

## SECTION I - PRODUCT AND COMPANY IDENTIFICATION

Name of the Product: Citru-Gest

Product Code: FG0820

Producer:

Perma Incorporated

605 Springs Road

Bedford, MA 01730

Telephone Number for Information - (978) 667-5161

Emergency Phone Number - (800) 255-3924 ChemTel Inc.

## SECTION II – HAZARD(S) IDENTIFICATION

Classification:

Flammable Liquids, Category 3

Labeling:

Symbol: Flame

Signal Word: Warning

Hazard Statement:

Flammable liquid and vapor.

Precautionary Statements:

Keep container tightly closed when not in use.

No smoking.

Wear protective gloves and eye/face protection.

Avoid contact with skin, eyes or clothing.

Store in a cool well-ventilated area.

Avoid release to the environment.

## SECTION III – Composition/Information On Ingredients

Component	CAS#	Weight (%)
Orange Terpenes	5989-27-5	75-85
Dipropylene glycol monomethyl ether	34590-94-8	8-12
Isopropanol	67-63-0	1-3
1-Methoxy-2-propanol	107-98-2	1-3
Nonylphenol polyethylene glycol ether	127087-87-0	4-6

## SECTION IV – FIRST AID MEASURES

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

**Eye Contact:** Move individual away from exposure. Immediately flush eyes with large quantities of clean water for at least 15 minutes. Get immediate medical attention.

**Ingestion:** DO NOT INDUCE VOMITING. This material may enter the lungs during vomiting. Never give anything by mouth to an unconscious person. GET IMMEDIATE MEDICAL ATTENTION.

**Inhalation:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet. GET IMMEDIATE MEDICAL ATTENTION.

## **SECTION V – FIRE FIGHTING MEASURES**

Suitable Extinguishing Media: Alcohol resistant foam, carbon dioxide (CO<sub>2</sub>), dry chemical.

Unsuitable Extinguishing Media: Water

Hazardous Combustion Products: Decomposition products may include carbon monoxide and carbon dioxide.

Fire/Explosion Hazard: None known.

Protective Equipment & Precautions for Firefighters: Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use. Evacuate all persons from the fire area to a safe location. Move non-burning material, as feasible, to a safe location as soon as possible. Use water spray to cool fire-exposed containers.

## **SECTION VI – ACCIDENTAL RELEASE MEASURES**

Personal Precautions: Depending on the extent of release, consider the need for fire fighters/emergency responders with adequate personal protective equipment for cleaning up. Do not eat, drink or smoke while cleaning up. Use a self-contained respirator, a mask with filter or a filtering mask. Wear protective clothing, safety glasses and impervious gloves (e.g. neoprene gloves). Ensure adequate ventilation. Avoid all sources of ignition: hot surfaces and open flames (see also section 7).

Environmental Precautions: Prevent spills from entering storm sewers or drains and contact with soil.

Methods For Cleaning Up: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or other confined areas. Contain and collect spillage with absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazards as the spilled product. Note, see section 1 for emergency contact information and section 13 for waste disposal.

## **SECTION VII – HANDLING AND STORAGE**

Precautions for Safe Handling: Put on appropriate personal protective equipment. Do not get in eyes, skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container, tightly closed, when not in use. Keep away from acids. Empty containers retain product residue and can be dangerous. Do not reuse container.

Advice on General Occupational Hygiene: Eating, drinking and smoking should be prohibited in areas where this product is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional hygiene measures.

