

# Zest Concentrate

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

#### 1.1. Identification

Product form : Mixture  
Product name : Zest Concentrate  
Product code : GT67602,08

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

Use of the substance/mixture : Deodorizing and Air Freshening

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

Gliptone Manufacturing Inc.  
1740 Julia Goldbach Avenue  
Ronkonkoma, NY 11779 - United States of America  
T 1-631-285-7250 - F 1-631-589-5487  
[www.gliptone.com](http://www.gliptone.com)

#### 1.4. Emergency telephone number

Emergency number : 1-800-424-9300 International: 1-703-527-3887

### SECTION 2: Hazard(s) identification

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

##### Classification (GHS-US)

Flam. Liq. 4 H227 - Combustible liquid  
Skin Irrit. 2 H315 - Causes skin irritation  
Skin Sens. 1 H317 - May cause an allergic skin reaction

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

GHS08

GHS09

Signal word (GHS-US) :

: Warning

Hazard statements (GHS-US) :

: H227 - Combustible liquid

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H401 - Toxic to aquatic life

H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US) :

: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P261 - Avoid breathing dust/vapors

P264 - Wash hands, forearms and face thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302+P352 - If on skin: Wash with plenty of water/soap

P321 - Specific treatment (see ... on this label)

P332+P313 - If skin irritation occurs: Get medical advice/attention

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

P362+P364 - Take off contaminated clothing and wash it before reuse

P363 - Wash contaminated clothing before reuse

P370+P378 - In case of fire: Use ... to extinguish

P403+P235 - Store in a well-ventilated place. Keep cool

P501 - Dispose of contents/container to an authorized waste collection point

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
2-methyl-2,4-pentanediol	(CAS No) 107-41-5	20 - 30	Flam. Liq. 4, H227 Skin Irrit. 2, H315
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	(CAS No) 4719-04-4	1.2 - 1.9	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317

Full text of H-phrases: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Obtain medical attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Obtain medical attention.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Wash skin thoroughly with mild soap and water. Call a physician immediately. Wash clothing before re-using.
- First-aid measures after eye contact : Rinse thoroughly with plenty of water for at least 20 minutes and take medical advice.
- First-aid measures after ingestion : Do NOT induce vomiting. Obtain medical attention. Never give anything by mouth to an unconscious person.

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

No additional information available

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Foam. Carbon dioxide.

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

- Fire hazard : combustible materials.
- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

#### 5.3. Advice for firefighters

- Firefighting instructions : Move containers away from the fire area if this can be done without risk. Cool down the containers/equipment exposed to heat with a water spray. Ensure that there is no direct contact between the water and the product.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
- Other information : Combustion produces irritating gases. Carbon oxides (CO, CO2).

### SECTION 6: Accidental release measures

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

General measures : Keep public away.

##### 6.1.1. For non-emergency personnel

- Protective equipment : Use chemically protective clothing.
- Emergency procedures : Ventilate spillage area. NO open flames, NO sparks, and NO smoking.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8 Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

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

- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

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### 6.4. Reference to other sections

For further information refer to section 8 : Exposure-controls/personal protection"".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid inhalation of vapors. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Keep away from ignition sources.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash clothing before re-using.

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

- Storage conditions : Store in a well-ventilated place. Keep cool. Keep away from heat and direct sunlight.
- Incompatible products : oxidant materials.
- Storage area : Store away from heat. Store in dry, well-ventilated area.
- Special rules on packaging : Always keep in containers made of the same material as the supply container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 2-methyl-2,4-pentanediol (107-41-5)

ACGIH	ACGIH Ceiling (ppm)	25 ppm (Hexylene glycol; USA; Momentary value; TLV - Adopted Value)
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### 8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Hand protection : Impermeable protective gloves. Wear long sleeves. Use protective clothing.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Environmental exposure controls : Avoid release to the environment.
- Other information : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

## SECTION 9: Physical and chemical properties

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

- Physical state : Liquid
- Color : Dark Yellow/Orange
- Odor : Citrus
- Odor threshold : No data available
- pH : No data available
- Melting point : Not applicable
- Freezing point : No data available
- Boiling point : No data available
- Flash point : 183 °F
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : No data available
- Explosion limits : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available
- Vapor pressure : No data available
- Relative density : 1.03
- Relative vapor density at 20 °C : No data available
- Solubility : In water, material is partially soluble.
- Log Pow : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available

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Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

VOC content	: 0 %
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions. Peroxides may be formed on prolonged contact with air.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, No sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Keep away from: strong acids, strong bases and oxidation agents.

