

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC POTTING EPOXY, PART B (HARDENER)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Type: Adhesive Product Name: GC POTTING EPOXY, PART B (Hardener) Part Number(s): 19-823 Part B	Emergency Contact: Chemtrec Phone: (800) 424-9300 Recommended use : Epoxy hardener Restrictions on use : Product for industrial use only
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SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 1B
 Skin sensitization, Category 1
 Reproductive toxicity, Category
 Specific target organ toxicity —
 Repeated exposure, Category 1
 Full text of H statements : see section 16

H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H361 Suspected of damaging fertility or the unborn child.
 H372 Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: H314 - Causes severe skin burns and eye damage
	: H317 - May cause an allergic skin reaction
Precautionary statements (GHS US)	: H361 - Suspected of damaging fertility or the unborn child
	: H372 - Causes damage to organs through prolonged or repeated exposure
	: P201 - Obtain special instructions before use.
	: P202 - Do not handle until all safety precautions have been read and understood.
	: P260 - Do not breathe dusts or mists.
	: P264 - Wash hands, forearms and face thoroughly after handling.
	: P270 - Do not eat, drink or smoke when using this product.
	: P272 - Contaminated work clothing must not be allowed out of the workplace.
	: P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
	: P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
	: P302+P352 - If on skin: Wash with plenty of water.
	: P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
: P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.	
: P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
: P308+P313 - If exposed or concerned: Get medical advice/attention.	
: P310 - Immediately call a poison center or doctor.	
: P314 - Get medical advice or attention if you feel unwell.	

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SECTION 2. HAZARDS IDENTIFICATION (CONTINUED)

- P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
- P362+P364 - Take off contaminated clothing and wash it before reuse.
- P391 - Collect spillage.
- P405 - Store locked up.
- P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	CAS-No.: 68082-29-1	30 – 50
Benzyl alcohol	CAS-No.: 100-51-6	15 - 20
4-Nonylphenol, branched	CAS-No.: 84852-15-3	10 – 30
Isophorone diamine	CAS-No.: 2855-13-2	10 - 20
Amine Epoxy Resin Adduct	CAS-No.: Proprietary	10 - 20
Triethylenetetramine	CAS-No.: 112-24-3	1 – 5

Full text of hazard classes and H-statements : see section 16

SECTION 4. FIRST AID MEASURES

4.1. Description of necessary first-aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Rinse immediately with plenty of water for 15 minutes. Remove/Take off immediately all contaminated clothing. Get immediate medical advice/attention. Thoroughly clean shoes before reuse. Wash clothing before reuse.
- First-aid measures after eye contact : Immediately rinse with plenty of water (for at least 15 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
- First-aid measures after ingestion : Rinse mouth out with water. Do not induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.

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SECTION 4. FIRST AID MEASURES (CONTINUED)

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.
For further information refer to section 13

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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SECTION 7. HANDLING AND STORAGE (CONTINUED)

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Triethylenetetramine (112-24-3)

USA - AIHA - Occupational Exposure Limits

WEEL TWA	1 ppm (skin)
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Benzyl alcohol (100-51-6)

USA - AIHA - Occupational Exposure Limits

WEEL TWA	10 ppm
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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the workplace.
 Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses with side shields

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation, wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Amber
Odor	: Amine-like
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 176 °C
Flash point	: > 93 °C

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Product Name: GC POTTING EPOXY, PART B (HARDENER)**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)**

Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 0.98 g/cm ³
Solubility	: Not miscible.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

VOC content : 20 %

SECTION 10. STABILITY AND REACTIVITY**10.1. Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Bases (Alkalis). Acids. Oxidizing agents. May slowly corrode copper, aluminum, zinc, and galvanized surfaces. Peroxides. N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

10.6. Hazardous decomposition productsammonia. Carbon oxides (CO, CO₂). Nitrogen oxides.**SECTION 11. TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects**

