



**Product Name:** Glycerine. Min. 99.5%. Pharma. Vegetable. Non-GMO. ex EU

**Batch Number:** 4380802

**Expiry Date:** December 2022

#### CERTIFICATE OF ANALYSIS

Test Description	Specification	Result
Glycerine Assay E422 and EP (% m/m):	99.5 – 101.0 min	100.0
Acrolein formation on heating E422 (Id A):	Complies	Complies
Specific gravity (25/25 deg C) E422 (Id B):	1.257 min	1.262
Refractive Index at 20 deg C E422 and EP (Id C):	1.471 – 1.474	1.474
Water, Karl Fischer EP (%):	0.5 max	0.07
Sulphated Ash E422 and EP (%):	0.01 max	0.00
Colour APHA:	10 max	1
Butanetriols E422 (%):	0.2 max	Complies
Acroleine, Glucose, Ammonium Compounds E422:	Complies	Complies
3-MCPD E422 (%):	Complies	Complies
Fatty Acids and Ester E422 (as Butyric Acid) (%):	0.1 max	Complies
Chlorinated Compounds E422 (ppm):	30 max	Complies
Arsenic E422 (mg/kg):	3 max	Complies
Lead E422 (mg/kg):	2 max	Complies
Mercury E422 (mg/kg):	1 max	Complies
Cadmium E422 (mg/kg):	1 max	Complies
Heavy Metals E422 and EP (ppm):	5 max	Complies
Identification A, B, C and D EP:	Complies	Complies
Appearance of solution EP:	Complies	Complies
Acidity and Alkalinity EP (ml 0.1M NaOH):	0.2 max	Complies
Aldehydes EP (ppm):	10 max	Complies
Esters EP (ml 0.1M HCl):	8.0 min	9.2
Impurity A and Related Substances EP:	Complies	Complies
Halogenated Compounds EP (ppm):	35 max	Complies
Sugars EP:	Complies	Complies
Chlorides EP (ppm):	10 Max	Complies

*Manufactured from vegetable oil. Complies with the requirements of current editions for Glycerine of EP, EU Regulations 231/2012 (Glycerol E422), 68/2013 and Codex Alimentarius.*

*The results given above are based on analysis carried out by the manufacturer. Some parameters not tested each batch and determined statistically.*

*Receipt of this certificate does not free the customer from carrying out their own inspection and testing to verify the product is suitable for use.*



**ALLERGEN STATEMENT**  
**VEGETABLE-BASED GLYCERINE**

Vegetable-based Glycerine from mixed feed stocks does not contain any Allergenic material.



Aug 2017

## ORIGIN OF VEGETABLE-BASED KOSHER GLYCERINE

As the Glycerine from our supplier is from multiple manufacturing sites it is not practical to maintain Manufacturing Flow Charts from all. Instead please see the below documents.

All material supplied by MADAR Corporation Ltd conforms to a Minimum 99.5% Purity, non-GM, Vegetable-based Specification.

All product is Kosher-certified by the manufacturing site.

All material is Halal – suitable.

Standard Vegetable-based product is from mixed feed stocks - which can include Coconut, Palm, Rapeseed, Soya etc. - or any combination of these.

Our supplier of Glycerine is BRC-accredited and sources from accredited & audited Glycerine manufacturing sites in :

Malaysia

Germany

Belgium

France

Holland

United Kingdom

All manufacturing sites have a MINIMUM of ISO9001 accreditation and a HACCP plan implemented.

Whilst we are unable to guarantee material from a specific manufacturing site, material supplied will always be from a European manufacturing site (countries listed above) and to our Specification.

## HAZARD ANALYSIS AND RISK ASSESSMENT: GLYCERINE

Process Step	Potential Hazards	Hazard Risk Analysis			Control Measures (CM)	Risk Rating After (CM)	Decision Tree CCP Questions						CCP No	Justification	Vulnerability Groups	Measures to Control Adulteration
		Likelihood	Severity	Risk Rating			Q 1	Q 2	Q 2a	Q 3	Q 4	Q 5				
1. Raw Material Purchase	Physical, Chemical Contamination due to: Materials supplied not to specification or to expected quality (ie) damaged packs, pest damage	2	2	4	Approved Suppliers	2	Y						No	Purchase from Approved Suppliers	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Use Reputable Suppliers
2. Intake food materials/ packaging	Physical, Chemical Contamination due to: Materials supplied not to specification or to expected quality (ie) damaged packs, pest damage	3	4	12	1. Approved Suppliers 2. Odour 3. Colour 4. Packaging 5. Delivery vehicle condition 6. Delivery Documentation 7. Certificate of Analysis	8	N	Y	-	Y			CCP1	1. Must comply to specification 2. Purchase from Approved Suppliers	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Use reputable Suppliers, Check load on delivery by trained operatives
3/9. Ambient Storage	Physical foreign body contamination from damaged packaging or uncovered packaging materials and poor environmental conditions	2	2	4	1. Visual checks 2. Stock Control 3. Storage Procedure <b>QPS 28.0</b>	2	Y						No	1. All stored products must be covered 2. Storage area must be clean and intact	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Use reputable Suppliers, Check load on delivery by trained operatives
	Microbial contamination due to out of date product	2	2	4	1. Visual checks 2. Stock Control 3. Storage Procedure <b>QPS 28.0</b>	2	Y						No	All food materials to be used within shelf life	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Use reputable Suppliers, Check load on delivery by trained operatives
	Chemical contamination due to poor storage of allergenic food materials	2	2	4	1. Visual checks 2. Stock Control 3. Storage Procedure <b>QPS 28.0</b>	2	Y						No	1. All stored products must be covered 2. Storage area must be clean and intact	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Use reputable Suppliers, Check load on delivery by trained operatives

