1. Product and Company Identification

Product Name: Bird Barrier Optical Gel

Product Use: Bird repellant

US Distributor: Bird Barrier America, Inc.

20925 Chico Street, Carson, CA 90746, USA

Phone: 310-527-8000

Manufacturer: EZflex Co., Ltd.

#503 Yuwon Building, 457-22

Seongnae1-dong, Gangdong-gu, Seoul, Korea

Phone: 82-2-485-3575

2. Hazard Identification

GHS Classification: Not classified

○ Signal word : -○ Hazard statement : -

3. Composition/Information on Ingredients

Ingredient(s)	CAS#	Percent(%)
Agar	9002-18-0	>60
Peppermint	8006-90-4	1-5
Beeswax	8012-89-3	20~30
Citronella	8000-29-1	>1

4. First aid measures

After eye contact

- O Flush eyes with running water for at least 15 minutes.
- O If needed, seek medical attention.

After skin contact

- Flush skin with running water for at least 15 minutes.
- $\ \bigcirc$ Remove and isolate contaminated clothing and shoes.
- O Wash and dry contaminated clothing and shoes before reuse thoroughly.
- O If needed, seek medical attention.

After inhalation

○ If needed, seek medical attention.

After swallowing

- O Seek medical attention immediately.
- Call 911 or emergency medical service.

Notes to physician

 Ensure that medical personnel are aware of the materials involved and take precautions to protect themselves.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing agents: Dry Chemical, CO2, water spray or regular foam.

Unsuitable extinguishing agents: Not available

Large Fires: Water spray, fog or regular foam.

Hazardous combustion products:

This product may evolve Carbon oxides and Silicon dioxide during fire or very high heat conditions.

Protection of firefighters

Specific hazards arising from the chemical:

May burn but does not ignite readily.

Protective equipment for firefighters:

Firefighters should wear self-contained breathing apparatus (SCBA).

Structural firefighter's protective clothing will only provide limited protection.

General fire hazards

\circ N	Move containers	from 1	fire area	if vou can	do it	without ris	śk.
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- O Cool containers with flooding quantities of water until well after fire is out.
- O Do not scatter spilled material with high pressure water streams.
- Always stay away from tanks engulfed in fire.

6. Accidental release measures

Personal precautions

- Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Wear protection gloves.

Environmental precautions

- Atmosphere : Use with adequate ventilation.
- O Land: Dike far ahead of liquid spill for later disposal.
- O Underwater : Prevent entry into waterway and sewers.

Methods for cleaning up

Small Spill

 Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Large Spill

O Dike far ahead of liquid spill for later disposal.

7. Handling and Storage

Safe Handling

Wash thoroughly after handling.

\bigcirc	Use with adequate ventilation.
\circ	Avoid contact with eyes, skin, and clothing.
\circ	Avoid ingestion.
Safe Stora	ıge
\circ	Keep container closed.
\circ	Store in the well ventilated area.

8. Exposure controls and personal protection

Engineering controls: Good industrial hygiene practices should be observed.

Personal protective equipment

Respiratory protection: Wear an approved NIOSH dustproof respirator.

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves.

Clothing: Wear appropriate protective clothing.

9. Physical and chemical information

Appearance	Gel
Color	Pale yellow
Odor	Pungent
Odor threshold	Not determined
рН	Not determined
Melting point/Freezing point	Not determined
Initial boiling point and	Not determined
Boiling range:	
Flashpoint	Not determined
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or	Not determined
explosive limits	
Vapor pressure	Not determined
Solubility	Not determined
Vapor density	Not determined
Relative Density	Not determined
Partition coefficient:	Not determined
n-octanol/water	
Auto-ignition temperature	Not determined

Decomposition temperature	Not determined
Viscosity	Not determined
Molecular weight	Not determined

10. Stability and reactivity

Stability: No data.

Conditions to Avoid: Heat, flame, spark and other ignition sources

Incompatible materials : oxidizing agents

Hazardous decomposition products: May produce carbon oxides or silicon.

11. Toxicological information

Acute toxicity (Oral)	Silicone
	Rat LD50>17000mg/kg (ChemIdplus)
	Oleoresin capsicum
	Rat LD50>3000mg/kg (ChemIdPlus)
Acute toxicity (Dermal)	Silicone
	Rabbit LD50>2000mg/kg (ChemIdplus)
	Oleoresin capsicum
	Rat, LD50>2500mg/kg bw (ChemIdPlus)
Acute toxicity (inhalation)	Oleoresin capsicum
	Rat LC50>10000gm/m3/4h
	(Conversion: 10000mg/L/4h) (ChemIdplus)
○ Skin corrosion/irritation	N/A
○ Serious eye damage	Silicone
/ eye irritation	Eye irritant(HSNO)
-	Oleoresin capsicum
	Eye irritant(HSNO)
Respiratory sensitization	N/A
○ Skin sensitization	N/A
Carcinogenicity	N/A
Germ cell mutagenicity	N/A
Reproductive toxicity	N/A
Specific target organ	N/A
Toxicity (Single exposure)	
○ Specific target organ	N/A
Toxicity (Repeated exposure)	
Aspiration	N/A

12. Ecological information

Toxicity	
Silicone	
○ Fish (Ictalurus punctatus)	96hr LC50=3.16mg/L (ECOTOX)
 Crustacea (Daphnia Magna) 	48hr LC50=44.5mg/L (ECOTOX)

Water Solubility	0.006997mg/L,	
	Poorly water soluble (Episuite)	
	Lack of rapid degradability (Episuite:Biowin	
	2,5,6,7)	
Persistence and degradability	No data	
Bioaccumulative potential	No data	
Mobility in soil	No data	
Other adverse effects	No data	

13. Disposal considerations

- Standard Industrial Classification (SIC codes): Manufacturing- Pharmaceutical preparations (SIC codes: 2834)
- Any special precautions for incineration or landfill : Incinerate

14. Transport information

UN Number : Not regulated

UN Proper Shipping Name: -

Transport hazard class : - Packing group, if applicable : -

Environmental hazards : Not regulated

Special precautions for user : -

15. Regulatory information

Safety, health and environmental regulations specific for the product in question:

US Regulation

- OSHA: Not regulated
- CERCLA (40CFR 302.4): Not regulated
- SARA 302, SARA 304 : Not regulated
- SARA 311/312: Not regulated
- SARA 313: Not regulated
- Toxic Substance Control Act (TSCA): Not regulated
- RCRA (40 CFR 261.31): Not regulated
- RCRA (40 CFR 261.33): Not regulated
- Rotterdam Convention: Not regulated
- Stockholm Convention on Persistent Organic Pollutants: Not regulated
- Montreal Protocol : Not regulated

16. Other information

References

- National library of Medicine (NLM) ChemIDPlus: (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM)
- Corporate Solution From Thomson Micromedex(http://csi.micromedex.com)
- ECOTOX Database, EPA (http://cfpub.epa.gov/ecotox)

- o Environmental Risk Management Authority New Zealand
- Estimation Program Interface (EPI) Suite (U.S. EPA)

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