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

4-Nonylphenol, branched (84852-15-3)	
LD50 oral rat	1412 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 14 day(s))
ATE US (oral)	1412 mg/kg body weight
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
Triethylenetetramine (112-24-3)	
LD50 oral rat	1716 mg/kg body weight (BASF test, Rat, Experimental value, Oral)
LD50 dermal rabbit	1465 mg/kg body weight (BASF test, Rabbit, Experimental value, Dermal)
ATE US (oral)	1716 mg/kg body weight
ATE US (dermal)	1465 mg/kg body weight
Isophorone diamine (2855-13-2)	
LD50 oral rat	1030 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5.01 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
ATE US (oral)	1030 mg/kg body weight
Benzyl alcohol (100-51-6)	
LD50 oral rat	1620 mg/kg bw/day (Rat, Male, Experimental value, Oral, 14 day(s))
LD50 oral	1580 mg/kg body weight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1410 - 1770
LD50 dermal rabbit	> 2000 mg/kg body weight (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4178 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
ATE US (oral)	1580 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns.

4-Nonylphenol, branched (84852-15-3)	
pH	No data available in the literature
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
pH	10.98 (1 %, 25 °C, CIPAC MT 75: Determination of pH)
Triethylenetetramine (112-24-3)	
pH	10.7
Isophorone diamine (2855-13-2)	
pH	11.6
Benzyl alcohol (100-51-6)	
pH	No data available in the literature

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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

Serious eye damage/irritation : Assumed to cause serious eye damage

4-Nonylphenol, branched (84852-15-3)	
pH	No data available in the literature
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
pH	10.98 (1 %, 25 °C, CIPAC MT 75: Determination of pH)
Triethylenetetramine (112-24-3)	
pH	10.7
Isophorone diamine (2855-13-2)	
pH	11.6
Benzyl alcohol (100-51-6)	
pH	No data available in the literature

Respiratory or skin sensitization : May cause an allergic skin reaction.
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified
 Reproductive toxicity : Suspected of damaging fertility or the unborn child.

4-Nonylphenol, branched (84852-15-3)	
NOAEL (animal/female, F0/P)	15 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study), Remarks on results: other:Generation: All generations tested: F0, F1, F2, F3 (migrated information)
NOAEL (animal/male, F1)	15 mg/kg body weight Animal: rat, Animal sex: male, Guideline: other:EPA OPPTS 837.3800 (US EPA OPPTS 1998)

STOT-single exposure : Not classified

Amine Epoxy Resin Adduct (Proprietary)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

4-Nonylphenol, branched (84852-15-3)	
LOAEL (oral,rat,90 days)	400 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

4-Nonylphenol, branched (84852-15-3)	
NOAEL (oral,rat,90 days)	100 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Isophorone diamine (2855-13-2)	
LOAEL (oral,rat,90 days)	160 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Benzyl alcohol (100-51-6)	
NOAEL (oral,rat,90 days)	400 mg/kg body weight Animal: rat, Guideline: other:OECD Guideline 451 (Carcinogenicity Studies)

Amine Epoxy Resin Adduct (Proprietary)	
STOT-repeated exposure	Causes damage to organs (Skin, Respiratory tract) through prolonged or repeated exposure.

Aspiration hazard : Not classified

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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

4-Nonylphenol, branched (84852-15-3)	
Viscosity	No data available in the literature
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
Viscosity	No data available in the literature
Triethylenetetramine (112-24-3)	
Viscosity	No data available in the literature
Isophorone diamine (2855-13-2)	
Viscosity	19 mm ² /s (20 °C, OECD 114: Viscosity of Liquids)
Benzyl alcohol (100-51-6)	
Viscosity	No data available in the literature
Symptoms/effects after skin contact	Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	Serious damage to eyes.
Symptoms/effects after ingestion	Burns.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Ecology - general	: Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Ecology - water	: Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

4-Nonylphenol, branched (84852-15-3)

EC50 - Crustacea [1]	84 µg/l (ASTM E729-88, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, Lethal)
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4-Nonylphenol, branched (84852-15-3)

EC50 72h - Algae [1]	0.33 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	0.027 mg/l (EPA OTS 797.1050, Skeletonema costatum, Static system, Salt water, Experimental value, Cell numbers)
EC50 96h - Algae [2]	0.41 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
NOEC chronic fish	0.006 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '91 d'

