organic solvents	Not classified
Harmful substances whose names are to be indicated on the label	Not classified
Pollution release and transfer registry (class I)	Not classified
Pollution release and transfer registry (class II)	Not classified
Poison and deleterious substances control law	Not classified
ISHA-harmful substances prohibited for manufacturing, importing, transferring, and supplying	Not classified
ISHA- harmful substances required permission	Not classified
Toxic chemical classification listing (TCCL) toxic chemicals	Not classified
Toxic release inventory (TRI) group I	Not classified
Toxic release inventory (TRI) group II	Not classified

Authorizations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorization Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.
 Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work Not regulated.
 Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding Not regulated.

Other regulations

WGK water hazard class – VwVwS: WGK 1 - low hazard to water
 Storage class VCI: 12

China:

Material	Inventory of Existing Chemical Substances in China (IECSC)
Glycerin (56-81-5)	Listed.

International Inventories

TSCA, EINECS/ELINCS, ENCS, IECSC, PICCS, AICS Listed

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16 OTHER INFORMATION

Date of issue:	April 16, 2009.
Date of revision:	Reason for revision:
December 2, 2013	Comply with Annex II of the EC Regulation N.1907/2006 (REACH).
May 5, 2014	Sections 6.1, 7.1 and 8.2 were revised. Comply with Mexican Regulations
November 3, 2014	Comply with ISO 11014:2009
January 10, 2015	Comply with GHS (5 th edition)
June1, 2015	Sections 9 and 15 were revised.

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 contained herein is based on the present state of our knowledge. The information relates to the specific product designed herein, and does not relate to use in combination with any other material or any other process. It characterizes the product with regards to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. 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