

## Safety Data Sheet

Date revised: 04/26/2021  
This form is subject to changes

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### 1. IDENTIFICATION OF SUBSTANCE:

Product Name: G6E-HTNS Part A

Product Number(s): G6E-HTNS

Manufacturer/Supplier:

**Graphene Supermarket**

**Graphene Laboratories, Inc.**

info@graphenelab.com

760 Koehler Ave.,

Phone: (516) 382-8649

Ronkonkoma, NY11779

Fax: (781) 287-1248

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### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

GHS Ratings:

Eye corrosive

Category 2A

Skin Corrosion/Irritation

Category 2

Skin Sensitization

Category 1

Specific Target Organ Toxicity (Single Exposure)

Category 3

Pictogram



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

Precautionary statement(s)

P101 If medical advice is needed, have product container or label at hand

P102 Keep out of reach of children

P103 Read label before use

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep the container tightly closed.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water/shower.

P304 + P340 + P312

IF INHALED: Remove person to fresh air and keep breathing comfortable. Call a POISON CENTER/doctor if you feel unwell.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P403 + P233 Store in a well-ventilated place. Keep the container tightly closed.

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1

<b>Ingredient Name</b>	<b>% by Weight</b>	<b>CAS Number</b>
Modified epoxy resins	10-30	propriety
Silver	30-60	7440-22-4
Mixture of nano-carbon products	1-3	propriety
Graphene Flakes	0.01 - 1	7782-42-5

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

### 4. FIRST AID MEASURES

- After inhalation

Supply fresh air. Seek medical advice if irritation persists.

- After skin contact

Immediately wash with warm water and mild soap and rinse thoroughly. Mechanical irritation of skin is possible.

- After eye contact  
Rinse your eyes for several minutes under running water. Then consult a doctor.
- After ingestion  
Get immediate medical attention. Rinse mouth with water but do not swallow the water. Do not induce vomiting unless directed by medical personnel.  
by ingestion.
- Indication of any immediate medical attention and special treatment needed  
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

None known

### 5.2 Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur, and the container may burst. Thermal decomposition may liberate carbon oxides and other toxic vapors

### 5.3 Advice for firefighters

Wear appropriate protective equipment and self-contained breathing apparatus, gloves, safety goggles

### 5.4 Further information

No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

For personal protection see section 8.

### 6.2 Environmental precautions

Do not let products enter drains, sewers. Avoid release to the environment.

### 6.3 Methods and materials for containment and cleaning up

Absorb it in vermiculite, dry sand or earth and place it into a container. Flush with plenty of soap water to clean the spillage area. Do not contaminate water sources.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid spilling, skin and eye contact. Keep away from the heat and open flame. Do not eat, drink or smoke when using the product.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep the container tightly closed in a dry and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Appropriate engineering controls: Use process enclosures and/or exhaust ventilation to keep airborne dust concentrations below the applicable occupational exposure limit.

## 8.2 Exposure controls

### General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed. Keep away from food and beverages.

Avoid contact with the eyes. Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Wear impervious clothing to minimize skin contact. Use of a barrier cream may help to prevent skin drying. Wash hands and other exposed skin with mild soap and water.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- Form: Paste
- Color: Dark Silver gray
- Odor: Light Odor
- Change in condition: No data available
- Melting point/Melting range: No data available
- Boiling point/Boiling range: No data available
- Sublimation temperature / start: No data available
- Flash point: No data available
- Ignition temperature: No data available
- Decomposition temperature: No data available
- Danger of explosion: Product does not present an explosion hazard.
- Lower Explosion limits: No data available
- Viscosity: No data available
- Vapor pressure: No data available
- Density: No data available
- Solubility in / Miscibility with Water: negligible, insoluble

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under normal conditions.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Strong oxidizer

### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Strong alkalis

### 10.6 Hazardous decomposition products

Under normal conditions of use, hazardous decomposition products should not be produced. Hazardous decomposition products formed under fire conditions. - Carbon oxides  
Other decomposition products - No data available  
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Ingredient name	Results	Species	Dose	Exposure
Silver Flakes	TDL <sub>o</sub> Oral	Rat	330 mg/kg	
Modified Epoxy Resin	LD 50 Oral LD50 Dermal Skin Erythema/E Eyes 405 Eyes – redness of the conjunctiva Skin severe/ moderate irritant	Rat Rat Rabbit  Rabbit Rabbit  Rabbit	11,400 mg/kg 2,000 mg/kg 1.5 – 2 (score)  0 0.7	24 hours
Nano carbon	LD 50 Oral LC 50 Inhalation	Rat Rat	2,000 mg/kg 2,000 mg/kg	4 hours
Graphene Flakes	LD 50 Oral LC 50 Inhalation	Rat Rat	2,000 mg/kg 2,000 mg/kg	4 hours

- Additional toxicological information:  
Reproductive toxicity  
No data available  
No data available  
Specific target organ toxicity - single exposure  
No data available  
Specific target organ toxicity - repeated exposure  
No data available  
Aspiration hazard  
No data available

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in aqueous environments.

