

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

074601100

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

071369222 071369230 071369248 071369255 074601175

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

074601019 074601043 074601076 074601159 074601167 074601183 074601662 074601704 074601712 074601720  
074601738 074601795 074601803 074601811 074601852



# SAFETY DATA SHEET

Issue Date 26-Sept-2014

Revision Date 14-July-2015

Version 3

## 1. IDENTIFICATION

### Product Identifier

Product Name TEMPO LIQUID

### Other means of identification

SDS# 025  
UN/ID No UN1993  
Product Code 1003, 1004, 1006, 1007, 1008, 1012, 1023, 1034, 1056

### Recommended use of the chemical and restrictions on use

Recommended Use Fabrication of denture relines

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

Supplier Address Lang Dental Mfg. Co., Inc.  
175 Messner Dr.  
Wheeling, IL 60090  
USA

### Emergency telephone number

Company Phone Number 847-215-6622  
Emergency Telephone (INFOTRAC) 352-323-3500 (International)  
800-535-5053 (North America)

### Authorized European Representative

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## 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity – Dermal	Category 4
Acute toxicity – Inhalation (Gases)	Category 4
Reproductive toxicity	Category 1B
Flammable liquids	Category 2

**Signal word** Danger

**Hazard statements** H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H225 Highly flammable liquid and vapor



**Physical State**    Liquid                      **Appearance**    Colorless                      **Odor**    Mint, alcohol-like

**Precautionary Statements – Prevention**

- P210 Keep away from heat/sparks/open flames/hot surfaces. – No Smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing mist or vapor
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/eye protection/face protection.

**Precautionary Statements – Response**

- P308+P313 If exposed or concerned; get medical advice/attention.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P363 Wash contaminated clothing before reuse.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P370+P378 In case of fire: Use appropriate media to extinction.
- P391 Collect spillage.

**Precautionary Statements – Storage**    P403+P235 Store in a well-ventilated place. Keep cool.

**Precautionary Statements – Disposal**    P501 Dispose of contents/container to an approved waste disposal plant.

**Hazardous component(s) for labeling**    Contains ethyl alcohol

**Hazards not otherwise classified (HNOC)** Not applicable.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight - %	Trade Secret
Citric Plasticizer	Proprietary	< 85	*
Ethyl alcohol	64-17-5	< 25	*

\*Specific CAS No and chemical weight have been withheld as a trade secret.

**4. FIRST AID MEASURES**

**First aid measures**

- General advice**                      If exposed or concerned, get medical advice or attention.
  
- Inhalation**                              Remove victim to fresh air and keep at rest in a position comfortable for breathing. Keep patient warm and at rest. If not breathing, give artificial respiration. Call a physician or poison control center immediately.
  
- Eye contact**                              Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

**Ingestion** Do NOT induce vomiting. Wash out mouth with water and give 200-300 mL (half pint) of water to drink. Get medical attention. Never give anything by mouth to an unconscious person.

**Skin Contact** Wash off immediately with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs, get medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** May cause skin and eye irritation. May cause irritation to mucous membranes and upper respiratory tract. Short-term overexposure above 1,000 ppm by inhalation may cause central nervous system (CNS) effects such as headache and irritation of the eyes, nose and throat. If continued for more than an hour, additional CNS effects such as dizziness, drowsiness, loss of appetite and inability to concentrate may occur. Gastrointestinal (stomach) effects may occur with symptoms such as nausea and vomiting.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable:** Dry chemical, carbon dioxide (CO<sub>2</sub>), water spray (fog), alcohol resistant foam

**Unsuitable:** Not determined

**Specific hazards arising from the chemical**

Flammable. Sealed containers may rupture explosively if hot. Vapors may travel to source of ignition and flash back. Use a water spray or fog to reduce or direct vapors. Cool containers exposed to flames with water until well after the fire is out.

**Hazardous Combustion Products:** Carbon oxides

**Sensitivity to Mechanical Impact:** No

**Sensitivity to Static Discharge:** Yes

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Fight fire from a safe location.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Eliminate all ignition sources. No smoking, flares, sparks or flames in immediate area. All equipment used when handling the product must be grounded. Use personal protective equipment as required.

**Environmental precautions** Prevent product from entering drains. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

**Methods and material for containment and clean-up**

**Method for containment** Collect using an inert absorbent material and place in appropriate containers for disposal. Do not use combustible materials such as sawdust.

**Method for clean-up** Use non-sparking hand tools and explosion-proof electrical equipment. Keep in suitable closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on safe handling**

Keep containers closed when not in use. All equipment used when handling the product must be grounded. Use non-sparking hand tools and explosion-proof electrical equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Use only in well-ventilated areas. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Take precautionary measures against static discharges. Wash thoroughly after handling. Keep away from heat, sparks, open flames and hot surfaces. NO SMOKING. Use personal protection recommended in Section 8.

### Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e. pilot lights, electric motors and static electricity). Protect from direct sunlight. Keep at a temperature not exceeding 25°C.

#### **Packaging Materials**

Keep in original container.

#### **Incompatible materials**

Strong oxidizing agents, silver salts, acid chlorides, alkali metals, metal hydrides

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines

Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric plasticizer	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (vacated)	IDLH: 4000 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup> (vacated)	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

### Appropriate engineering controls

#### **Engineering controls**

Apply technical measures to comply with the occupational exposure limits. Eyewash stations.

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

#### **Eye / face protection**

Depending on the use of this product, safety glasses or goggles may be worn. If necessary, refer to US OSHA 29CFR SS1910.133, Canadian standards or the European Standard EN 166. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

#### **Skin and body protection**

If anticipated that prolonged and repeated skin contact will occur during use of this product, wear gloves for routine industrial use. If necessary, refer to US OSHA 29CFR SS1910.138 or the appropriate standards of Canada or the EC member states. Wear suitable protective clothing.

#### **Respiratory protection**

Wear suitable respiratory equipment if exposure to levels above the occupational exposure limit is likely. A suitable mask with filter type A may be appropriate. In the event of formation of particularly high levels of vapor, a self-contained breathing apparatus may be appropriate.

#### **General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state	Liquid	Odor	Mint, alcohol-like
Appearance	Colorless	Odor threshold	Not determined
Color	Clear		

<u>Property</u>	<u>Values</u>	<u>Remarks / Method</u>
pH	Not determined	
Melting point / freezing point	-144°C / -227.2°F	
Boiling point / boiling range	78.4°C / 173.12°F	
Flash point	19.4°C / 67°F	
Evaporation rate	Not determined	
Flammability (solid, gas)	n/a (liquid)	
Flammability limits in air		
Upper flammability limit	Not established	
Lower flammability limit	Not established	
Vapor pressure	45 mm Hg	@ 20°C
Vapor density	1.59	@15.5°C (Air = 1)
Specific gravity	0.996-0.998	
Water solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition coefficient	Not determined	
Autoignition temperature	Not established	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic viscosity	Not determined	
Explosive properties	Not determined	
Oxidizing properties	Not determined	

### Other information

Density	0.996-0.998
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## 10. STABILITY AND REACTIVITY

**Reactivity** Not reactive under normal conditions

**Chemical stability** Stable under recommended storage conditions.

**Possibility of hazardous reactions** None under normal processing

**Hazardous polymerization** Hazardous polymerization does not occur.

### Conditions to avoid

Excessive heat, sparks, flames. Take precautionary measures against static discharges. Avoid all possible sources of ignition. Contamination.

**Conditions to avoid** Excessive heat, sparks, flames, sources of ignition, static discharge, direct sunlight, moisture

**Incompatible materials** Strong oxidizing agents, silver salts, acid chlorides, alkali metals, metal hydrides

**Hazardous decomposition products** None under normal conditions

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposures

#### Product information

<b>Inhalation</b>	Harmful if inhaled
<b>Eye contact</b>	Avoid contact with eyes.
<b>Skin contact</b>	Harmful in contact with skin
<b>Ingestion</b>	Not expected to be toxic

#### Component information

Chemical Name	ORAL LD50	DERMAL LD50	INHALATION LC50
Citric plasticizer	6300 mg/kg (rat)	> 2000 mg/kg (rabbit)	>15.68 mg/L (rat) 4 h
Ethyl Alcohol 64-17-5	7060 mg/kg (rat)	-	124.7 mg/L (rat) 4 h

### Information on physical, chemical and toxicological effects

**Symptoms** May cause skin and eye irritation. May cause irritation to the mucous membranes and upper respiratory tract.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** May cause allergic skin reaction.

**Carcinogenicity** Ethyl alcohol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl alcohol 64-17-5	A3	Group 1	Known	X

#### **IARC (International Agency for Research on Cancer)**

Group 1 IARC Carcinogenic to humans

**Reproductive toxicity** May damage fertility or the unborn child.

**Numerical measures of toxicity – Product** Not determined

The following values are calculated based on chapter 3.1 of the GHS document.

