1. MATERIAL IDENTIFICATION

Product name

R190 A

Recommended use and use restriction

- General use: Epoxy Resin
- Use restriction: Not available

No. C.A.S.

Not available

Company Name

- Company: Forza Inc
- Adress: 3211 Nebraska Ave, Suite 300, Council Bluffs, IA 51501
- Telephone number: 4027319300
- Emergency telephone number: Chemtrec:18004249300

2. HAZARDS IDENTIFICATION

GHS classification

- Corrosion / skin irritation: Category2
- Severe eye damage / irritation: Category2A
- Sensitization of the skin: Category 1
- Chronic aquatic toxicity: category 2

GHS label elements

Hazard pictograms / symbols Signal word: **Warning**

- **Hazard statements**

  - H315 Causes skin irritation
  - H317 May cause an allergic skin reaction.
  - H319 Causes severe eye irritation
  - H401 Toxic to aquatic life
  - H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements**

Prevention

  -
  - P201 Obtain special instructions before use.
  - P202 Do not handle the substance before reading and understanding all the safety instructions.
  - P261 Avoid breathing dust, smoke, gas, fog, vapors, spray.
  - P264 Wash hands carefully after handling.
  - P270 Do not eat, drink or smoke while handling this product.
  - P272 Contaminated work clothing cannot be removed from the workplace.
  - P273 Do not disperse in the environment.
  - P280 Wear gloves, clothing, glasses and protective mask.

- P331 Do not induce vomiting
- P360: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
- P362 Take off contaminated clothes.
- P363: Wash contaminated clothing before reuse
- P302 + P352 If on skin. Wash with plenty of water.
- P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 In case of contact with eyes: Rinse cautiously with water for several minutes.
- Remove contact lenses, if it is worn and it is easy to continuerinsing.
- P332 + P313 In case of skin irritation: consult a doctor

Storage

- P403 + P235 Store in a well-ventilated place, keep in a cool place.

Disposal.

- P501: Disposal of contents/container to be specified in accordance with regulations.

3. COMPOSITION

Component	CAS No.	Content (%)
Epoxy Resin	25068-38-6	80 – 90
Aggregates	ND	20-10

4. FIRST AID MEASURES

General advice: Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye contact: Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

Skin contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wounds with sterile dressing. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

Ingestion: Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation: Move to fresh air.

Most important symptoms/effects: Eye disease. Skin disorders and Allergies.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

- Alcohol-resistant foam.
- Carbon dioxide (CO2).
- Dry chemical. Dry sand.
- Limestone powder.

Unsuitable extinguishing media

- Not available.

Special hazards arising from the substance

- Incomplete combustion may form carbon monoxide.
- May generate ammonia gas.
- May generate toxic nitrogen oxide gases.
- Do not allow run-off from firefighting to enter drains or water courses.
- Burning produces noxious and toxic fumes.
- Downwind personnel must be evacuated.

Special protection actions for firefighters

- Avoid contact with the skin.
- A face shield should be worn.
- Wear self-contained breathing apparatus for firefighting if necessary.

Further information

- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Do not allow run-off from firefighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.

Environmental precautions

- Do not allow spill to enter into sewers or waterways.
- Use appropriate containment to avoid environmental contamination.
- Construct a dike to prevent spreading.

Methods for cleaning up

- Approach suspected leak areas with caution. Place in appropriate chemical waste container.

Further information

- If possible, stop the flow of the product.

7. HANDLING AND STORAGE

Precautions for safe handling

- Avoid contact with skin and eyes.
- Emergency showers and eye wash stations should be readily accessible.
- Adhere to work practice rules established by government regulations.
- Use personal protective equipment.
- When using, do not eat, drink or smoke.

Conditions for safe storage

- Do not store near acids.
- Keep containers tightly closed in a dry, cool and well- ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls

- ACGIH TLV
  - Not available

Engineering controls

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Ventilation: Normal room ventilation is sufficient, however, mechanical ventilation It provides better results.

Personal protection

- Respiratory protection: Respiratory protection against organic vapors.
- Eye protection: Full face goggles underneath.
- Hand protection: Use neoprene or plastic gloves.
- Body protection: Impervious clothing.
  Rubber or plastic boots.
  Slicker suit.

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Liquid
- Color	White
B. Odor	Not available
C. Odor threshold	Not available
D. pH	Not available
E. Melting point / freezing point	Not available
F. Initial boiling point / boiling range	Not available
G. Flammability point	Not available
H. Evaporation rate	Not available
I. Inflammability	Not available
J. Upper / lower flammability limits	Not available
K. Vapor pressure	4.6 x 10-8Pa (at 25°C)
L. Solubility	Not available
M. Vapor density	Not available
N. Relative density	Not available
O. Partition coefficient n-octanol / water	Not available
P. Auto-ignition temperature	Not available
Q. Decomposition temperature	Not available
R. Viscosity	11,500 – 13,500 cp
S. Molecular weight	Not available
T. Flash Point	Not available

10. STABILITY AND REACTIVITY

Chemical Stability

- Stable under normal conditions.

Conditions to avoid

- No data available.

Materials to avoid

- Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds.
- Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Sodium hypochlorite.
- Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
- Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
- Oxidizing agents.

Hazardous decomposition products

- Nitric acid. Ammonia.
- Nitrogen oxides (NOx).
- Nitrogen oxide can react with water vapors to form corrosive nitric acid.
- Carbon monoxide (CO). Carbon dioxide (CO2).
- Aldehydes.
- Flammable hydrocarbon fragments.

11. TOXICOLOGICAL INFORMATION

Health hazards

- Harmful if swallowed.
- Corrosive to eyes.
- Corrosive to respiratory system.
- Corrosive to skin.
- Severe eye irritant
- Severe respiratory tract irritant
- Severe skin sensitization.

Target organs:

- Eye
- Skin
- Respiratory system

Signs and symptoms of exposure (acute effects)

Product vapor in low concentrations can cause lacrimation, cunjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphera. Corneal edema may give rise to a perception of `blue haze´or `fog´around lights. The effect is transient and has no known residual effect. Burns of the eye may cause blindness. Contact of undiluted product with the eyes or skin quickly causes severe irritation and pain and may cause burns, necrosis and permanent injury.
Inhalation of vapors may severely damage contacted tissue and produce scarring. Inhalation of aerosols and mists may severely damage contacted tissue and produce scarring.
Product is absorbed through the skin and may cause nausea, headache and general discomfort.
Repeated and/or prolonged exposure may cause allergic reaction/sensitization. Repeated and/« prolonged exposures may result in: respiratory effects (such as cough, tightness of chest or shortness of breath). Adverse eye effects (such as conjunctivitis or corneal damage). Adverse skin effects (such as rash, irritation corrosion). Effects from inhalation of vapors may be delayed. Repeated and/or prolonged exposure to low concentrations of vapor may cause sore throat which are transient.

Medical conditions generally aggravated by exposure

- Asthma
- Chronic respiratory disease
- Eye disease
- Skin disorders and allergies

Carcinogenicity OSHA, ACGIH, NTP, IARC

- This product contains no listed carcinogens in concentrations of 0.1 or greater.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic toxicity: LC50 (24 h): 222mg/l Species: Rainbow trout (oncorhynchus mykiss).
LC100 (96 h): 240 mg/l
Species: Rainbow trout (oncorhynchus mykiss).
LC0 (96 h): 180 mg/l
Species: Rainbow trout (oncorhynchus mykiss).
LC50 (24 h): 240 mg/l
Species: Carp (Cyprinus carpio).
LC50 (96 h): 175 mg/l
Species: Carp (Cyprinus carpio).
EC50 (96 h): 718 mg/l
Spices: grass shrimp (Palaemonetes).
EC100 (96 h): 1.000 mg/l
Species: Mud crab (neopanope).

Toxicity to other organisms: No data available.

Persistence and degradability

Not available

Bio accumulative potential

Not available

Mobility

Not available

Other adverse effects

Not available

13. DISPOSAL CONSIDERATIONS

Methods of elimination

Waste from residues/ unused: Contact supplier if guidance is required.

Contaminated packing: Dispose of container and unused contents in accordance with federal, and local requirements.

14. TRANSPORT INFORMATION

UN/ID No. (IMDG)

- UN 3082

Proper shipping name

Environmentally hazardous substances, liquids, (Epoxy Resin)

Class or Division

- 9

Packing group IMDG

- III

Label (s)

- 9

Marine pollutant

- Yes

Special precautions for the user related to transport measures

- Not available

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class (es)
Marine pollulant.

EPA SARA Title III Section 312 (40 CFR 370) Component(s) above´de minimus´level:
None.

WHMIS HAZARD Classification
Marine pollulant.

16. OTHER INFORMATION

Date of issue

20/10/2023

Review number and Last date reviewed

0, 20/10/2023

Other

The information is considered correct but is not exhaustive and will be used only as guidance, which is based on current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.