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

Product has poor water solubility.



12.5 Other adverse effects  
No data available

### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging

Packaging should be completely emptied of contents and disposed of in a manner specified by the recycler/regional disposal contractor.

### 14. TRANSPORT INFORMATION

UN-Number

DOT, ADR, ADN, IMDG, IATA - Not regulated for transport

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA - Not regulated for transport

Transport hazard class

DOT, ADR, ADN, IMDG, IATA - Not regulated for transport

Packing group

DOT, ADR, IMDG, IATA - Not regulated for transport

Special precautions for user

- Not applicable

Transport in bulk according to  
AnnexII of MARPOL73/78  
and the IBC Code

- Not applicable

### 15. REGULATORY INFORMATION

#### **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **SARA 311/312 Components (Acute Health Hazard, Chronic Health Hazard)**

None of the materials are listed

#### **TSCA**



All ingredients are listed

**Proposition 65**

Chemicals known to cause cancer	- None of the ingredients are listed
Chemicals known to cause reproductive toxicity	- None of the ingredients are listed
Chemicals known to cause developmental toxicity	- None of the ingredients are listed

Pennsylvania Right To Know Components  
None of the ingredients are listed

New Jersey Right To Know Components  
None of the ingredients are listed

Massachusetts Right To Know Components  
None of the ingredients are listed

Rhode Island Right To Know Components  
None of the ingredients are listed

Minnesota Right To Know Components  
None of the ingredients are listed

Florida Right To Know Components  
None of the ingredients are listed

California Prop. 65 Components  
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Carcinogenic categories

EPA	- None of the ingredients are listed
TLV	- None of the ingredients are listed
NIOSH-Ca	- None of the ingredients are listed

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.  
Modified Resin  
HMIS Rating  
Health hazard: 2  
Flammability: 1  
Physical Hazard 0

Silver Flakes:  
HMIS Rating  
Health hazard: 1  
Flammability: 0  
Physical Hazard 0



Graphene Flakes:  
Health hazard: 2  
Flammability: 0  
Physical Hazard: 0

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.



## Safety Data Sheet

Date revised: 04/26/2021  
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### 1. IDENTIFICATION OF SUBSTANCE:

Product Name: G6E-HTNS Part B

Product Number(s): G6E-HTNS Part B

Manufacturer/Supplier:

**Graphene Supermarket**

**Graphene Laboratories, Inc.**

760 Koehler Ave.,

Ronkonkoma, NY11779

info@graphenelab.com

Phone: (516) 382-8649

Fax: (781) 287-1248

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### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

GHS Ratings:

Acute toxicity (Oral)

Category 4

Acute toxicity (Dermal)

Category 4

Eye Damage

Category 1

Eye Corrosive

Category 2A

Skin Corrosion/Irritation

Category 2

Respiratory Sens.

Category 1

Pictogram



Signal word Warning

## Hazard statement(s)

- H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.  
H317 May cause an allergic skin reaction.  
H332 Harmful if inhaled

## Precautionary statement(s)

- P101 If medical advice is needed, have product container or label at hand  
P102 Keep out of reach of children  
P103 Read label before use  
P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face protection.  
P303 + P361 + P353  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water/shower.  
P304 + P340 + P312  
IF INHALED: Remove person to fresh air and keep breathing comfortable. Call a POISON CENTER/doctor if you feel unwell.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
P403 + P233 Store in a well-ventilated place. Keep the container tightly closed.  
P501 Dispose of contents/ container to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1

Ingredient Name	% by Weight	CAS Number
Acid Anhydride Complex	10-30	25134-21-8
Glycerol	1-5	56-81-5
Anhydride	1-5	552-30-7
Imidazole	<0.1	228-32-4
Silver Flakes	50 - 70	7440-22-4

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

### 4. FIRST AID MEASURES

- After inhalation  
Supply fresh air. Seek medical advice if irritation persists.
- After skin contact  
Immediately wash with warm water and mild soap and rinse thoroughly. Mechanical irritation of skin is possible.
- After eye contact  
Rinse the eye for several minutes under running water. Then consult a doctor.
- After ingestion  
Get immediate medical attention. Rinse the mouth with water but do not swallow the water. Do not induce vomiting unless directed by medical personnel.
- Indication of any immediate medical attention and special treatment needed  
No data available

## 5. FIRE FIGHTING MEASURES

- 5.1 Extinguishing media  
Suitable extinguishing media  
Use high-volume water spray  
Unsuitable extinguishing media  
None known
- 5.2 Specific hazards arising from the chemical  
No data available
- 5.3 Advice for firefighters  
Wear appropriate protective equipment and self-contained breathing apparatus, gloves, safety goggles. Collect contaminated fire extinguishing water separately.
- 5.4 Further information  
No data available

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures  
Wear protective clothing. Ensure adequate ventilation.  
For personal protection see section 8.
- 6.2 Environmental precautions  
Do not let products enter drains, sewers. Avoid release to the environment.
- 6.3 Methods and materials for containment and cleaning up  
Neutralize with acid. Absorb it in vermiculite, dry sand or earth and place it into a container. Flush with plenty of soap water to clean the spillage area.
- 6.4 Reference to other sections  
For disposal see section 13.

## 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling  
Avoid spilling, skin and eye contact. Keep away from the heat and open flame. Do not eat, drink or smoke when using the product. Do not breathe vapor/dust
- 7.2 Conditions for safe storage, including any incompatibilities  
Keep the container tightly closed in a dry and well-ventilated place.

7.3 Keep away from strong acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Appropriate engineering controls: Use process enclosures and/or exhaust ventilation.

### 8.2 Exposure controls

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed. Keep away from food and beverages.

Avoid contact with the eyes. Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Wear impervious clothing to minimize skin contact. Use of a barrier cream may help to prevent skin drying. Wash hands and other exposed skin with mild soap and water.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- Form: Paste
- Color: Silver
- Odor: Low odor
- Change in condition: No data available
- Melting point/Melting range: No data available
- Boiling point/Boiling range: No data available
- Sublimation temperature / start: No data available
- Flash point: No data available
- Ignition temperature: No data available
- Decomposition temperature: No data available
- Danger of explosion: Product does not present an explosion hazard.
- Lower Explosion limits: No data available
- pH: No data available
- Vapor pressure: No data available
- Density: No data available
- Solubility in / Miscibility with Water: non-soluble

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under normal conditions.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Strong oxidizer

#### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Strong alkalis

#### 10.6 Hazardous decomposition products

Under normal conditions of use, hazardous decomposition products should not be produced. Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

Ingredient name	Results	Species	Dose
Acid Anhydride <b>25134-21-8</b>	LD 50 Oral LD50 Dermal Eyes 405 LC10 Inhalation Skin severe/moderate irritant	Rat Rat Rabbit Rat Rabbit	958 mg/kg 4290 mg/kg Strong irritant 750 mg/kg mild
Anhydride <b>552-30-7</b>	LD 50 Oral	Rat	5600 mg/kg
Imidazole <b>288-32-4</b>	LD50 Oral	Rat	970 mg/kg
Silver Flakes	TDL <sub>o</sub> Oral	Rat	330 mg/kg

#### Carcinogenic categories

IARC - None of the materials are listed

NTP - None of the materials are listed

OSHA-Ca - None of the materials are listed

### 12. ECOLOGICAL INFORMATION

#### 12.1 Aquatic Toxicity

##### 288-32-4 Imidazole

EC50/48h 341.5 mg/l (Daphnia magna)

EC50/72h 133 mg/l (Scenedesmus subspicatus)

LC50/48h 280 mg/l (Golden orfe)

#### 12.2 Persistence and degradability

No data available.

#### 12.3 Bioaccumulative potential



No data available.

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

No data available

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging

Packaging should be completely emptied of contents and disposed of in a manner specified by the recycler/regional disposal contractor.

### 14. TRANSPORT INFORMATION

UN-Number

DOT, ADR, ADN, IMDG, IATA - Not regulated for transport

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA - Not regulated for transport

Transport hazard class

DOT, ADR, ADN, IMDG, IATA - Not regulated for transport

Packing group

DOT, ADR, IMDG, IATA - Not regulated for transport

Special precautions for user

- Not applicable

Transport in bulk according to

AnnexII of MARPOL73/78

and the IBC Code

- Not applicable

### 15. REGULATORY INFORMATION

Pennsylvania Right to Know Components

Glycerol 56-81-5

Anhydride 552-30-7

Acid Anhydride Complex 25134-21-8

Imidazole 288-32-4

Massachusetts Right to Know Components

Glycerol 56-81-5



Anhydride 552-30-7

New Jersey Right to Know Components

Glycerol 56-81-5

Anhydride 552-30-7

Acid Anhydride Complex 25134-21-8

Imidazole 288-32-4

Road Island Right to Know Components

Glycerol 56-81-5

Anhydride 552-30-7

Acid Anhydride Complex 25134-21-8

Imidazole 288-32-4

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **SARA 311/312 Components**

Acute Health Hazard, Chronic Health Hazard:

Glycerol 56-81-5

Anhydride 552-30-7

Acid Anhydride Complex 25134-21-8

Imidazole 288-32-4

#### **Carcinogenic categories**

EPA - None of the ingredients are listed

TLV - None of the ingredients are listed

NIOSH-Ca - None of the ingredients are listed

## 16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Full text of H-Statements referred to under sections 2 and 3.

Acid Anhydride Complex

HMIS Rating

Health hazard: 2

Flammability: 0

Physical Hazard 0



Anhydride  
HMIS Rating  
Health hazard: 2  
Flammability: 0  
Physical Hazard 0

Silver Flakes:  
HMIS Rating  
Health hazard: 1  
Chronic Health Hazard: Flammability: 0  
Physical Hazard 0

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgments of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.