1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Epoxy.com Product #681 Primer A Component

Product Description: Liquid MMA Polymer Resin Company: Epoxy Systems, Inc.

Address: 20774 West Pennsylvania Ave

Dunnellon, FL 34431

Emergency Contact No.: 1-800-633-8253 (**PERS**)

Date Prepared or Revised: April 2013

For most current MSDS, please visit our website at www.epoxy.com

2. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

Chemical Name	CAS	OSHA
	Number	Hazard
Methyl Methacrylate	80-62-6	Yes

Composition Note: The remaining ingredients are designated as "trade secret".

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! FLAMMABLE. MAY CAUSE EYE AND/OR SKIN IRRITATION. PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN SENSITIZATION.

POTENTIAL HEALTH EFFECTS

Acute

Eye Contact: Exposure during handling may cause eye irritation, swelling, tearing, redness or cornea

Skin Contact: Exposure during handling may cause moderate irritation. May cause skin sensitization,

evidenced by rashes and hives.

Inhalation: Exposure to this product in excess of the applicable TVL or PEL may cause moderate

irritation to the nose and respiratory tract. May cause Central Nervous System

depression evidenced by headache, dizziness, and nausea.

Ingestion: Ingestion may cause may cause irritation to the gastrointestinal tract. May cause Central

Nervous System depression or other systemic effects.

Systemic Effects: Lungs, eyes, and skin.

Chronic: None known

Medical Conditions which May be Aggravated by Inhalation or Dermal Exposure:

Persons with eye, skin or respiratory disorders or unusual (hyper) sensitivity to chemicals

may experience adverse reactions to this product.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding

the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A

PHYSICIAN.

Skin Contact: In case of contact, remove product and immediately wash affected area with plenty of

soap and water for at least 5 minutes. Do not apply greases or ointments. Remove

contaminated clothing. Clean contaminated clothing with soap and water before re-use. If

redness, burning, or swelling persists, CONSULT A PHYSICIAN.

DO NOT INDUCE VOMITING. Never administer anything by mouth to an **Ingestion:**

unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. CONSULT A PHYSICIAN. Do not leave victim unattended. If vomiting occurs spontaneously, lay victim on the side and keep head

lower than waist to prevent aspiration.

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Inhalation: If respiratory irritation or distress occurs, remove victim to fresh air. If breathing is

difficult, give oxygen. If breathing stop, apply artificial respiration. CONSULT A

PHYSICIAN.

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the

patient. Consideration should be given to the possibility that overexposure to materials

other than this product may have occurred.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water fog, carbon dioxide or dry chemical, aqueous foam.

Fire and Explosion Hazards: Hazardous gases/vapors produced are methyl methacrylate, carbon monoxide, carbon

> dioxide, and smoke. Toxic and flammable vapors may be produced under combustion. Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to ignition sources and flash

back. Do not allow run-off from fire fighting to enter drains or water courses.

Fire Fighting Equipment and

Procedures:

Wear full protective clothing and self-contained breathing apparatus for fire fighting. Isolate fuel supply from fire. Use water spray to cool fire-exposed surfaces and

containers.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use cautious judgment when cleaning up spill. Shut off leaks, if possible without

personal risk. Wear suitable protective clothing, gloves and eye/face protection.

Evacuate personnel to safe areas.

Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, **Environmental Precautions:**

and soils.

Clean-up Methods: Small spills: Soak up with absorbent material such as clay, sand or other suitable non-

reactive material. Place in leak-proof containers. Seal tightly for proper disposal. **Large spills**: Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Additional Information: Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations.

7. HANDLING AND STORAGE

Exposure Limits:

Handling (Personnel): To prevent skin and eyes contact under the foreseeable conditions of use, wear

> appropriate protective clothing and safety eyewear. When handling do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well-

ventilated work area.

Handling (Physical Aspects): Close container after each use. Ground container to prevent explosion from static spark.

Keep away from heat, sparks and flames.

Chemical Name

Storage: Keep away from: acids, oxidizing agents, heat, or flames. Store in a cool, dry, well-

ventilated area in closed containers. Protect containers from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ACGIH OSHA (TLV) (PEL) Methyl Methacrylate 50 ppm 100 ppm

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure techniques may be used to

effectively minimize employee exposures.

When engaged in activities where product could contact the eye, wear safety glasses **Eye Protection:**

with side shields, chemical splash goggles, or face shield.

Skin contact should be minimized through use of Nitrile, neoprene or butyl gloves and **Skin Protection:**

suitable long sleeved clothing. Consideration must be given both to durability as well as

permeation resistance.

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Respirator Protection: NIOSH or MSHA approved air-purifying respirators should be used in the context of

respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and/or filter cartridge selection should be based on American National Standards Institute

(ANSI) Standards Z88.2 Practices for Respiratory Protection.