### 10.6. Hazardous decomposition products

Aldehydes. Peroxides may be formed on prolonged contact with air.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Likely routes of exposure	: Skin contact.; Eyes contact.; Inhalation; Ingestion.
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Acute toxicity	: Not classified
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2-methyl-2,4-pentanediol (107-41-5)	
LD50 oral rat	3700 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value; > 2000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	> 8000 mg/kg (Rabbit)
ATE US (oral)	3700.000 mg/kg body weight

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (4719-04-4)	
LD50 oral rat	763 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LC50 inhalation rat (mg/l)	0.371 mg/l/4h (Rat; Experimental value)
ATE US (oral)	763.000 mg/kg body weight
ATE US (vapors)	0.371 mg/l/4h
ATE US (dust, mist)	0.371 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
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Serious eye damage/irritation	: Not classified
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Respiratory or skin sensitization	: May cause an allergic skin reaction.
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Germ cell mutagenicity	: Not classified
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Carcinogenicity	: Not classified
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Reproductive toxicity	: Not classified
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Specific target organ toxicity (single exposure)	: Not classified
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Specific target organ toxicity (repeated exposure)	: Not classified
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Aspiration hazard	: Not classified
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### SECTION 12: Ecological information

#### 12.1. Toxicity

##### Ecology - general

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Do not discharge into drains or the environment. Do not discharge into surface water.

#### 2-methyl-2,4-pentanediol (107-41-5)

EC50 Daphnia 1	5410 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
LC50 fish 2	9450 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss; Flow-through system; Fresh water; Experimental value)
Threshold limit algae 1	> 429 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)

#### 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (4719-04-4)

LC50 fish 1	16.07 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Brachydanio rerio; Static system; Fresh water; Experimental value)
EC50 Daphnia 1	11.9 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
EC50 Daphnia 2	8.75 mg/l (EC0; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	6.66 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Experimental value)
Threshold limit algae 2	1.56 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Experimental value)

#### 12.2. Persistence and degradability

#### 2-methyl-2,4-pentanediol (107-41-5)

Persistence and degradability	Readily biodegradable in water. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.02 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.20 g O <sub>2</sub> /g substance
ThOD	2.3 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.01

#### 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (4719-04-4)

Persistence and degradability	Readily biodegradable in water.
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#### 12.3. Bioaccumulative potential

#### 2-methyl-2,4-pentanediol (107-41-5)

Log Pow	0.58 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

#### 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (4719-04-4)

Log Pow	-4.67 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

#### 12.4. Mobility in soil

#### 2-methyl-2,4-pentanediol (107-41-5)

Surface tension	0.033 N/m
Log Koc	Koc,Other; 1; Calculated value

#### 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (4719-04-4)

Log Koc	log Koc,PCKOCWIN v1.66; 1; Calculated value; Koc; PCKOCWIN v1.66; 10; Calculated value
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#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

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### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Transport document description

: UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III

UN-No.(DOT)

: UN3082

Proper Shipping Name (DOT)

: Environmentally hazardous substances, liquid, n.o.s.

Hazard Classes (DOT)

: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

Hazard labels (DOT)

: 9 - Class 9 (Miscellaneous dangerous materials)



Packing group (DOT)

: III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx)

: 203

DOT Packaging Bulk (49 CFR 173.xxx)

: 241

DOT Symbols

: G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102)

: 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.

146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.

173 - An appropriate generic entry may be used for this material.

335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s." UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx)

: 155

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)

: No limit

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)

: No limit

DOT Vessel Stowage Location

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Other information

: No supplementary information available.

#### TDG

No additional information available

#### Transport by sea

UN-No. (IMDG)

: 3082

Proper Shipping Name (IMDG)

: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class (IMDG)

: 9 - Miscellaneous dangerous compounds

Packing group (IMDG)

: III - substances presenting low danger

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### Air transport

UN-No.(IATA)	: 3082
Proper Shipping Name (IATA)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class (IATA)	: 9 - Miscellaneous Dangerous Goods
Packing group (IATA)	: III - Minor Danger

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (4719-04-4)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
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### 15.2. International regulations

#### CANADA

During the transition period (June 2015-June 2017), Canadian regulation requires that the supplier must provide a document that conforms to either Controlled Products Regulations (WHMIS 1988) or HPR (WHMIS 2015), and not a combination of both. This document conforms to the post June 2017 HPR (WHMIS 2015) for a specific controlled or hazardous product. The classification, label and (material) SDS fully complies with the specific regulation chosen by the supplier.

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

#### 2-methyl-2,4-pentanediol (107-41-5)

U.S. - New Jersey - Right to Know Hazardous Substance List
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## SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
H227	Combustible liquid
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction

NFPA health hazard

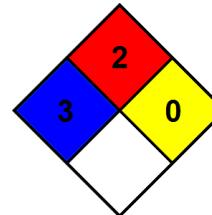
: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard

: 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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### HMIS III Rating

Health	: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability	: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal Protection	: B B - Safety glasses, Gloves

### SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*