SAFETY DATA SHEETS

This SDS packet was issued with item:

073263761

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

071101757 073263670

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).

071101765 073263654



Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

- · Product identifier
- · Trade name: PATTERN RESIN LS (Powder)
- · Application of the substance / the mixture Manufacture of dental prothesis
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: GC America Inc. 3737 W. 127th Street Alsip, IL 60803 USA

sds@gcamerica.com

- · Information department: Regulatory Affairs
- Emergency telephone number: During normal opening times (Mon.-Fri. 8:00 AM-5:00 PM CST): +1 (708) 597-0900 Transportation (CHEMTREC®) Emergency Telephone No. +1 (800) 424-9300

2 Hazard identification

· Classification of the substance or mixture

Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.

· Additional information:

The information provided is in regards to the toxicity and hazard rating(s) of the individual component(s) in the formulation. The associated risk(s) depends on the route(s) of exposure. The hazard rating system is based entirely on the existence of the risk(s) and does not take into account the likelihood of reduced risk(s) through proper usage and handling.

· Label elements

- · GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Signal word Warning
- Hazard-determining components of labeling: dibenzoyl peroxide
- Hazard statements May cause an allergic skin reaction.
- Precautionary statements
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves.
 If skin irritation or rash occurs: Get medical advice/attention.
 Specific treatment (see on this label).
 Dispose of contents/container in accordance with local/regional/national/international regulations.

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The substance possesses oxidizing properties.

· HMIS-ratings (scale 0 - 4)

HEALTH 1 Health = 1 1 Fire = 1 FIRE Reactivity = 1**REACTIVITY** 1

3 Composition/Information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 94-36-0 dibenzoyl peroxide

0.5 - 1.5% w/w

· Additional information:

If a substance is marked with **, then substance is a trade secret. This is allowed under OSHA's Hazard Communication Standard (HCS) as a trade secret and under GHS as Confidential Business Information (CBI).

4 First aid measures

Immediately remove any clothing soiled by If symptoms persist consult doctor.			
After inhalation:	empleinte		
Supply fresh air; consult doctor in case of c In case of unconsciousness place patient s			
After skin contact:			
Immediately wash with water and soap and	rinse thoroughly.		
Seek medical treatment.	-		
After eye contact:			
Rinse opened eye for several minutes under	er running water. If symptoms persist, consult a doctor.		
After swallowing:			
Rinse out mouth and then drink plenty of w	ater.		
If symptoms persist consult doctor.			
Information for doctor:			
Most important symptoms and effects, b			
Indication of any immediate medical atte	ention and special treatment needed		
No further relevant information available.			

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5 Firefighting measures

- · Extinguishing media
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

 Personal precautions, protective equipment and emergency procedures Remove persons from danger area. Avoid formation of dust. Avoid contact with the eyes and skin. Wear protective clothing.
 Environmental precautions: Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to penetrate the ground/soil.

- In case of seepage into the ground inform responsible authorities.
- **Methods and material for containment and cleaning up:** Pick up mechanically. Prevent formation of dust.

Dispose of the collected material according to regulations.

Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- Precautions for safe handling
- Observe instructions for use.
- Prevent formation of dust.

Any deposit of dust which cannot be avoided must be regularly removed.

Avoid contact with the eyes and skin.

- Information about protection against explosions and fires: Dust can combine with air to form an explosive mixture.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Store only in unopened original receptacles.
- Information about storage in one common storage facility: Store away from foodstuffs.

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(Contd. of page 3) • Further information about storage conditions: Observe instructions for use / storage.

• Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

· Additional information about design of technical systems: No further data; see item 7.

- Control parameters
- · Components with limit values that require monitoring at the workplace:

CAS: 94-36-0 dibenzoyl peroxide

- EL Long-term value: 5 mg/m³
- EV Long-term value: 5 mg/m³

• Additional information: The lists that were valid during the creation were used as basis.

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing.