<b>ATEmix (oral)</b>	6439	mg/kg
<b>ATEmix (dermal)</b>	1100	mg/kg
<b>ATEmix (inhalation-gas)</b>	4499	mg/L
<b>ATEmix (inhalation-dust/mist)</b>	19	mg/L
<b>ATEmix (inhalation-vapor)</b>	124.7	mg/L

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Not classified as harmful or toxic to fish, algae and higher aquatic plants

Chemical Name	Algae / aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Citric plasticizer	0.4: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.31 – 5.45: 96 h Pimephales promelas mg/L LC50 static 0.42 – 1.28: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 10.9 mg/L 30 min EC50 = 10.9 mg/L 5 min EC50 = 11.1 mg/L 15 min EC50 = 2.2 mg/L 24 h	2.99 48 h Daphnia magna mg/L EC50 static 3.4: 48 h Daphnia magna mg/L EC50

	1.2: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	0.71 – 1.2: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 1.24 – 5.3: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 1.38 – 1.74: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through > 1.24: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through		
Ethyl alcohol 64-17-5	-	12.0 – 16.0: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static 13400 - 15100: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	-	9268 – 14221: 48 h <i>Daphnia magna</i> mg/L LC50 10800: 24 h <i>Daphnia magna</i> mg/L EC50 2: 48 h <i>Daphnia magna</i> mg/L EC50

**Persistence and degradability** Material is readily biodegradable

**Bioaccumulation** This product has low potential for bioaccumulation.

**Mobility** This product is water soluble and may spread in water systems.

Chemical Name	Partition coefficient
Citric plasticizer	5.38
Ethyl alcohol 64-17-5	-0.32

**Other adverse effects** For ethyl alcohol: When spilled on the land, it is apt to volatilize, biodegrade and/or leach into the ground water. It is anticipated based on physical properties including water solubility, vapor pressure and octanol/water coefficient (log P=-0.31) that water will serve as the final media. Based on these factors it is anticipated that this substance will neither adsorb to soil nor bioconcentrate in aquatic organisms. Once in water photolysis, oxidation, hydrolysis and biodegradation are anticipated to occur.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes** Follow all local and national government regulations in disposing material or contaminated packaging.

**Contaminated Packaging** Reuse of empty containers is not recommended. Employees should be advised of the potential hazards due to residual material associated with empty containers. Dispose of all empty containers in accordance with federal, state and local regulations.

Chemical Name	RCRA	RCRA – Basis for Listing	RCRA – D Series Wastes	RCRA – U Series Wastes
Citric plasticizer	U069	Included in waste stream; F039	-	U069

Chemical Name	California Hazardous Waste Status
Ethyl alcohol 64-17-5	Toxic Ignitable

### 14. TRANSPORTATION INFORMATION

#### DOT

UN / ID No	UN1993
Proper shipping name	Flammable liquid, n.o.s. (Ethyl alcohol / plasticizer solution)
Hazard Class	3
Packing Group	II



**IATA**

UN / ID No	UN1993
Proper shipping name	Flammable liquid, n.o.s. (Ethyl alcohol / plasticizer solution)
Hazard Class	3
Packing Group	II

**IMDG**

UN / ID No	UN1993
Proper shipping name	Flammable liquid, n.o.s. (Ethyl alcohol / plasticizer solution)
Hazard Class	3
Packing Group	II

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

<b>TSCA</b>	Listed	United States Toxic Substances Control Act 8(b) Inventory
<b>DSL</b>	Listed	Canadian Domestic Substances List
<b>EINECS</b>	Listed	European Inventory of Existing Chemical Substances

**EU Regulations**    EC No. 1272/2008 (CLP) Classification, Labeling, Packaging  
 Medical Devices Directive 93/42/EEC - Class I Medical Devices

**US Federal Regulations**

Chemical Name	CAS	Weight %	SARA 313 Threshold Values %
Citric plasticizer	-	< 85	1.0

**SARA 311 / 312 Hazard Categories**

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Citric plasticizer	10 lb.	X	X	X

Chemical Name	Hazardous Substances RQs	CERCLA / SARA RQ	Reportable Quantity (RQ) Final
Citric plasticizer	10 lb.	-	10 lb. / 4.54 kg

**US State Regulations**

Chemical Name	California Proposition 65
Citric plasticizer	Developmental Female Reproductive Male Reproductive

**US State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Citric plasticizer	X	X	X
Ethyl alcohol 64-17-5	X	X	X

## 16. OTHER INFORMATION

HMIS	Health Hazards	Flammability	Physical Hazards
	1	3	0

**Issue Date** 26-Sept-2014

**Revision Date** 14-July-2015

**Revision Note** Section 2 – Revise some Hazard Statements and Precautionary Statements, add hazardous component for labeling info

