

## 1. Identification

**Product identifier** Flexall Plus Pain Relieving Gel  
**Other means of identification** None.  
**Recommended use** Topical Analgesic  
**Recommended restrictions** None known.  
**Manufacturer/Importer/Supplier/Distributor information**  
**Company name** Chattem, Inc.  
**Address** 1715 West 38th Street  
 Chattanooga, TN 37409  
**Telephone** 1-800-366-6077  
**E-mail** consumer.affairs@chattem.com

**Emergency phone number** (800) 366-6833

## 2. Hazard(s) identification

**Physical hazards** Flammable liquids Category 3  
**Health hazards** Skin corrosion/irritation Category 2  
 Serious eye damage/eye irritation Category 1

### OSHA defined hazards

This mixture is a product regulated by the FDA and is not considered a hazard when used in a manner consistent with the labeled directions.

### Label elements



**Signal word** Danger  
**Hazard statement** Flammable liquid and vapor. Causes skin irritation.

### Precautionary statement

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.

**Response** If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.

**Storage** Store in a well-ventilated place. Keep cool.

**Disposal** Product is a consumer commodity. Empty containers may be disposed of as refuse.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Menthol	89-78-1	>16

Ethanol	64-17-5	>15
Polyethylene Glycol Stearyl Ether	9005-00-9	11

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Causes eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse. Product contains methyl salicylate. Handle with caution by individuals who have an allergic reaction to aspirin or other salicylates.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Applies only to bulk product use in industrial setting. Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Flammable liquid and vapor.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Applies only to the product when used in an industrial setting. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.  Industrial: Wipe up with absorbent material. Collect and place in a suitable disposal container. This material is not known to possess additional hazards when spilled, beyond those of other non-hazardous solids.  Household: Product used in household may be disposed of in refuse or sewer.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Campher (CAS 76-22-2)	PEL	2 mg/m <sup>3</sup>	
Ethanol (CAS 64-17-5)	PEL	1900 mg/m <sup>3</sup>	
		1000 ppm	
Glycerin (CAS 56-81-5)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Campher (CAS 76-22-2)	STEL	3 ppm
	TWA	2 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Campher (CAS 76-22-2)	TWA	2 mg/m <sup>3</sup>
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup>
		1000 ppm

#### US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Menthol (CAS 89-78-1)	STEL	3 ppm
	TWA	1 ppm

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

### Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Applies only to the product when used in an industrial setting.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Applies only to the product when used in an industrial setting. Wear safety glasses with side shields (or goggles).

#### Skin protection

##### Hand protection

Applies only to the product when used in an industrial setting. Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

#### Skin protection

##### Other

Applies only to the product when used in an industrial setting. Wear suitable protective clothing.

#### Respiratory protection

Applies only to the product when used in an industrial setting. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	When using do not smoke.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Semi-solid.
<b>Form</b>	Cream.
<b>Color</b>	White.
<b>Odor</b>	Menthol.
<b>Odor threshold</b>	Not available.
<b>pH</b>	5 - 7.5
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	188 °F (86.67 °C)
<b>Flash point</b>	85.0 °F (29.4 °C)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	0.97 @ 25C
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	60000 cSt @ 25C
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
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**Skin contact** Causes skin irritation.

**Eye contact** Causes serious eye irritation.

**Ingestion** Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Causes eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Product contains methyl salicylate. Handle with caution by individuals who have an allergic reaction to aspirin or other salicylates.

#### Information on toxicological effects

##### Acute toxicity

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	30000 mg/m3
Glycerin (CAS 56-81-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Guinea pig	45 ml/kg, Days
<i>Inhalation</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
<i>Oral</i>		
LD50	Rat	27 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

##### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

##### NTP Report on Carcinogens

Not listed.

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and degradability** No data is available on the degradability of this product.

##### Bioaccumulative potential

###### Partition coefficient n-octanol / water (log Kow)

Ethanol (CAS 64-17-5) -0.31  
Menthol (CAS 89-78-1) 3.3

**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 considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Applies only to the product when used in an industrial setting.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Not a hazardous waste as generated per the EPA RCRA regulation for solutions of 24% or less alcohol (40 CFR 261.21(a)(1)).

**Waste from residues / unused products** For bulk quantities: Dispose of in accordance with local regulations. 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. Product is a consumer commodity. Empty containers may be disposed of in refuse.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.  
DOT Exemption 49CFR173.150(e)(2).

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US federal regulations** This mixture is a product regulated by the FDA and is not considered a hazard when used in a manner consistent with the labeled directions.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Ethanol (CAS 64-17-5) LISTED

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

#### 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

##### US. Massachusetts RTK - Substance List

Campher (CAS 76-22-2)  
Ethanol (CAS 64-17-5)  
Glycerin (CAS 56-81-5)

##### US. New Jersey Worker and Community Right-to-Know Act

Campher (CAS 76-22-2)  
Ethanol (CAS 64-17-5)  
Glycerin (CAS 56-81-5)

##### US. Pennsylvania Worker and Community Right-to-Know Law

Campher (CAS 76-22-2)  
Ethanol (CAS 64-17-5)  
Glycerin (CAS 56-81-5)

##### US. Rhode Island RTK

Not regulated.

##### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

#### 16. Other information, including date of preparation or last revision

**Issue date** 21-December-2015

**Revision date** 26-September-2016

**Version #** 03

**HMIS® ratings** Health: 3  
Flammability: 3  
Physical hazard: 0

**Disclaimer** Chattem, 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.