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

LC50 - Fish [1]	7.07 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	7.07 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 72h - Algae [1]	4.34 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	4.34 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Experimental value, Nominal concentration)

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SECTION 12. ECOLOGICAL INFORMATION (CONTINUED)

Triethylenetetramine (112-24-3)	
LC50 - Fish [1]	495 mg/l (96 h, Pimephales promelas, Fresh water, Literature study)
EC50 - Crustacea [1]	31.1 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Literature study)

Isophorone diamine (2855-13-2)	
LC50 - Fish [1]	110 mg/l (EU Method C.1, 96 h, Leuciscus idus, Semi-static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	23 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 72h - Algae [1]	37 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 50 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	> 50 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
LOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Benzyl alcohol (100-51-6)	
LC50 - Fish [1]	460 mg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	230 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	770 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	500 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

Benzyl alcohol (100-51-6)	
EC50 96h - Algae [1]	76828 mg/l Test organisms (species): other:
ErC50 algae	770 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	51 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	48897 mg/l Test organisms (species): other: Duration: '30 d'

12.2. Persistence and degradability

EP965SC7 Black B	
Persistence and degradability	Not rapidly degradable
4-Nonylphenol, branched (84852-15-3)	
Persistence and degradability	Not readily biodegradable in water.
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
Persistence and degradability	Not readily biodegradable in water.
Triethylenetetramine (112-24-3)	
Persistence and degradability	Not readily biodegradable in water.

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SECTION 12. ECOLOGICAL INFORMATION (CONTINUED)

Isophorone diamine (2855-13-2)

Persistence and degradability	Not readily biodegradable in water.
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Benzyl alcohol (100-51-6)

Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
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Amine Epoxy Resin Adduct (Proprietary)

Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

4-Nonylphenol, branched (84852-15-3)

BCF - Fish [1]	1200 – 1300 (Equivalent or similar to OECD 305, 16 day(s), Gasterosteus aculeatus, Flow-through system, Salt water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	5.4 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 23 °C)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

BCF - Other aquatic organisms [1]	77.4 l/kg (BCFBAF v3.01, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	0.3 – 3.55 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Triethylenetetramine (112-24-3)

Partition coefficient n-octanol/water (Log Pow)	-2.65 (Estimated value, KOWWIN)
Bioaccumulative potential	Not bioaccumulative.

Isophorone diamine (2855-13-2)

BCF - Fish [1]	1.8 – 3.2 (BCFBAF v3.01, Pisces, Estimated value)
Partition coefficient n-octanol/water (Log Pow)	0.99 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Benzyl alcohol (100-51-6)

BCF - Fish [1]	1.4 l/kg (BCFBAF v3.01, Estimated value)
Partition coefficient n-octanol/water (Log Pow)	1 – 1.1 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

4-Nonylphenol, branched (84852-15-3)

Surface tension	38.9 mN/m (20 °C, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4 (log Koc, Calculated value)
Ecology - soil	Low potential for mobility in soil.

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

Surface tension	63.93 mN/m (23 °C, 0.15 g/l, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	6.5 – 8.6 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Adsorbs into the soil.

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SECTION 12. ECOLOGICAL INFORMATION (CONTINUED)

Triethylenetetramine (112-24-3)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.885 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
Isophorone diamine (2855-13-2)	
Surface tension	34.7 mN/m (23 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.6 – 2.3 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for adsorption in soil.
Benzyl alcohol (100-51-6)	
Surface tension	39 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.1 – 1.3 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Ozone : Not classified
 Fluorinated greenhouse gases : No

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: TRANSPORT INFORMATION

In accordance with DOT / IMDG / IATA

14.1. UN number

UN-No. (DOT) : UN3267
 UN-No. (IMDG) : 3267
 UN-No. (IATA) : 3267

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Corrosive liquid, basic, organic, n.o.s. (4-Nonylphenol, branched ; Isophorone diamine)
 Proper Shipping Name (IMDG) : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (4-Nonylphenol, branched ; Isophorone diamine)
 Proper Shipping Name (IATA) : Corrosive liquid, basic, organic, n.o.s. (4-Nonylphenol, branched ; Isophorone diamine)

