

SAFETY DATA SHEET

Section 1 : Product and Company Identification

a) **Product Name** : CP150NS/M.008

b) **Recommended Use of the Chemical and Restrictions on Use** : Industrial and sporting usages

c) **Manufacturer** :

- **Name** : TB CARBON CO., LTD.

- **Address** : #626-280

TB CARBON CO., LTD.

18, Dulleom-gil, Yangsan-si

Gyeongsangnam-do, Korea

- **Emergency Telephone Number** : TEL : (+82)-55-387-8992~4

FAX : (+82)-55-387-8996

Section 2 : Hazards Identification

a) **Hazard-Risk Classification** :

Carcinogenicity : Category 2,

Skin Corrosion/Irritation : Category 2 , **Serious Eye Damage/Eye Irritation** : Category 2

Skin Sensitization : Category 2 , **Hazardous to the Aquatic Environment_Chronic** : Category 2

b) **Label Elements Including Precautionary Statements**

- **Symbol** :



- **Signal Word** : Warning

- Hazard Statements :

- H315 :** Causes skin irritation
- H317 :** May cause an allergic skin reaction
- H319 :** Causes serious eye irritation
- H351 :** Suspected of causing cancer
- H411 :** Harmful to aquatic life with long lasting effects

- Precautionary statements

Prevention

- P261 :** Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 :** Wash ... thoroughly after handling.
- P272 :** Contaminated work clothing should not be allowed out of the workplace.
- P273 :** Avoid release to the environment.
- P280 :** Wear protective gloves/protective clothing/eye protection/face protection.
- P281 :** Use personal protective equipment as required.

Response

- P302+P352 :** IF ON SKIN: Wash with plenty of soap and 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.
- P308+P313 :** If exposed or concerned Get medical advice/attention.
- P321 :** Specific treatment (see ... on this label).
- P332+P313 :** If skin irritation occurs: Get medical advice/ attention.
- P333+P313 :** If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 :** If eye irritation persists: Get medical advice/attention.
- P362 :** Take off contaminated clothing and wash before reuse.
- P363 :** Wash contaminated clothing before reuse.
- P391 :** Collect spillage.

Storage

- P402 + P235 :** Store in a dry. Keep Cool

Disposal

- P501 :** Dispose of contents/container to ...

- Other Hazard Risk Which Are Not Included In The Classification Criteria(NFPA)

Health : 2

Fire : 1

Reaction : 0

Section 3 : Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Content (%)</u>
Epoxy Resin Mixture	Trade Secrets	25 - 40
Dicyandiamide	461-58-5	5 - 10
Diuron	330-54-1	2 - 5
Carbon Fiber	7440-44-0	60 - 75
Glass Fiber	65997-17-3	2 – 30

Section 4 : First Aid Measures

a) Eye contact: If particles get in eyes, flush with plenty of water for several minutes

b) Skin contact: If product irritates skin, wash area with mild soap and water

c) Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

d) Ingestion: Rinse out mouth. Drink plenty of water

In case of discomfort : Supply with medical care

e) Indication of immediate medical attention and notes for physician:

Medical personnel to take the material and protective measures for enlarge

Section 5 : Fire Fighting Measures

a) Suitable (and unsuitable) extinguishing media:

- **Suitable extinguishing media:** powder type fire extinguisher, water spray or bubble

- **Unsuitable extinguishing media:** No data

b) Specific hazards arising from the chemical

(e.g. nature of any hazardous combustion products):

In case of fire, it may generate toxic gas

c) Special protective equipment and precautions for fire-fighters:

Please wear appropriate reserve rescuers

Please keep a safe distance off the digestive area

Leaking gas fire : Do not extinguish, unless leak can be stopped safely

Eliminate all ignition sources if safe to do so

Section 6 : Accidental Release Measures

a) Personal precautions, protective equipment and emergency procedures:

Please isolate the contaminated area

No need to enter a protective equipment that may not have access to do not disturb people

Please remove all ignition sources

Please note that materials and conditions to avoid

b) Environmental precautions and protective procedures:

Waterways, sewers, basements, please avoid the influx of airtight space

Steam drain, please do not spread through the ventilation device, sealed space

c) Methods and materials for containment and cleaning up:

Use filtered vacuum cleaner with grounded electrical cord, or wet sweeping methods, to collect loose material : avoid circulating airborne fibrous particles, during cleanup operation.

Section 7 : Handling and Storage

a) Precautions for safe handling: As with all industrial product, section of specific personal protective equipment(e.g. gloves, disposable, clothing , clothing , respirators) and general control exposure potential. To avoid ingestion incidental to handling, food and tobacco should not be present in the work area. Wash skin contact areas with soap and water after handling.

b) Conditions for safe storage (including any incompatibilities): Store product in original containers. Avoid conditions that may generate dust or lint.

Section 8 : Exposure Controls & Personal Protection

a) Control parameters (e.g. occupational exposure limit values, biological limit values):

	ACGIH(TLV)	OSHA(PEL)	Biological Limit Values
Carbon Fiber	No data	No data	No data
Glass Fiber	No data	No data	No data
Epoxy Resin Mixture	No data	No data	No data
Dicyandiamide	No data	No data	No data
Diuron	10 mg/m ³ TWA	No data	No data

b) Appropriate engineering controls:

- **Local Exhaust:** Recommended when appropriate to control employee-exposure, especially at points where fragmentation or particulate generation may occur.
 - **Mechanical (General) Ventilation:** May not be adequate as the sole means of controlling dust or lint.
- c) Personal Protective Equipment:**
- **Respiratory Protection:** Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. A full facepiece respirator also provides eye and face protection. Cutting, grinding or sanding of parts fabricated after curing components listed above for potential hazardous components in the dust.
 - **Eye Protection:** Wear safety goggles if dust or lint is present.
 - **Hands Protection:** Wear Gloves when handling
 - **Body Protection:** Apply barrier cream or wear long sleeved shirt to prevent fibrous matter from contacting exposed skin. Wash work clothing frequently. Wash exposed skin areas before eating and at end of work day. Use good housekeeping practices to keep work area free of dust and fibers.

