SAFETY DATA SHEETS

This SDS packet was issued with item: 072057123

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).

072057107 072057115 072057131



GRADIA INTENSIVE COLOR & MAMELON STAIN MATERIAL SAFETY DATA SHEET

Page 1 of 2

SECTION 1 - SOURCE/IDENTITY/USE INFORMATION

DISTRIBUTOR

GC AMERICA INC. 3737 West 127th St. Alsip, Illinois, 60803 Telephone: 708-597-0900 Hours: Mon.- Fri. 8:00 am. - 5:00 pm. C.S.T. Transportation Emergency No. 800-424-9300

COMMON NAME: GRADIA INTENSIVE COLOR AND MAMELON STAIN CHEMICAL NAME: N.A.

PRODUCT USE: Used to add developmental grooves and characterizations to restorations.

The following information is provided with regard to the toxicity and hazards of the pure components present in this product. SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENT	C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
Di-2-Methacryloyloxyethyl	41137-60-4	N.E.	N.E.	45-60
2,2,4-trimethylhexamethylene				
dicarbamate				
Neopentylglycol dimethacrylate	126-30-7	N.E.	N.E.	
				15-20
Amorphous Precipitated Silica	112926-00-8	$PEL=0.1 mg/m^3$	LD50=>10000mg/kg	5-15
		TLV/TWA=10mg/m ³	(oral ratio)	
		(dust) (ACGIH)	LC50= N.E.	

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT:	N.E.	SPECIFIC GRAVITY:	N.E.
VAPOR PRESSURE:	N.E.	MELTING POINT:	N.E.
VAPOR DENSITY:	N.E.	EVAPORATION RATE:	N.E.
SOLUBILITY IN WATER	: N.E.	ODOR THRESHOLD:	N.E.
COEFFICIENT OF OIL/W	ATER DISTRIBUTION: N.E.	APPEARANCE AND ODOR:	N.E.

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT: N.E.FLAMMABLE LIMITS: N.E.EXTINGUISHING MEDIA: Water fog, carbon dioxide, dry chemicalSPECIAL FIRE FIGHTING PROCEDURES: N.A.UNUSUAL FIRE AND EXPLOSION HAZARDS: N.A.HAZARDOUS COMBUSTION PRODUCTS: N.E.

SECTION 5 - REACTIVITY DATA

STABILITY:	Stable	Unstable: 🔀
POLYMERIZATION:	Will Not Occur	Will Occur: 🔀
CONDITIONS TO AVOID:	High heat, high humic	lity.
INCOMPATIBILITY (MATI	ERIALS TO AVOID): Not	ne.
HAZARDOUS DECOMPO	SITION OR BY-PRODUC	TS: N.E.



MS001500

GRADIA INTENSIVE COLOR & MAMELON STAIN

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SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION

	YES	NO	NE	NA	NTP	IARC	OSHA	OTHER
MUTAGENIC AFFECTS		Х						
TERATOGENIC AFFECTS		Х						
REPRODUCTIVE TOXIN		Х						
CARCINOGENICITY		Х						
SENSITIZER		Х						

ROUTES OF ENTRY: Inhalation Skin Ingestion

HEALTH HAZARD (Acute and Chronic):

SKIN: May cause irritation.

INGESTION: May cause toxic affects.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: N.E. CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.

EMERGENCY FIRST AID PROCEDURES:

INHALATION: If discomfort occurs, remove to fresh air.*EYES:* Flush with plenty of water. If irritation develops seek medical attention.*SKIN:* Wash with soap and water.*INGESTION:* Rinse and clear mouth and throat. Seek medical attention.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

IN CASE OF RELEASE OR SPILL: Absorb with inert material. Transfer to container for disposal.

WASTE DISPOSAL METHOD: In accordance with local, state and federal regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Store at normal room temperature in a well ventilated area. Avoid direct sunlight.

Special: N.A.

Other: N.A.

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: N.A.

VENTILATION: Lo	cal Exhaust: Yes	Mechanical: N.A.
-----------------	------------------	------------------

PROTECTIVE GLOVES: N.A. EYE PROTECTION: N.A. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N.A. WORK/HYGIENIC PRACTICE: Observe good hygienic practices.

SECTION 9 - PREPARATION INFORMATION

This data is supplied to comply with OSHA Hazard Communication Standard 29 CFR 1910,1200 and W.H.M.I.S. CPR

 DATE:
 09 January 2006

 REVIEWED:
 03 April 2012

N.A. = NOT APPLICABLE N.E. = NOT ESTABLISHED

The information herein is given in good faith but no warranty expressed or implied is made.

		NFPA		
FIRE - 0	TOXICITY - 1	REACTIVITY - 1	SPECIAL- P	



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Version US-EN-Rev 1

Reviewed on 03/13/2015

1 Identification

- · Product identifier
- Trade name: GRADIA (Shade Group: Mamelon Stain [MS2, MS3, and MS5])

• Relevant identified uses of the substance or mixture and uses advised against Dental material

The product is intended for professional use.