14.3. Transport hazard class(es)

DOT
 Transport hazard class(es) (DOT) : 8
 Hazard labels (DOT) : 8



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SECTION 14: TRANSPORT INFORMATION (CONTINUED)

IMDG

Transport hazard class(es) (IMDG) : 8
 Hazard labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8
 Hazard labels (IATA) : 8



14.4. Packing group

Packing group (DOT) : III
 Packing group (IMDG) : III
 Packing group (IATA) : III

14.5. Environmental hazards

Dangerous for the environment : Yes
 Marine pollutant : Yes



Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : UN3267
 DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
 T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
 TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
 TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154
 DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
 DOT Packaging Bulk (49 CFR 173.xxx) : 241
 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
 DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

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SECTION 14: TRANSPORT INFORMATION (CONTINUED)

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L		
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.		
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters", 52 - Stow "separated from" acids		
IMDG			
Special provision (IMDG)	: 223, 274		
Limited quantities (IMDG)	: 5 L		
Excepted quantities (IMDG)	: E1		
Packing instructions (IMDG)	: P001, LP01		
IBC packing instructions (IMDG)	: IBC03		
Tank instructions (IMDG)	: T7		
Tank special provisions (IMDG)	: TP1, TP28		
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE		
EmS-No. (Spillage)	: S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES		
Stowage category (IMDG)	: A		
Stowage and handling (IMDG)	: SW2		
Segregation (IMDG)	: SGG18, SG35		
Properties and observations (IMDG)	: Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.		
IATA			
Special provision (IATA)	: A3, A803	PCA packing instructions (IATA)	: 852
PCA Excepted quantities (IATA)	: E1	PCA max net quantity (IATA)	: 5L
PCA Limited quantities (IATA)	: Y841	CAO packing instructions (IATA)	: 856
PCA limited quantity max net quantity (IATA)	: 1L	CAO max net quantity (IATA)	: 60L
		ERG code (IATA)	: 8L

SECTION 15. REGULATORY INFORMATION

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
4-Nonylphenol, branched	84852-15-3	Present	Active	SP
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	68082-29-1	Present	Active	XU
Triethylenetetramine	112-24-3	Present	Active	
Isophorone diamine	2855-13-2	Present	Active	
Benzyl alcohol	100-51-6	Present	Active	
Amine Epoxy Resin Adduct	Proprietary	Not present	-	

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

4-Nonylphenol, branched	CAS-No. 84852-15-3	10 - 30%
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15.2. International regulations

CANADA

4-Nonylphenol, branched (84852-15-3)

Listed on the Canadian DSL (Domestic Substances List)

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SECTION 15. REGULATORY INFORMATION (CONTINUED)

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

Listed on the Canadian DSL (Domestic Substances List)

Triethylenetetramine (112-24-3)

Listed on the Canadian DSL (Domestic Substances List)

Isophorone diamine (2855-13-2)

Listed on the Canadian DSL (Domestic Substances List)

Benzyl alcohol (100-51-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

4-Nonylphenol, branched (84852-15-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Triethylenetetramine (112-24-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Isophorone diamine (2855-13-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Benzyl alcohol (100-51-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

4-Nonylphenol, branched (84852-15-3)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Triethylenetetramine (112-24-3)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
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SDS Number: 120B
 Revision Date: 05/20/2025
 Supersedes Date: 12/10/2020

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SECTION 15. REGULATORY INFORMATION (CONTINUED)

Isophorone diamine (2855-13-2)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Benzyl alcohol (100-51-6)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Triethylenetetramine(112-24-3)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Isophorone diamine(2855-13-2)	U.S. - New Jersey - Right to Know Hazardous Substance List
Benzyl alcohol(100-51-6)	U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16. OTHER INFORMATION

Full text of hazard classes and H-statements

H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SECTION 17. DISCLAIMER

GC Electronics believes that the information contained herein is accurate and reliable as of the date of this material safety data sheet, but no representation guarantee or warranty, express or implied, is made as to the accuracy, reliability or completeness of the information. Persons receiving information are encouraged to make their own determination as to the information's suitability and completeness for their particular application. NO INFORMATION CONTAINED HEREIN CONSTITUTES A PRODUCT WARRANTY OF ANY KIND, WHETHER EXPRESS OR IMPLIED; AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED BY GC ELECTRONICS.