Ventilation: Use local exhaust or general dilution ventilation to control exposure within applicable

limits.

Work Practice Controls: Personal hygiene is an important work practice exposure control measure and the

following general measures should be taken when working with or handling this

material:

(1) Do not store, use, and/or consume foods, beverages, tobacco products, or

cosmetics in areas where this material is stored.

(2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidental

splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid Freezing Point: N/E

Color: Amber Flash Point: $52^{\circ}F$ (11.5°C)

Odor:Strong acrid odorSpecific Gravity:N/EVapor Pressure:N/EpH:0.95Boiling Point:N/ESolubility In Water:N/E

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions. Unstable with heat. **Conditions To Avoid:** Incompatible chemicals, heat and open flame.

Materials To Avoid: Oxidizing and reducing agents.

Hazardous Decomposition Decomposes with heat. Combustion may produce carbon monoxide, carbon dioxide,

Products: aldehydes and smoke.

Hazardous Polymerization: Polymerization can occur when exposed to excessive heat.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Oral (LD₅₀, Rat): N/E Dermal (LD₅₀, Rabbit): N/E Inhalation (LC₅₀, Rat): N/E

Chronic Health Hazard: Prolonged and/or repeated exposure to high levels of methyl methacrylate may lead to

kidney, lung, liver, and heart damage. Repeated or prolonged exposure may cause

allergic reaction and/or limited sensitization.

12. ECOLOGICAL INFORMATION

Ecotoxicity: This product has not been evaluated.

Chemical Fate Information: No data found for product.

13. DISPOSAL CONSIDERATIONS

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Waste Disposal: This material is a hazardous waste by RCRA criteria (40CFR 261). Dispose of container

and unused contents in accordance to local, state and federal regulations.

Container Disposal Method: Emptied container may contain product residue and should not be reused.

14. TRANSPORTATION INFORMATION

DOT/TDG Single Packaging:

UN Number: UN1247

Proper Shipping Name: Methyl Methacrylate Monomer, Inhibited

Hazard Class: 3 Packing Group: II

Label: 3 Flammable

IATA: UN Number: UN1247

Proper Shipping Name: Methyl Methacrylate Monomer, Inhibited

Hazard Class: 3
Packing Group: II

Label: 3 Flammable

IMO: UN Number: UN1247

Proper Shipping Name: Methyl Methacrylate Monomer, Inhibited

Hazard Class: 3
Packing Group: II
Flash Point: 11.5°C
Label: 3 Flammable

Based on the packaging size, the supplier may apply the basic description

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS:

OSHA Hazard Communication Standard (29CFR 1910.1200):

This product is considered a "hazardous chemical" under this regulation.

Status Under Toxic Substances Control Act (TSCA) (40 CFR 710):

All chemical(s) comprising this product are either exempt or listed on the TSCA Inventory.

EPA Reportable Quantities:

Clean Water Act (40CFR Section 112): Not listed.

CERCLA Hazardous Substance (40CFR Part 302, Table 302.4):

Methyl Methacrylate CAS # 80-62-6. RQ: 1000 lbs.

EPCRA Extreme Hazardous Substance (40CFR Section 302 Part 355): Not listed.

Toxic Chemical Release Inventory (TRI) Reporting - (SARA Title III Section 313 (40 CFR 372)

Component(s) above 'de minimus' level): Methyl Methacrylate. CAS # 80-62-6.

SARA Title III Hazard Classes (40CFR 370 Sections 311 and 312):

Fire Hazard: Yes
Reactive Hazard: Yes
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: Yes

US STATE REGULATIONS:

California - "Safe Drinking Water and Toxic Enforcement Act" (Proposition 65):

This product may contains trace amounts of chemicals that are known to the State of California to cause cancer and/or reproductive toxicity and other harm.

INTERNATIONAL REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS:

Components of this product are listed on the Canadian DSL or NDSL inventories.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS:

Class **D-2B**: Material causing other toxic effects

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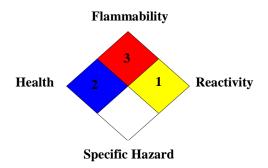
16. OTHER INFORMATION

HAZARD RATINGS:

Hazardous Material Information System (HMIS)

Health	2
Flammability	3
Physical Hazard	1
Personal Protection	В

National Fire Protection Association (NFPA)



HMIS/NFPA Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety glasses, gloves

This Material Safety Data Sheet (MSDS) is prepared by Epoxy Systems, Inc. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this MSDS. This MSDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Epoxy.com Product #681 Primer B Component

Product Description: Liquid MMA Polymer Resin

Company: Epoxy Systems, Inc.