· Breathing equipment:



Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Safety glasses

Information on basic physic	sical and chemical properties	
General Information		
Appearance:		
Form:	Powder	
Color:	Red	

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· Odor: · Odor threshold:	Odorless Not determined.	
· pH-value:	Not applicable.	
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not determined.	
· Ignition temperature:	Undetermined.	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not self-igniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
 Explosion limits: Lower: Upper: 	Not determined. Not determined.	
· Vapor pressure:	Not applicable.	
 Density at 20 ℃: Relative density Vapor density Evaporation rate 	1.18 g/cm ³ Not determined. Not applicable. Not applicable.	
 Solubility in / Miscibility with Water: 	Insoluble.	
· Partition coefficient (n-octanol/wate	r): Not determined.	
[·] Viscosity: Dynamic: Kinematic:	Not applicable. Not applicable.	
· Solvent content:		
Solids content: • Other information	100.0 % No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability Stable at ambient temperature.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

· Information on toxicological effects

- · Acute toxicity:
- · LD/LC50 values that are relevant for classification: No further relevant information available.
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:
- · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

dibenzoyl peroxide

silicon dioxide

NTP (National Toxicology Program)

None of the ingredients is listed.

· Carcinogenic categories' legend:

IARC Group 1: The agent is carcinogenic to humans.

- IARC Group 2A: The agent is probably carcinogenic to humans.
- IARC Group 2B: The agent is possibly carcinogenic to humans.
- IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.
- IARC Group 4: The agent is probably not carcinogenic to humans.
- NTP K: Known to be human carcinogen.

NTP R: Reasonably anticipated to be human carcinogen.

- · Repeated dose toxicity. No further relevant information available.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

No further relevant information available.

No further relevant information available.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

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13 Disposal considerations

· Waste treatment methods

- **Recommendation:** Dispose of contents / container in accordance with local / regional / national / international regulations.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information						
· UN-Number · DOT, TDG, ADN, IMDG, IATA	Void					
 · UN proper shipping name · DOT, TDG, ADN, IMDG, IATA 	Void					
· Transport hazard class(es)						
· DOT, TDG, ADN, IMDG, IATA · Class	Void					
 Packing group DOT, TDG, IMDG, IATA 	Void					
 Environmental hazards: Marine pollutant: 	No					
· Special precautions for user	Not applicable.					
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	Il of Not applicable.					
· UN "Model Regulation":	Void					

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture • SARA (Superfund Amendments and Reauthorization Act)

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

dibenzoyl peroxide

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

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· Car	nadiar	n Ing	gredient	Disclosu	re list (lin	nit 1%)			

dibenzoyl peroxide

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS). • Hazard pictograms



- · Signal word Warning
- Hazard-determining components of labeling: dibenzoyl peroxide
- Hazard statements May cause an allergic skin reaction.
- Precautionary statements
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves.
 If skin irritation or rash occurs: Get medical advice/attention.
 Specific treatment (see on this label).
 Dispose of contents/container in accordance with local/regional/national/international regulations.

• Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

 Department issuing SDS: Regulatory Affairs · Contact: **Regulatory Affairs** Telephone No. +1 (708) 597-0900 sds@gcamerica.com Date of preparation / last revision 03/13/2018 / - Abbreviations and acronyms: GHS: Globally Harmonized System of Classification and Labelling of Chemicals HCS: Hazard Communication Standard (USA) MSDS: Material Safety Data Sheet SDS: Safety Data Sheet ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways) ECHA: European Chemicals Agency OSHA: Occupational Safety and Health Administration (USA) C.I.: Colour Index LEL: Lower Explosive Limit UEL: Upper Explosive Limit IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration. 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative (Contd. on page 9)

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· Sources

- Manufacturers' MSDSs/SDSs
- OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)
- TOXNET (http://toxnet.nlm.nih.gov/)
- ECHA (http://echa.europa.eu/)
- EnviChem (www.echemportal.org)

· Notes:

CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.

• * Data compared to the previous version altered. This version replaces all previous versions.

· Disclaimer:

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