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Type: Adhesive

Product Name: **GC POTTING EPOXY, PART A
(RESIN)**

Part Number(s): 19-823 Part A

Emergency Contact: **Chemtrec**
Phone: **(800) 424-9300**

Recommended use : Epoxy resin
Restrictions on use : Product for industrial use only

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 2

H315 Causes skin irritation.

Serious eye damage/eye irritation, Category 2

H319 Causes serious eye irritation.

Skin sensitization, Category 1

H317 May cause an allergic skin reaction.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Warning

Hazard statements (GHS US)

: H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

Precautionary statements (GHS US)

: P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves.

P302+P352 - If on skin: Wash with plenty of water.

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 or attention.

P337+P313 - If eye irritation persists: Get medical advice or attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Epoxy Resin	CAS-No.: 25068-38-6	≥ 90
carbon black	CAS-No.: 1333-86-4	0.5 – 1

Full text of hazard classes and H-statements : see section 16

SECTION 4. FIRST AID MEASURES

4.1. Description of necessary first-aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5. FIRE-FIGHTING MEASURES

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use water jet to extinguish.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon oxides (CO, CO ₂). Phenolic compounds. Metal oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the workplace. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Contains a component(s) that is encapsulated within the product and not expected to be released during normal processing conditions or a foreseeable emergency. Do not breathe dust created by sanding, grinding or machining.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Keep cool. Protect from sunlight.
Packaging materials : Store always product in container of same material as original container.

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Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

carbon black (1333-86-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Carbon black
ACGIH® TLV® TWA	3 mg/m³ (Inhalable fraction)
Remark (ACGIH®)	TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Carbon black
OSHA PEL TWA	3.5 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the workplace.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



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Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Black
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 252 °C
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 1.16 g/cm ³
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

VOC content	: 0 %
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SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acids. Oxidizing agents. Bases. Amines. Mercaptans.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Refer to section 5.2 for hazardous decomposition products during combustion.

SAFETY DATA SHEET

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Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
 Acute toxicity (dermal) : Not classified
 Acute toxicity (inhalation) : Not classified

Epoxy Resin (25068-38-6)	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

carbon black (1333-86-4)	
LD50 oral rat	> 10000 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 28 day(s))
LD50 dermal rabbit	> 8000 mg/kg Source: ECHA

Skin corrosion/irritation : Causes skin irritation.

Epoxy Resin (25068-38-6)	
pH	No data available in the literature

carbon black (1333-86-4)	
pH	4 – 10 (5 %, 20 °C)

Serious eye damage/irritation : Causes serious eye irritation.

Epoxy Resin (25068-38-6)	
pH	No data available in the literature

carbon black (1333-86-4)	
pH	4 – 10 (5 %, 20 °C)

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Epoxy Resin (25068-38-6)	
NOAEL (chronic,oral,animal/male,2 years)	15 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)

Epoxy Resin (25068-38-6)	
NOAEL (chronic,oral,animal/female,2 years)	100 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)

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Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

carbon black (1333-86-4)

IARC group	2B - Possibly carcinogenic to humans
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Reproductive toxicity : Not classified
 STOT-single exposure : Not classified
 STOT-repeated exposure : Not classified

carbon black (1333-86-4)

LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0071 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days)	> 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0011 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

Aspiration hazard : Not classified

Epoxy Resin (25068-38-6)

Viscosity	No data available in the literature
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carbon black (1333-86-4)

Viscosity	Not applicable
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Symptoms/effects after inhalation : None under normal conditions.
 Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
 Symptoms/effects after eye contact : Eye irritation.
 Symptoms/effects after ingestion : None under normal conditions.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life.
 Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.
 Hazardous to the aquatic environment, long-term (chronic) : Not classified

Epoxy Resin (25068-38-6)

LC50 - Fish [1]	1.3 mg/l (96 h, Pisces, Literature study)
EC50 - Crustacea [1]	≈ 2 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	9.4 mg/l (EPA 660/3 - 75/009, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Biomass)
EC50 72h - Algae [2]	> 11 mg/l Test organisms (species): Scenedesmus capricornutum
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