**Information to be updated in due course** Hazard pictograms listed in this SDS to be added to product label

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# SAFETY DATA SHEET

Issue Date 26-Sept-2014

Revision Date 21-Oct-2015

Version 3

## 1. IDENTIFICATION

### Product Identifier

Product Name TEMPO POWDER

### Other means of identification

SDS# 017

Product Code 1012, 1020, 1023, 1030, 1034, 1050, 1056, 1070, 1080

### Recommended use of the chemical and restrictions on use

Recommended Use Fabrication of denture relines

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

Supplier Address Lang Dental Mfg. Co., Inc.  
175 Messner Dr.  
Wheeling, IL 60090  
USA

### Emergency telephone number

Company Phone Number 847-215-6622  
Emergency Telephone (INFOTRAC) 352-323-3500 (International)  
800-535-5053 (North America)

### Authorized European Representative

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## 2. HAZARDS IDENTIFICATION

### Classification

Skin sensitization	Category 1
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Signal word Warning

Hazard statements H317 May cause an allergic skin reaction.



<b>Physical State</b>	Powder	<b>Appearance</b>	Fine, white or pink	<b>Odor</b>	Faint odor in bulk
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### Precautionary Statements – Prevention

P261 Avoid breathing dust, fumes, gas, mist, vapors or spray.  
P264 Wash hands and exposed skin thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary Statements – Response**

P302+P352 IF ON SKIN: Wash with soap and water.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P363 Wash contaminated clothing before reuse.

**Precautionary Statements – Disposal**

P501 Dispose of contents/container to an approved waste disposal plant.

<b>3. COMPOSITION / INFORMATION ON INGREDIENTS</b>
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Chemical Name	CAS No	Weight - %	Trade Secret
Polymer	9003-42-3	60 - 100	*
Polymer	9011-14-7	60 - 30	*
Benzoyl peroxide	94-36-0	0 - 5	*

\*Specific chemical weight has been withheld as a trade secret.

<b>4. FIRST AID MEASURES</b>
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**First aid measures**

**Inhalation** Remove to fresh air. Keep at rest in a position comfortable for breathing, Get medical attention if discomfort persists.

**Eye contact** Rinse immediately with plenty of water, including under the eyelids, for at least 15 minutes. If irritation persists, get medical advice / attention.

**Ingestion** Do NOT induce vomiting. Drink plenty of water or milk immediately. If vomiting, continue to offer water or milk. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately and provide an estimate of when and how much material was ingested.

**Skin Contact** Wash with soap and water. If irritation persists, call a physician. Take off contaminated clothing and wash before reuse.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Eyes, skin and respiratory tract may be irritated by gross overexposure to particulates. Eyes may be red, itchy, irritated or watering from overexposure. Ingestion of large amounts may be irritating if product is swallowed. May cause nausea, headache, vomiting or diarrhea.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

<b>5. FIRE-FIGHTING MEASURES</b>
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**Extinguishing Media**

**Suitable:** Water, carbon dioxide (CO<sub>2</sub>), dry chemical

**Unsuitable:** Avoid extinguishing methods which may generate dust clouds. Water stream can disperse dust in air producing a fire hazard and possible explosion hazard if exposed to ignition source.

**Specific hazards arising from the chemical**

For bulk size: Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately those of coal dust.

**Protective equipment and precautions for firefighters**

Self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Use personal protective equipment as required. Remove any contaminated clothing and wash thoroughly before reuse.

### Methods and material for containment and clean-up

**Method for containment** Prevent further leakage or spillage if safe to do so.

**Method for clean-up** Sweep up to avoid slipping hazard. Keep airborne particulates at a minimum when cleaning up spills. Clean up in accordance with all applicable regulations. Wash all affected areas with plenty of warm water and soap.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Use only in well-ventilated areas. Avoid contact with skin, eyes or clothing. Avoid breathing dust or fume. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed to prevent water absorption and contamination. Store in a dry, cool and well-ventilated place away from direct sunlight or other sources of light or intense heat. Temperature not to exceed 35°C.

**Packaging materials** Keep in original container.

**Incompatible materials** Strong oxidizing agents

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Benzoyl peroxide 94-36-0	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (vacated)	IDLH: 1500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>

**Appropriate engineering controls** Apply technical measures to comply with the occupational exposure limits. When working with large quantities of product, provide adequate ventilation (e.g. local exhaust ventilation, fans). Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes. Use good local exhaust at processing equipment, including buffers, sanders, grinders and polishers.

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

**Eye / face protection** Depending on the use of this product, safety glasses or goggles may be worn. If necessary, refer to US OSHA 29 CFR SS1910.133, Canadian standards or the European Standard EN 166. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

**Skin and body protection** If anticipated that prolonged and repeated skin contact will occur during use of this product, wear gloves for routine industrial use. If necessary, refer to US OSHA 29 CFR SS1910.138 or the appropriate standards of Canada or the EC member states.