To avoid risks for humans and environment obtain instructions.

- · 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(s) identification

· Classification of the substance or mixture

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 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 Danger

• Hazard-determining components of labeling: urethane dimethacrylate (UDMA)

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Trade name: GRADIA (Shade Group: Mamelon Stain [MS2, MS3, and MS5])

(Contd. of page 1) · Hazard statements Toxic if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. · Precautionary statements Contaminated work clothing must not be allowed out of the workplace. Avoid breathing dust/fume/gas/mist/vapors/spray If swallowed: Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. • Additional information: 47 % of the mixture consists of component(s) of unknown toxicity. · Classification system: NFPA ratings (scale 0 - 4) Health = 1Fire = 1Reactivity = 1 · HMIS-ratings (scale 0 - 4) HEALTH 1 Health = 1 1 Fire = 1 FIRE Reactivity = 1 **REACTIVITY** 1 · Other hazards Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

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

Dangerous components:

-	•	
72869-86-4	urethane dimethacrylate (UDMA)	25-50%
	dimethacrylate**	10-20%
	UV-light absorber**	1-5%
13463-67-7	titanium dioxide	1-5%

· 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).

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Trade name: GRADIA (Shade Group: Mamelon Stain [MS2, MS3, and MS5])

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4 First-aid measures

· Description of first aid measures

• General information:

Immediately remove any clothing soiled by the product.

If symptoms persist consult doctor.

• After inhalation:

Supply fresh air; consult doctor in case of complaints. In case of unconsciousness place patient stably in side position for transportation. Do not use mouth to mouth or mouth to nose resuscitation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly. Seek medical treatment.

· After eye contact:

Protect unharmed eye. Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Do not induce vomiting; immediately call for medical help. Rinse out mouth and then drink plenty of water.

- · Information for doctor:
- Most important symptoms and effects, both acute and delayed Allergic reactions
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting 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.

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Trade name: GRADIA (Shade Group: Mamelon Stain [MS2, MS3, and MS5])

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•	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. Ensure good ventilation/exhaustion at the workplace.

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.

· 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.

- Further information about storage conditions: Observe instructions for use / storage.
- Specific end use(s) No further relevant information available.

8 Exposure cont	rols/	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:

13463-67-7 titanium dioxide

- PEL Long-term value: 15* mg/m³ *total dust
- REL See Pocket Guide App. A
- TLV Long-term value: 10 mg/m³ withdrawn from NIC

• 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.

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Trade name: GRADIA (Shade Group: Mamelon Stain [MS2, MS3, and MS5])

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• 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 physical and	chemical properties
· General Information	
· Appearance:	
Form:	Pasty
Color:	Different according to coloring
· Odor: · Odor threshold:	Characteristic Not determined.
· pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not determined.
· Ignition temperature:	Undetermined.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
[·] Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Insoluble.
· Partition coefficient (n-octanol/wa	ter): Not determined.
· Viscosity:	
Dynamic:	Not applicable.

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Trade name: GRADIA (Shade Group: Mamelon Stain [MS2, MS3, and MS5])

	()	Contd. of page
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	0.0 %	
Solids content:	85.1 %	
· Other information	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.

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: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- Experience with humans: May cause damage to kidneys. May cause damage to liver.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

titanium dioxide	2B
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	
· Carcinogenic categories' legend:	
	(Contd. on page

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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.

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.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

UN-Number		
DOT, ADR, ADN, IMDG, IATA	Void	
UN proper shipping name		
DOT, ADR, ADN, IMDG, IATA	Void	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
Class	Void	
Packing group		
DOT, ADR, IMDG, IATA	Void	

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 · Environmental hazards:
 · No

 · Marine pollutant:
 No

 · Special precautions for user
 Not applicable.

 · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
 Not applicable.

 · UN "Model Regulation":

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 ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

urethane dimethacrylate (UDMA)

dimethacrylate**

UV-light absorber**

titanium dioxide

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value established by ACGIH)

titanium dioxide

· NIOSH-Ca (National Institute for Occupational Safety and Health)

titanium dioxide

· GHS label elements

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

· Hazard pictograms



· Signal word Danger

• **Hazard-determining components of labeling:** urethane dimethacrylate (UDMA)

· Hazard statements

Toxic if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation.

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Trade name: GRADIA (Shade Group: Mamelon Stain [MS2, MS3, and MS5])

(Contd. of page 8) May cause an allergic skin reaction. Precautionary statements Contaminated work clothing must not be allowed out of the workplace. Avoid breathing dust/fume/gas/mist/vapors/spray If swallowed: Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. 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 03/14/2015 / -· 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) ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists 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 Acute Tox. 3: Acute toxicity, Hazard Category 3 Acute Tox. 4: Acute toxicity, Hazard Category 4 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 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.

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Trade name: GRADIA (Shade Group: Mamelon Stain [MS2, MS3, and MS5])

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