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Process Step	Potential Hazards	Hazard Risk Analysis			Control Measures (CM)	Risk Rating After (CM)	Decision Tree CCP Questions						CCP No	Justification	Vulnerability Groups	Measures to Control Adulteration
		Likelihood	Severity	Risk Rating			Q1	Q2	Q2a	Q3	Q4	Q5				
4. De box	Physical foreign body contamination from damaged or incorrectly removed packaging	2	2	4	Visual checks	2	N	Y	-	N	N		No	All secondary packaging must be removed	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Trained Staff, Supervised QA Checks
5. Fill	Physical contamination due to people/ equipment/ environment	4	4	16	1. Visual checks 2. 800 micron filter in place 3. Staff Training	8	N	Y	-	Y			CCP 2	All products individually packed and filter checked for integrity	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Trained Staff, Supervised QA Checks
	Chemical contamination due to people/ equipment/ environment/ poor cleaning/ allergens	2	3	6	1. Visual checks 2. Hygiene procedures 3. Staff Training	3	N	Y	-	N	N		No	All products individually packed and filter checked for integrity	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Trained Staff, Supervised QA Checks
	Microbial contamination due to people/ equipment/ environment/ poor cleaning	2	3	6	1. Visual checks 2. All containers certificated 3. Hygiene procedures 4. Staff Training	3	N	Y	-	N	N		No	All products individually packed and tested	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Trained Staff, Supervised QA Checks
6. Weigh	No perceived hazards															
7. Lid	Microbial contamination due to multiplication of pathogenic bacteria from poor seal	2	3	6	Visual Inspection	3	N	Y	-	N	N		No	1. Quality Checks 2. Trained Staff	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Trained Staff, Supervised QA Checks

## HAZARD ANALYSIS AND RISK ASSESSMENT: GLYCERINE

Process Step	Potential Hazards	Hazard Risk Analysis			Control Measures (CM)	Risk Rating After (CM)	Decision Tree CCP Questions						CCP No	Justification	Vulnerability Groups	Measures to Control Adulteration
		Likelihood	Severity	Risk Rating			Q1	Q2	Q2a	Q3	Q4	Q5				
	Physical contamination due to poor seal	2	3	6	Visual Inspection	3	N	Y	-	N	N		No	1. Quality Checks 2. Trained Staff	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Trained Staff, Supervised QA Checks
8. Label	Microbial contamination due to incorrect label applied	2	3	6	Visual Inspection	3	N	Y	-	N	N		No	1. Quality Checks 2. Trained Staff	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Trained Staff, Supervised QA Checks
10. Pick	Physical / Chemical contamination due to uncovered/ damaged product	2	2	4	Visual Inspection	2	Y	Y	-	N	Y	Y	No	All products are covered and intact	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Trained Staff, Supervised QA Checks
11. Load	Physical/ Chemical contamination due to uncovered product/ damaged product	2	2	4	Visual Inspection	2	Y	Y	-	N	Y	Y	No	All products are covered and intact	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Vehicles sealed on loading, Trained Staff, Supervised QA Checks, Recall Procedure and Recall Team
12. Despatch	Physical/ Chemical contamination due to damaged product, packaging, dirty vehicle, stored with incompatibles	2	2	4	1. Visual Inspection 2. Vehicle hygiene check 3. Approved Hauliers	2	Y	Y	-	N	Y	Y	No	1. No damaged products or packs 2. Do not load onto dirty vehicles 3. Use Approved Hauliers	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	Vehicles sealed on loading, Trained Staff, Supervised QA Checks, Recall Procedure and Recall Team