**KEEP OUT OF REACH OF CHILDREN**

## SECTION VIII – EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Orange Terpenes 5989-27-5

ACGIH time weighted average 20 ppm

### Dipropylene glycol monomethyl ether 34590-94-8

ACGIH time weighted average 100 ppm

ACGIH short term exposure limit 150 ppm

OSHA Z1 permissible exposure limit 600 mg/m<sup>3</sup>

### Isopropanol 67-63-0

NIOSH recommended exposure limit 400 ppm

NIOSH recommended exposure limit 980 mg/m<sup>3</sup>

NIOSH short term exposure limit 500 ppm

NIOSH short term exposure limit 1,225 mg/m<sup>3</sup>

OSHA Z1 permissible exposure limit 400 ppm

OSHA Z1 permissible exposure limit 980 mg/m<sup>3</sup>

ACGIH time weighted average 200 ppm

ACGIH short term exposure limit 400 ppm

### 1-Methoxy-2-propanol 107-98-2

ACGIH time weighted average 100 ppm

ACGIH short term exposure limit 150 ppm

NIOSH recommended exposure limit 100 ppm

NIOSH recommended exposure limit 360 mg/m<sup>3</sup>

NIOSH short term exposure limit 150 ppm

NIOSH short term exposure limit 540 mg/m<sup>3</sup>

OSHA Z1A time weighted average 100 ppm

OSHA Z1A time weighted average 360 mg/m<sup>3</sup>

OSHA Z1A short term exposure limit 150 ppm

OSHA Z1A short term exposure limit 540 mg/m<sup>3</sup>

Appropriate Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Exposure Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure levels below TLV(s).

#### Individual Protection Measures:

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher

degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

8 hours (breakthrough time): butyl rubber

Body Protection: Personal protective equipment for the body should be selected based on the task performed and the risks involved. Should be approved by a specialist before handling this product. Recommended, safety apron.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: natural rubber (latex)

#### **SECTION IX – PHYSICAL PROPERTIES**

Appearance	Red
Odor	Citrus
Odor Threshold	Not available
Physical State	Liquid
pH	8.6-9.2
Flash Point (TCC)	49°C (120°F)
Flammability (solid, gas)	Not available
Upper Explosive Limit	6.1%
Lower Explosive Limit	0.7%
Vapor Pressure	2.0 mmHg
Vapor Density	4.7
Relative Density	0.85
Solubility	Insoluble
Partition coefficient:	Not available
Auto-Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	5-10 cps. @ 25°C

#### **SECTION X – STABILITY AND REACTIVITY**

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Vapors may form explosive mixture with air.

Conditions to Avoid: Keep away from heat, flame, sparks and other ignition sources.

Incompatible Materials: Avoid contact with the following:

- Halogens
- Peroxides
- Strong acids
- Strong oxidizing agents
- Acidic clays
- Vinyl chloride
- Iodine pentafluoride

Hazardous Decomposition Products: Acrid smoke and fumes.

## SECTION XI – TOXICOLOGICAL INFORMATION

Orange Terpenes 5989-27-5

Oral LD50 Rat: 4,400 mg/kg

Dermal LD50 Rabbit: > 5,000 mg/kg

Dipropylene glycol monomethyl ether 34590-94-8

Oral LD 50 Rat: > 5,000 mg/kg

Dermal LD50 Rabbit: 9,510 mg/kg

Isopropanol 67-63-0

Oral LD50 Rat: 4,700-5,800 mg/kg

Inhalation LC50 Rat: 16,000 ppm, 4 h

Dermal LD50 Rabbit: 5,030-7,900 mg/kg

1-Methoxy-2-propanol 107-98-2

Oral LD50 Rat: 4,016 mg/kg

Inhalation LC50 Rat: 7,000 ppm, 6 h

Dermal LD50 Rat: > 2,000 mg/kg

Nonylphenol polyethylene glycol ether 127087-87-0

Oral LD50 Rat: 4,854 mg/kg

Inhalation LC50 Rat: 11 mg/l, 4 h

Dermal LD50 Rat: 2,534 mg/kg

Chronic Toxicity

No component of this product, present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen or potential carcinogen by NTP, OSHA and or IARC.

Reproductive Toxicity

For similar material(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Target Organs

Eyes, Central Vascular System, Kidney, Liver, Central Nervous System

## SECTION XII – Ecological Information

Orange Terpenes 5989-27-5

Acute LC50 0.702 mg/L

Primephales promelas (fathead minnow) 96h flow-through

Acute EC50 0.36 mg/L

Daphnia magna (water flea) 48h static

Acute EC50 150 mg/L

Desmodesmus subspicatus (green algae) 72h static

Dipropylene glycol monomethyl ether 34590-94-8

Acute LC50 > 1,000 mg/L	Poecilia reticulata (guppy) 96h static
Acute LC50 1,919 mg/L	Daphnia magna (water flea) 48h static
Acute LC50 > 1,000 mg/L	Crangon crangon (shrimp) 96h semi-static
Acute LC50 800000 ug/L	Crustaceans: Common shrimp, sand shrimp, (48h) static
Acute LC50 1250000 ug/L	Fish: Inland silverside, menidia beryllins (96h) static
Isopropanol 67-63-0	
Acute LC50 > 10,000 mg/L	Daphnia magna (water flea) 48h static
1-Methoxy-2-propanol 107-98-2	
Acute LC50 20,800 mg/L	Primephales promelas (fathead minnow) 96h static
Acute LC50 23,300 mg/L	Daphnia magna (water flea) 48h static
Nonylphenol polyethylene glycol ether 127087-87-0	
Acute LC50 5.25 mg/L	Primephales promelas (fathead minnow) 96h static
Acute EC50 5.80 mg/L	Daphnia magna (water flea) 48h static

### SECTION XIII – DISPOSAL CONSIDERATIONS

Waste Disposal Methods – Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your local State Water Board or Regional Office of the EPA.

### SECTION XIV – TRANSPORTATION INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. Dangerous goods descriptions may not reflect end-use or region-specific exceptions that can be applied. For additional information, please contact the distributor listed in section 1 of this SDS.

TDG: Not Regulated  
DOT: Not Regulated  
IATA: Not Regulated  
IMDG/IM: Not Regulated

### SECTION XV – REGULATORY INFORMATION

TSCA Inventory Status: All components of this material are listed on the US Toxic Substances Control Act (TSCA) inventory.

Canadian Inventory Status: This material contains components that are NOT listed on the Canadian Domestic Substances List (DSL).

Australian Inventory Status: This product contains one or more chemicals currently not on the Australian Inventory of Chemical Substances.

US Federal Regulations:

Section 313 of Title III of the Superfund Amendments and Reauthorization ACT of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	CAS#	Weight (%)	SARA 313 Status
1-Methoxy-2-propanol	107-98-2	1-3	Listed

SARA 311/312 Hazardous Categorization

No products were found.

TSCA 12(b) – Export Notification:

This material does not contain any components that are subject to the US Toxic Substances Control act (TSCA) section 12(b) Export Notification requirements.

Clean Air Act, Section 12 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any reportable HAPs.

Chemical Weapons Convention (CWC):

This product does not contain any listed substances.

California Prop. 65: This product contains no listed substances known to the state of California to cause cancer, birth defects or other reproductive harm at levels which require reporting under the state statute.

**SECTION XVI – OTHER INFORMATION**

HMIS Rating:           Health 1  
                              Flammability 2  
                              Reactivity 0

Prepared By:           David Sadlo  
Preparation Date:      May 26, 2015

The information herein is based on data considered to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results. Also this shall not establish a legally valid contractual relationship.

Vendor assumes no responsibility for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in use of the material.

Our products are intended for sale to industrial and commercial customers. We encourage customers to inspect and test our products before use and to satisfy themselves as to suitability for their specific applications.

Warranty: The manufacturer warrants that products sold comply with specifications as represented and will perform satisfactorily if used according to the directions, or the manufacturer will refund or replace any unused portion thereof, for a period of one year from the date of manufacture. The manufacturer does not make any other warranty, or assume responsibility of any kind, expressed or implied regarding the effect or result of the products use; and assumes no responsibility of injury to vendee or third parties proximately caused by the material if reasonable safety procedures are not adhered to.