**Respiratory protection**

No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per US OSHA requirement in 29 CFR SS 1910.134, or applicable US state regulations, or the appropriate standards of Canada, its provinces, EC member states or Australia. VENTILATION: Local exhaust at processing equipment.

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	Powder	<b>Odor</b>	Faint odor in bulk
<b>Appearance</b>	Fine	<b>Odor threshold</b>	Not determined
<b>Color</b>	White or pink		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks / Method</u></b>
pH	Not determined	
Melting point / freezing point	Not determined	
Boiling point / boiling range	Not applicable	
Flash point	304°C / 579°F	
Evaporation rate	Not applicable	
Flammability (solid, gas)	Non-flammable	
Flammability limits in air		
Upper flammability limit	Not applicable	
Lower flammability limit	Not applicable	
Vapor pressure	Not applicable	
Vapor density	Not applicable	
Specific gravity	Not determined	
Water solubility	Insoluble in water	
Solubility in other solvents	Not determined	
Partition coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic viscosity	Not determined	
Explosive properties	Not determined	
Oxidizing properties	Not determined	

## 10. STABILITY AND REACTIVITY

<b><u>Reactivity</u></b>	Not reactive under normal conditions
<b><u>Chemical stability</u></b>	Stable under recommended storage conditions
<b><u>Possibility of hazardous reactions</u></b>	None under normal processing
<b><u>Hazardous polymerization</u></b>	Does not occur.
<b><u>Conditions to avoid</u></b>	Heating above 240°C / 464°F
<b><u>Incompatible materials</u></b>	Strong oxidizing agents
<b><u>Hazardous decomposition products</u></b>	Methacrylate monomer, oxides of carbon when burned

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposures**

<b>Product information</b>	This product has not been tested on animals to obtain toxicology data.
<b>Inhalation</b>	Persons with impaired lung function or asthma-like conditions may experience additional breathing difficulties.
<b>Eye contact</b>	Avoid contact with eyes.
<b>Skin contact</b>	May be irritating to skin in some sensitive individuals, especially after prolonged or repeated contact.
<b>Ingestion</b>	Large amounts may cause nausea, headache, vomiting or diarrhea.

**Component information**

Chemical Name	ORAL LD50	DERMAL LD50	INHALATION LC50
Benzoyl peroxide 94-36-0	6400 mg/kg (rat)	-	-

**Information on physical, chemical and toxicological effects**

**Symptoms** See Section 4.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Not classifiable as a human carcinogen (IARC group 3)

**Numerical measures of toxicity – Product** Not determined

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 6250 mg/kg

<b>12. ECOLOGICAL INFORMATION</b>
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**Ecotoxicity** There is no specific data available for this product; however, very large releases may be harmful or fatal to overexposed aquatic life.

**Persistence and degradability** Not determined

**Bioaccumulation** Not determined

**Mobility** Not determined

**Other adverse effects** Not determined

<b>13. DISPOSAL CONSIDERATIONS</b>
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**Waste treatment methods**

**Disposal of wastes** Follow all local and national government regulations in disposing material or contaminated packaging.

Chemical Name	California Hazardous Waste Status
Benzoyl peroxide 94-36-0	6400 mg/kg (rat)

**Contaminated Packaging** For bulk only: Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards due to residual material associated with empty containers. Dispose of all empty containers properly in accordance with federal, state and local regulations.

Chemical Name	California Hazardous Waste Status
Benzoyl peroxide 94-36-0	Toxic, Ignitable, Reactive

<b>14. TRANSPORTATION INFORMATION</b>
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**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

**TSCA** For use in FDA regulated products only United States Toxic Substances Control Act, Section 8(b) Inventory  
**DSL** Listed Canadian Domestic Substances

**EU Regulations** EC No. 1272/2008 (CLP) Classification, Labeling, Packaging  
Medical Devices Directive 93/42/EEC - Class I Medical Devices

### US Federal Regulations

Chemical Name	CAS	Weight %	SARA 313 - Threshold Values %
Benzoyl peroxide	94-36-0	1	1.0

### US State Regulations

#### US State Right-to-know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Benzoyl peroxide 94-36-0	X	X	X

## 16. OTHER INFORMATION

HMIS	Health Hazards	Flammability	Physical Hazards
	1	1	0

**Issue Date** 26-Sept-2014  
**Revision Date** 21-Oct-2015  
**Revision Note** Section 2 - update precautionary statements.

**Information to be updated in due course** Hazard pictograms listed in this SDS to be added to product label

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet