

502698 FRESCOLAT® MGA

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1. IDENTIFICATION		
Product Description:	FRESCOLAT® MGA	
CAS #	63187-91-7	
FEMA Number	3807	
Other means of identification Vigon Item #	502698	
Recommended use		d flavor ingredient which may be used in flavor and fragrance egal and IFRA or FEMA GRAS/FDA guidelines.
Recommended restrictions	For Manufacturing Use On	ıly
<u>Company</u>		24 Hour Emergency Response Information
Vigon International, Inc.		INFOTRAC (ACCT# 78928);
127 Airport Road		1-800-535-5053 WITHIN THE U.S.A.
E. Stroudsburg, PA 18301		1-352-323-3500 OUTSIDE THE U.S.A.
For information call: 570-476-630	00	
Web Site: www.vigon.com		
Manufacturer/Importer/Supplier/E Manufacturer	Distributor information	
Company name	Vigon International, Inc.	
Address	127 Airport Road	
	E. Stroudsburg, PA 18301 United States	
Telephone	For information call:	570-476-6300
Website	www.vigon.com	
E-mail	Not available.	
Emergency phone number	INFOTRAC	(ACCT# 78928);
	1-800-535-5053	WITHIN THE U.S.A.
	1-352-323-3500	OUTSIDE THE U.S.A.
2. HAZARD(S) IDENTIFIC	ATION	
Physical hazards	Not classified.	
Health hazards	Acute toxicity, dermal	Category 5
	Skin corrosion/irritation	Category 2

Category 1

Category 3

Environmental hazards

Label elements



long-term hazard

Serious eye damage/eye irritation

Hazardous to the aquatic environment,



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Hazard statement	May be harmful in contact with skin. Causes skin irritation. Causes serious eye damage. Harmful to aquatic life with long lasting effects.	
Precautionary statement		
Prevention	Wash thoroughly after handling. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.	
Deenenee	IF ON SKIN. Weak with planty of water, IF IN EVES, Dines on the value with water for asymptot	

Response	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	100% of the mixture consists of component(s) of unknown acute inhalation toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Chemical name	Common name and synonyms	CAS number	%
6-isopropyl-9-methyl-1,4-dioxaspiro [4.5.]decane-2-methanol	MENTHONE GLYCERIN ACETAL (9- methyl-6-propan-2-yl-1,4-dioxaspiro[4.5] decan-2-yl)methanol (-)-menthone 1,2-glycerol ketal laevo-menthone glycerin acetal DL-menthone glycerine acetal	63187-91-7	100

4. FIRST-AID MEASURES

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.
Eye contact	Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.
Ingestion	Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Not available.



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General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.	
5. FIRE-FIGHTING MEASU	IRES	
Suitable extinguishing media	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.	
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.	
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.	
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.	
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.	
Specific methods	Use water spray to cool unopened containers.	
General fire hazards	Static charges generated by emptying package in or near flammable vapor may cause flash fire.	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.
	The product is immiscible with water and will spread on the water surface.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.
Environmental precautions	Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.



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7. HANDLING AND STORAGE Precautions for safe handling Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling. Keep container closed. Handle containers with care. Open slowly in order to control possible Conditions for safe storage, pressure release. Store in a cool, well-ventilated area. including any incompatibilities 8. EXPOSURE CONTROLS/PERSONAL PROTECTION This substance has no PEL, TLV, or other recommended exposure limit. Occupational exposure limits **Biological limit values** No biological exposure limits noted for the ingredient(s). Use explosion-proof ventilation equipment to stay below exposure limits. Adequate ventilation Appropriate engineering controls should be provided so that exposure limits are not exceeded. Individual protection measures, such as personal protective equipment Eye/face protection Wear safety glasses with side shields (or goggles). Face shield is recommended. Skin protection Hand protection Chemical resistant gloves. Other Use of an impervious apron is recommended. Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must **Respiratory protection** be provided. Thermal hazards Wear appropriate thermal protective clothing, when necessary. General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Refer to Spec Sheet
Physical state	Liquid.
Form	Liquid.
Color	Refer to Spec Sheet
Odor	Characteristic.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling	Not available.
range	
Flash point	> 200.0 °F (> 93.3 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.



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Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.1 mbar at 25°C 0.00002 mm Hg at 25°C
Vapor density	7.9
Relative density	Not available.
Solubility(ies)	Insoluble
Solubility (water)	
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	611.6 - 613.4 °F (322 - 323 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Molecular formula	C13H24O3
Molecular weight	228.33 g/mol
Oxidizing properties	Not oxidizing.
Specific gravity	1.03 at 25°C

10. STABILITY AND REACTIVITY

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.	
Skin contact	May be harmful in contact with skin. Causes skin irritat	ion.
Eye contact	Causes serious eye damage. Causes mild eye irritation	n.



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Ingestion	Expected to be a low ingestion hazard.	
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.	
Information on toxicological effec	ts	
Acute toxicity	May be harmful in contact with skin.	
Product	Species	Test Results
δ-isopropyl-9-methyl-1,4-dioxasp	iro [4.5.]decane-2-methanol (CAS 63187-9	1-7)
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	5716 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye rritation	Causes serious eye damage.	
Respiratory or skin sensitization Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause s	kin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity		
IARC Monographs. Overall E	Evaluation of Carcinogenicity	
Not listed.		
OSHA Specifically Regulated	d Substances (29 CFR 1910.1001-1052)	
Not regulated.		
•••	gram (NTP) Report on Carcinogens	
Not listed.	lated Substances (20 CEB 1010 1001 105	50)
Not available.	Ilated Substances (29 CFR 1910.1001-105	
Reproductive toxicity	This product is not expected to cause r	enroductive or developmental effects
Specific target organ toxicity - single exposure	This product is not expected to cause reproductive or developmental effects. Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	

12. ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.



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Product		Species	Test Results
6-isopropyl-9-methyl-1,4-die	oxaspiro [4.5.]	decane-2-methanol (CAS 63187-91-7)
Aquatic			
Acute			
Fish	EC50	Carp (Cyprinus carpio)	24 mg/l, 24 hours
Persistence and degradability	Biodegradability: Modified Strum Test Result: Not readily biodegradable <10 %		
Bioaccumulative potential	No data available.		
Mobility in soil	No data available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		
13. DISPOSAL CONSIDE	RATIONS		
Disposal instructions	Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with		

	used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	Not established.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADN

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

DOT

BULK

Not regulated as dangerous goods.

DOT

NON-BULK

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.



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IMDG

Not regulated as dangerous goods.

15. REGULATORY INFORMATION

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.		
CERCLA Hazardous Substar	nce List (40 CFR 302.4)		
Not listed.			
SARA 304 Emergency releas	se notification		
Not regulated.			
	lated Substances (29 CFR 1910.1001-1050)		
Not available.			
	Substances (29 CFR 1910.1001-1052)		
Not regulated. TSCA Section 12(b) Export N	lotification (40 CFR 707, Subpt. D)		
Not regulated.			
Superfund Amendments and Rea SARA 302 Extremely hazard Not listed.			
SARA 311/312 Hazardous chemical	Yes		
Classified hazard categories	Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation		
SARA 313 (TRI reporting) Not regulated.			
Other federal regulations			
Clean Air Act (CAA) Section	112 Hazardous Air Pollutants (HAPs) List		
Not regulated.			
Clean Air Act (CAA) Section	112(r) Accidental Release Prevention (40 CFR 68.130)		
Not regulated.			
Safe Drinking Water Act (SDWA)	Not regulated.		
US state regulations California Proposition 65			
•	- Carcinogens & Reproductive Toxicity (CRT): Listed substance		
Not listed.			
16. OTHER INFORMATION	I, INCLUDING DATE OF PREPARATION OR LAST REVISION		
Issue date	11-29-2015		
Revision date	06-01-2018		



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Version #	02
HMIS® ratings	Health: 3 Flammability: 1 Physical hazard: 0
Disclaimer	Vigon International, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Vigon International, Inc. has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its' safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this docum
Revision information	This document has undergone significant changes and should be reviewed in its entirety.