

Material Safety Date Sheet (MSDS)

1. Product and company identification

Product name EPOXY MOLDING COMPOUND for IC

Name of product
(chemical name,
brand name, etc.) : MP-8000CH4-E
Supplier product code : ZF221411C

Company identification

Name of the
supplier : NITTO DENKO ELECTRONICS (MALAYSIA) SDN. BHD

Address : NO.2, PERSIARAN BUDIMAN SEKSYEN 23, 40000 SHAH ALAM,
SELANGOR DARUL EHSAN, MALAYSIA

A section in
Charge : Research & Development SECTION

Telephone numbe : 60-3-5541-7733 FAX number : 60-3-5541-8160
mergency telephone numbe : 60-3-5541-7733

2. Composition / information on ingredients

Distinction between
a substance and : Compound

Chemical name or the generic	Solid Epoxy Resin	Phenol Resin	Fused Silica
Synonyms			
Chemical formula or structural formula			SiO ₂
Content (mass%)	2-20	2-20	60-95
The serial number of the notifications on the official gazette	-	-	-
CAS number	-	-	60676-86-0
The common Chemical	Antimony Trioxide	Carbon Black	Crystalline Silica
Synonyms			
Chemical formula or structural formula	Sb ₂ O ₃	C	SiO ₂
Content (mass%)	1.2	below 1	below 5
The serial number of the notifications on the	-		-
CAS number	1309-64-4	1333-86-4	14808-60-7

3. Hazards identification

Most important hazards and effects of the product

Adverse human health effects : Dust or small particles abrade skin and irritate eyes.
Silica ; See section 11
Cristalline Silica and Carbon Black are listed in US California Proposition 65 as chemical can cause cancer or reproductive toxicity.

Physical and chemical hazards : May occur extraordinary reaction and generate high temperature when contact with strong alkalis acids.

Specific hazards : May irritate skin and eyes with prolonged and repeated contact.

4. First-aid measures

Inhalation :

If affected, move victims to fresh air. Keep victims at rest.

Skin contact :

Wash exposed area with lots of soap and water. Remove contaminated clothing and launder before re-use.

Eye contact :

Immediately flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get medical attention.

Ingestion :

Do not induce vomiting. Get immediate medical attention.

A brief description of the most important symptoms and effect :

Protection of first-aiders :

Special notes to a physician :

5. Fire-fighting measures

Extinguishing media :

foam.

NOT suitable extinguishing media :

Water in a jet.

Specific hazards :

May produce oxides of carbon if incomplete combustion occurs.

Specific methods :

Keep personal removed from and upwind fire.

Protection of firefighters :

Wear full protective clothing and self-contained breathing apparatus with full face-piece.

6. Accidental release measures

Personal precautions :	Person not Wearing protective equipment should be excluded from the area of the spill until clean-up has been completed.
Environmental precautions :	Prevent spills from entering sewers, watercourses or low areas.
Methods for Cleaning up	In case of spill wipe up with wipers or vacuum cleaners, then put it into a chemical waste containers.
Recovery :	
Neutralization :	
Disposal :	See section 13 for information in disposal.

7. Handling and storage

Handling	Avoid contact with skin, eye and clothing. Avoid inhalation of vapors. Wash skin thoroughly after handling.
Prevention of user exposure :	
Precautions :	Apply local ventillation over processing areas.
Safe handling advice :	Avoid contact with strong acids or alkalis.
Storage	
Technical measures :	Keep containers closed or covered and dry.
Incompatible products :	Strong acids or alkalis.
Storage conditions	Keep unger 5 degreeC in covered containers and away from direct sunlight, heat and open flames when not in use.
Suitable storage conditions :	
Storage conditions to be avoided :	Avoid keeping in higher temperatures.
Recommended :	Use closed containers with impervious materials.
Not suitable :	Avoid overexposure in higher humidity.

8. Exposure controls / personal protection

Engineering measures :	exposure below established exposure limits or
Control parameters :	Carbon ;
Personal protective equipment	
Respiratory protection :	cartridge. polyethylene or certain synthetic rubbers (contact your safety equipment supplier).
Hand protection :	
Eye protection :	Dust-tight goggles.
Skin and body protection :	Impervious clothing and boots are recommended.

9. Physical and chemical properties

Physical state

Form:	Tblet or Powder
Color :	Black
Odour :	Faint ordor
pH :	NA
Specific temperature / temperature ranges at which changes in physical state occur	
Boiling point :	NA
Fusing point :	70-110 dwgreeC
Decomposition temperature :	above 200 degreeC
Flash point :	above 200 degreeC
Autoignition temperature :	above 200 degreeC
Explosion properties :	No data
Densy :	No data
Solubility, with indication of the solve	Not miscible in water, miscible in Ketone.

10. Stability and reactivity

Stability :	Stable below 5 degreeC, at least 6 months in a closed container.
Possible hazardous reactions occurring under specific condition :	May occur extrarordinary reaction when contacted with strong acids, alkalis or hardeners for epoxy resins.
Condition to avoid :	Store in high temperature or humidity.
Materials to avoid :	Strong acids, oxidising agents or harderes for epoxy resins.
Hazardous decomposition products :	Themal decomposition may from carbon monooide, carbon dioxide, nitrogen, nitrogen oxide and water vapor.

11. Toxicological information

Acute toxicity :	Solid Epoxy Resin ; Oral-Rat LD50 over 5000mg/Kg NOEL 50mg/Kg/day
Local toxicity :	Not cleared.
Specific effects	
Carcinogenicity :	Fused Silica ; Listed as Level 3 in IARC Cristalline Silica ; Listed as Level 1 in IARC

12. Ecological information

Information on fate

Mobility : Sink in water.

13. Disposal considerations

Incineration is the recommended disposal method for chemical waste such as this product. Dispose to licensed disposal processor.

Product :
Waste from residues :
Contaminated packaging :
Dispose to licensed disposal processor.
Remove all packaging for recovery or waste disposal.

14. Transport information

Information for Code and classification

Land : Assure containers are not damage to prevent leakage of product before loading.

The UN classification number : NA

15. Regulatory information

It is necessary to follow all regulations in your country.

Regulations : US California proposition 65

16. Other information

Disclaimer;

This information is made based on data from such as raw material MSDS, and our current knowledge.

The information contained herein is believed to be accurate, and is intended to describe the product for the purposes of health, safety and environmental requirements.