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Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 12. ECOLOGICAL INFORMATION (CONTINUED)

carbon black (1333-86-4)	
LC50 - Fish [1]	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 5600 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	> 10000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 10000 mg/l Test organisms (species):
ErC50 algae	> 10000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)

12.2. Persistence and degradability

EP965SC7 Black A	
Persistence and degradability	Not rapidly degradable

Epoxy Resin (25068-38-6)	
Persistence and degradability	Not readily biodegradable in water.

carbon black (1333-86-4)	
Persistence and degradability	Biodegradability in soil: not applicable, Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

Epoxy Resin (25068-38-6)	
Partition coefficient n-octanol/water (Log Pow)	3 (Estimated value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

carbon black (1333-86-4)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Epoxy Resin (25068-38-6)	
Surface tension	59 mN/m (20 °C, 0.09 g/l)
Ecology - soil	No (test)data on mobility of the substance available.

carbon black (1333-86-4)	
Surface tension	Not applicable (solid)
Ecology - soil	No (test)data on mobility of the substance available. Not toxic to plants. Not toxic to animals.

12.5. Other adverse effects

Ozone : Not classified
 Fluorinated greenhouse gases : No

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 13. DISPOSAL CONSIDERATIONS

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

In accordance with DOT / IMDG / IATA

14.1. UN number

UN-No. (DOT)	: Not regulated
UN-No. (IMDG)	: 3082
UN-No. (IATA)	: 3082

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Not regulated
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin)
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: Not regulated
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IMDG

Transport hazard class(es) (IMDG)	: 9
Hazard labels (IMDG)	: 9



IATA

Transport hazard class(es) (IATA)	: 9
Hazard labels (IATA)	: 9



14.4. Packing group

Packing group (DOT)	: Not regulated
Packing group (IMDG)	: III
Packing group (IATA)	: III

14.5. Environmental hazards

Other information	: No supplementary information available.
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14.6. Transport in bulk

Not applicable

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 Miami, FL, 33142
 (833) 423-0432
 www.gcelectronics.com

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 14. TRANSPORT INFORMATION (CONTINUED)

14.7. Special precautions for user

DOT

Not regulated

IMDG

Special provision (IMDG) : 274, 335, 969
 Limited quantities (IMDG) : 5 L
 Excepted quantities (IMDG) : E1
 Packing instructions (IMDG) : LP01, P001
 Packing provisions (IMDG) : PP1
 IBC packing instructions (IMDG) : IBC03
 Tank instructions (IMDG) : T4
 Tank special provisions (IMDG) : TP1, TP29
 EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
 EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
 Stowage category (IMDG) : A

IATA

Special provision (IATA) : A97, A158, A197, A215
 PCA Excepted quantities (IATA) : E1
 PCA Limited quantities (IATA) : Y964
 PCA limited quantity max net quantity (IATA) : 30kgG
 PCA packing instructions (IATA) : 964
 PCA max net quantity (IATA) : 450L
 CAO packing instructions (IATA) : 964
 CAO max net quantity (IATA) : 450L
 ERG code (IATA) : 9L

SECTION 15. REGULATORY INFORMATION

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Epoxy Resin	25068-38-6	Present	Active	XU
carbon black	1333-86-4	Present	Active	

15.2. International regulations

CANADA

Epoxy Resin (25068-38-6)

Listed on the Canadian DSL (Domestic Substances List)

carbon black (1333-86-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Epoxy Resin (25068-38-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC POTTING EPOXY, PART A (RESIN)

SECTION 15. REGULATORY INFORMATION (CONTINUED)

carbon black (1333-86-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Epoxy Resin (25068-38-6)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

carbon black (1333-86-4)

Listed on IARC (International Agency for Research on Cancer)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

15.3. State regulations

⚠ WARNING: This product can expose you to chemicals including Epichlorohydrin, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
carbon black(1333-86-4)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16. OTHER INFORMATION

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
 Issue date : 10/2/2025

Full text of hazard classes and H-statements	
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H401	Toxic to aquatic life

SECTION 17. DISCLAIMER

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