Section 9 : Physical and Chemical Properties

- a) **Appearance:** Resin impregnated material with carbon fiber
- b) **Odour:** No data
- c) **Odour threshold:** No data
- d) **pH:** No data
- e) **Melting Point/Freezing Point:** No data
- f) **Initial Boiling Point and Boiling Range:** No data
- g) **Flash Point:** No data
- h) **Evaporation rate:** No data
- i) **Flammability (Solid, Gas):** No data
- j) **Upper/Lower Flammability or Explosive Limits:** No data
- k) **Vapor Pressure:** No data
- l) **Solubility:** No data
- m) **Vapor Density:** No data
- n) **Relative Density:** No data
- o) **Partition Coefficient: n-Octanol/Water:** No data
- p) **Auto-ignition Temperature:** No data
- q) **Decomposition Temperature:** No data
- r) **Viscosity:** No data
- s) **Molecular mass:** No data

Section 10 : Stability and Reactivity

a) Chemical Stability and Possibility of Hazardous Reactions:

Stable under normal temperature and pressure conditions

b) Conditions to avoid (e.g. Static Discharge, Shock or Vibration, etc):

Heat, sparks and open flame ignition sources such as

c) Incompatible Materials:

Avoid contact with acids, oxidizing agents, bases or amines. And strong acids, oxidizing agents.

d) Hazardous Decomposition Products:

In case of fire, It may generate toxic gas

Section 11 : Toxicological Information

a) Information of the Likely Routes of Exposure:

- **Inhalation:** None known
- **Skin Contact:** Prolonged skin contact may cause temporary irritation
- **Eye Contact:** Dust in the eyes may cause irritation
- **Ingestion:** None known

b) Health Hazards Information:

- **Acute Toxic:**
 - Oral:** No data
 - Dermal:** No data
 - Inhalation:** No data
- **Skin Corrosive/Irritant:** causes skin irritation
- **Serious Eye Damage/Eye Irritation:** causes eye irritation
- **Respiratory Sensitization:** No data
- **Skin Sensitization:** No data

- Carcinogenicity:

	IARC	ACGIH
Carbon Fiber	No data	No data
Glass Fiber	Group 3	No data
Epoxy Resin Mixture	No data	No data
Dicyandiamide	No data	No data
Diuron	No data	A4

- **Germ Cell Mutagenicity:** No data
- **Reproductive Toxicity:** No data

- **Specific Target Organ Toxicity (Single Exposure):** No data
- **Specific Target Organ Toxicity (Repeated Exposure):** No data
- **Aspiration Hazard:** No data

Section 12 : Ecological Information

- a) **Aquatic and Terrestrial Ecotoxicity:** No data
- b) **Persistence and Degradability:** No data
- c) **Bioaccumulative Potential:** No data
- d) **Mobility in Soil:** No data
- e) **Other Adverse Effects:** No data

Section 13 : Disposal Considerations

a) **Disposal Method:** Waste material should be bagged or containerized, sealed and disposed of in an approved landfill in accordance with federal, state and local regulations. Product as shipped is not considered a hazardous waste under current RCRA regulations

b) **Disposal Precaution**

(Including the Disposal Method of Contaminated Container and Packaging):

Do not incinerate. And follow the a) Method

Section 14 : Transport Information

- a) **UN Number:** No data
- b) **UN Proper Shipping Name:** No data
- c) **Transport Hazard Class:** No data
- d) **Packing Group (If Applicable):** No data
- e) **Marin Pollution (Yes/No):** No data
- f) **Special Precaution Which a User to Be Aware of or Needs to Comply With Transport or Conveyance Either Within or Outside Their Premises:** No data

Section 15 : Regulatory Information

- a) **Industrial Safety and Health Act:** No information
- b) **Toxic Chemical Control Act:** No information
- c) **Dangerous Material Safety Control Act:** No information

d) **Wastes Management Act:** No information

e) **Other Requirements in Domestic and Other Countries:**

- **Chemical inventories**

	KECI(korea)	TSCA(USA)	DSLCanada)	IECSC(China)
Carbon Fiber	Listed	Listed	Listed	Listed
Glass Fiber	Listed	Listed	Listed	Listed
Epoxy Resin Mixture	Not applicable	Not applicable	Not applicable	Not applicable
Dicyandiamide	Listed	Listed	Listed	Listed
Diuron	Listed	Listed	Listed	Listed

Section 16 : Other Regulatory Information

a) **California Proposition 65 Warnings**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Diuron Known Carcinogen = Epichlorohydrin. Known Reproductive Toxin = Epichlorohydrin.

Section 17 : Other Information

a) **Information Source and References:** SDS references which provides from each raw materials manufacturers of Epoxy Resin Mixture as well as Korea Occupational Safety and Health Agency

b) **Issuing Date:** 11/27/2015 (M/D/Y)

c) **Revision Number and Date:**

- **Revision Number:** Rev. 01

- **Revision Date:** 02/19/2019

d) **Other:** As with all industrial product, section of specific personal protective equipment(e.g. gloves, disposable, clothing , clothing , respirators) and general control exposure potential. To avoid ingestion incidental to handling, food and tobacco should not be present in the work area. Wash skin contract areas with soap and water after handling.

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mentioned in this publication should satisfy himself as to such suitability and that he can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufactures or suppliers current instruction for handling each material they use.

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