## HAZARD ANALYSIS AND RISK ASSESSMENT: GLYCERINE

Process Step	Potential Hazards	Hazard Risk Analysis			Control Measures (CM)	Risk Rating After (CM)	Decision Tree CCP Questions						CCP No	Justification	Vulnerability Groups	Measures to Control Adulteration
		Likelihood	Severity	Risk Rating			Q1	Q2	Q2a	Q3	Q4	Q5				
13. Waste	Microbial contamination from waste improperly disposed of	2	2	4	Visual inspection	2	Y						No	1. Waste must be placed continuously in lidded bins 2. Trained Staff	Allergen Sufferers, Young, Old, Ill, Susceptible to food poisoning and choking on FB's	



## SAFETY DATA SHEET

### GLYCERINE (VEG) 99.5% RAPESEED DERIVED

#### Section 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

**Product name:** Glyceryl (Veg) 99.5% RAPESEED DERIVED  
**REACH registered number(s):** EXEMPT 190712006/EC ANNEX V.9  
**Product code:** WAXGLYCPEG100  
**CAS number:** 56-81-5  
**EINECS number:** 200-289-5  
**Synonyms:** GLYCERINE E 422 1,2,3-PROPANE TRIOL

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

##### 1.3. Details of the supplier of the safety data sheet

**Company name:** MADAR Corporation Ltd  
19-20 Sandleheath Industrial Estate  
Fordingbridge  
Hampshire  
SP6 1PA  
UK  
Approved sellers: Mystic Moments, New Directions UK, World of Moulds

#### Section 2: Hazards identification

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

**Classification under CLP:** This product has no classification under CLP.

##### 2.2. Label elements

**Label elements:** This product has no label elements.

##### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.





## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** GLYCERINE (VEG) 99.5% BPIEP E422 (\*WEL)

**Contains:** Glycerine

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash mouth out with water.

**Inhalation:** Consult a doctor.

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

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

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

**Immediate/ special treatment:** Not applicable.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

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

**Personal precautions:** Refer to section 8 of SDS for personal protection details.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labeled salvage container for disposal by an appropriate method.



#### 6.4. Reference to other sections

### Section 7: Handling and storage

#### 7.1. Precautions for safe handling

**Handling requirements:** Not applicable

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

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.

**Suitable packaging:** Polyethylene. Steel drums.

#### 7.3. Specific end use(s)

### Section 8: Exposure controls/personal protection

#### 8.1. Control parameters

**Workplace exposure limits:** No data available.

#### DNEL/PNEC Values

**DNEL / PNEC** No data available.

#### 8.2. Exposure controls

**Engineering measures:** Not applicable.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Protective gloves.

**Eye protection:** Safety goggles. Ensure eye bath is at hand.

**Skin protection:** Protective clothing.

### Section 9: Physical and chemical properties

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

**State:** Liquid

**Colour:** Colourless

**Odour:** Odourless

**Solubility in water:** Miscible in all proportions

**Also soluble in:** Most organic solvents.

**Evaporation rate:** Negligible

**Melting point/range°C:** 17.8

**Flash point°C:** 177

**Viscosity:** Viscous

**Boiling point/range°C:** 290

**Relative density:** 1.263 @ 75 degC

#### 9.2. Other information

**Other information:** No data available.

### Section 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

#### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicity Values:** Not applicable

### Symptoms / routes of exposure

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

**Delayed/ immediate effects:** No data available.

**Other information:** Not applicable.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

### 12.3. Bioaccumulative potential

### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Recovery operations:** Not applicable.

**Disposal of packaging:** Arrange for collection by specialised disposal company.



#### Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

#### Section 15: Regulatory information

##### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

#### Section 16: Other information

##### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Legal disclaimer:** \* The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product. Material sold under the MADAR Corporation Ltd trade marks are manufactured by 3rd party suppliers.



## PRODUCT SPECIFICATION

### GLYCERINE

### VEGETABLE-BASED 99.5% MINIMUM E.P.

ASSAY :	99.5% m/m Min.
IDENTIFICATIONS A, B, C and D :	COMPLIES E.P.
APPEARANCE OF SOLUTION :	CLEAR
ACIDITY, ALKALINITY (0.1m NaOH)	0.2ml max.
REFRACTIVE INDEX @ 20°C :	1.471 – 1.474
ALDEHYDES :	10 PPM Max.
HALOGENATED COMPOUNDS :	35 PPM Max.
ESTERS (0.1M HCl) :	8.0ml Min.
SUGARS :	COMPLIES E.P.
CHLORIDES :	10 PPM Max.
HEAVY METALS (PPM) :	5mg/kg
WATER :	0.5% Max.
SULPHATED ASH :	0.01% Max.
COUNTRY OF ORIGIN:	Germany

COMPLIES WITH EUROPEAN PHARMACOEPIA (E.P.), COMPLIES WITH E422 APPROVED FOR USE IN FOOD.

KOSHER-CERTIFIED

NON-GMO.