Address: 20774 West Pennsylvania Ave

Dunnellon, FL 34431

Emergency Contact No.: 1-800-633-8253 (**PERS**)

Date Prepared or Revised: April 2013

For most current MSDS, please visit our website at www.epoxy.com

2. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

Chemical Name	CAS Number	OSHA Hazard
Dibenzoyl peroxide	94-36-0	Yes
Alkyl Benzoate	131298-44-7	Yes

Composition Note: The remaining ingredients are designated as "trade secret".

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! ORGANIC PEROXIDE. MAY CAUSE EYE AND/OR SKIN IRRITATION. PROLONGED OR

REPEATED EXPOSURE MAY CAUSE SKIN SENSITIZATION.

Peroxides and peroxide decomposition products are flammable and can ignite with explosive force if confined.

POTENTIAL HEALTH EFFECTS

Acute

Eye Contact: Exposure during handling may cause eye irritation, swelling, tearing, redness or cornea

lamage.

Skin Contact: Exposure during handling may cause moderate irritation. May cause skin sensitization,

evidenced by rashes and hives.

Inhalation: Exposure to this product in excess of the applicable TVL or PEL may cause moderate

irritation to the nose and respiratory tract. May cause Central Nervous System

depression evidenced by headache, dizziness, and nausea.

Ingestion: Ingestion may cause may cause irritation to the gastrointestinal tract. May cause Central

Nervous System depression or other systemic effects.

Systemic Effects: Lungs, eyes, and skin.

Chronic: None known

Medical Conditions which May be Aggravated by Inhalation or Dermal Exposure:

Persons with eye, skin or respiratory disorders or unusual (hyper) sensitivity to chemicals

may experience adverse reactions to this product.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding

the eyes open. If redness, burning, blurred vision, or swelling persists, CONSULT A

PHYSICIAN.

Skin Contact: In case of contact, remove product and immediately wash affected area with plenty of

soap and water for at least 5 minutes. Do not apply greases or ointments. Remove contaminated clothing. Clean contaminated clothing with soap and water before re-use. If

redness, burning, or swelling persists, CONSULT A PHYSICIAN.

Ingestion: DO NOT INDUCE VOMITING. Never administer anything by mouth to an

unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. **CONSULT A PHYSICIAN**. Do not leave victim

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unattended. If vomiting occurs spontaneously, lay victim on side and keep head lower

than waist to prevent aspiration.

Inhalation: If respiratory irritation or distress occurs, remove victim to fresh air. If breathing is

difficult, give oxygen. If breathing stop, apply artificial respiration. **CONSULT A**

PHYSICIAN.

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the

patient. Consideration should be given to the possibility that overexposure to materials

other than this product may have occurred.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water fog, carbon dioxide or dry chemical, aqueous foam.

Fire And Explosion Hazard: Irritating and toxic fumes may be produced at high temperature. Hazardous gases/vapors

produced are carbon monoxide, carbon dioxide, byphenyl, and smoke. Do not allow run-

off from fire fighting to enter drains or water courses.

Fire Fighting Equipment and

Procedures:

Wear full protective clothing and self-contained breathing apparatus for fire fighting. Isolate fuel supply from fire. Use water spray to cool fire-exposed surfaces and

containers.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use cautious judgment when cleaning up spill. Shut off leaks, if possible without

personal risk. Wear suitable protective clothing, gloves and eye/face protection.

Evacuate personnel to safe areas.

Environmental Precautions: Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters,

and soils.

Clean-up Methods: Small spills: Soak up with absorbent material such as clay, sand or other suitable non-

reactive material. Place in leak-proof containers. Seal tightly for proper disposal. **Large spills**: Approach suspected leak areas with caution. Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal. Notify authorities if any exposures to the general public or environment occur or are

Additional Information: Notify authorities if any exposures to the general public or environment occur or are likely to occur. Dispose in accordance with federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling (Personnel): To prevent skin and eyes contact under the foreseeable conditions of use, wear

appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well-

ventilated work area.

Handling (Physical Aspects):

Storage:

Close container after each use. Keep away from heat, sparks and flames.

Keep away from acids, heavy metals, alkalies, and reducing agents. Store in a cool, dry, well-ventilated area in closed containers away from source of heat and direct sunlight.

Protect containers from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: Chemical Name ACGIH OSHA (TLV) (PEL)

Dibenzoyl peroxide 5 mg/m^3 5 mg/m^3

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for excessive

exposure exists, the following traditional exposure techniques may be used to

effectively minimize employee exposures.

Eye Protection: When engaged in activities where product could contact the eye, wear safety glasses

with side shields, chemical splash goggles, or face shield.

Skin Protection: Skin contact should be minimized through use of Nitrile, neoprene or butyl gloves and

suitable long sleeved clothing. Consideration must be given both to durability as well as

permeation resistance.

Respirator Protection: Respirator and/or filter cartridge selection should be based on American National

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Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection. Ventilation:

Use local exhaust or general dilution ventilation to control exposure within applicable

Work Practice Controls: Personal hygiene is an important work practice exposure control measure and the

following general measures should be taken when working with or handling this

material:

(1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.

Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid Flash Point: N/E

Color: White $>50^{\circ}$ C (122°F) SADT: Odor: No significant odor **Specific Gravity:** 1.2 @ 25°C pH: **Boiling Point:** N/E 5.8

Freezing Point: N/E **Solubility In Water:** Negligible

Vapor Pressure: N/E

10. STABILITY AND REACTIVITY

Stability: Stable unless exposed to heat, flames, drying conditions and contamination from

incompatible materials.

Conditions To Avoid: Contamination. Water loss (drying). Direct sunlight. Open flame. Prolonged storage

above 100°F (38°C). Storage above SADT. Storage near flammable or combustible

materials.

Materials To Avoid: Avoid contact with rust, iron, and copper. Hazardous decomposition will occur when

contact with acids, alkalies, heavy metal, reducing agents, and peroxide accelerators.

Hazardous Decomposition

Decomposes with heat. Combustion may produce Benzoic Acid, Benzene, Biphenyl,

Products:

Phenyl Benzoate. **Hazardous Polymerization:** Will not occur..

11. TOXICOLOGICAL INFORMATION

Benzoyl Peroxide

Hazard Data:

Intraperitoneal: Mouse--LD50: 250 mg/kg.

Oral: Rat--LD50: 7710 mg/kg; Mouse-- LD50: 5700 mg/kg.

Skin: Mammal (unspecified)--LD50: >1 g/kg.

Alkyl Benzoate

Hazard Data:

Oral: Rat--LD50: >5000 mg/kg.

12. ECOLOGICAL INFORMATION

Ecotoxicity: This product has not been evaluated.

Chemical Fate Information: No data found for product.

13. DISPOSAL CONSIDERATIONS

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Waste Disposal: This material is a hazardous waste by RCRA criteria (40CFR 261). Dispose of container

and unused contents in accordance to local, state and federal regulations.

Container Disposal Method: Emptied container may contain product residue and should not be reused.

14. TRANSPORTATION INFORMATION

DOT/TDG: Cartridges: ORM-D / Limited Quantity

Single Packaging:

UN Number: UN3109

Proper Shipping Name: Organic Peroxide Type E – Liquid (Dibenzoyl Peroxide, 40%)

Hazard Class: 5.2 Packing Group: II

Label: 5.2 Organic Peroxide

IATA: UN Number: UN3109

Proper Shipping Name: Organic Peroxide Type E – Liquid (Dibenzoyl Peroxide, 40%)

Hazard Class: 5.2

Label: 5.2 Organic Peroxide

IMO: UN Number: UN3109

Proper Shipping Name: Organic Peroxide Type E – Liquid (Dibenzoyl Peroxide, 40%)

Hazard Class: 5.2

Label: 5.2 Organic Peroxide

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS:

OSHA Hazard Communication Standard (29CFR 1910.1200):

This product is considered a "hazardous chemical" under this regulation.

Status Under Toxic Substances Control Act (TSCA) (40 CFR 710):

All chemical(s) comprising this product are either exempt or listed on the TSCA Inventory.

EPA Reportable Quantities:

Clean Water Act (40CFR Section 112): Not listed.

CERCLA Hazardous Substance (40CFR Part 302, Table 302.4): Not listed. EPCRA Extreme Hazardous Substance (40CFR Section 302 Part 355): Not listed.

Toxic Chemical Release Inventory (TRI) Reporting - (SARA Title III Section 313 (40 CFR 372)

Component(s) above 'de minimus' level): Dibenzoyl peroxide CAS #94-36-0

SARA Title III Hazard Classes (40CFR 370 Sections 311 and 312):

Fire Hazard: Yes
Reactive Hazard: Yes
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: Yes

US STATE REGULATIONS:

California - "Safe Drinking Water and Toxic Enforcement Act" (Proposition 65):

This product may contain trace amounts of chemicals that are known to the State of California to cause cancer and/or reproductive toxicity and other harm.

INTERNATIONAL REGULATIONS:

CANADIAN DSL/ NDSL INVENTORY STATUS:

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Components of this product are listed on the Canadian DSL or NDSL inventories.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS:

Class C: Oxidizing material Class D-2B: Material causing other toxic effects





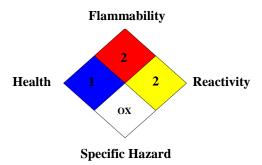
16. OTHER INFORMATION

HAZARD RATINGS:

Hazardous Material Information System (HMIS)

Health	1
Flammability	2
Physical Hazard	2
Personal Protection	В

National Fire Protection Association (NFPA)



HMIS/NFPA Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety glasses, gloves

This Material Safety Data Sheet (MSDS) is prepared by Epoxy Systems, Inc. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this MSDS. This MSDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

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