



Safety Data Sheet according to (EC) No 1907/2006

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HYSOL MG 52F

SDS No. : 1048218
V001.0

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

HYSOL MG 52F

Contains:

Phenol-formaldehyde polymer

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use:

Molding Compound

1.3. Details of the supplier of the safety data sheet

Manufacturer

Hysol Huawei Electronic Co., Ltd.

Songtiao Industrial Zone, Lianyungang, Jiangsu, China,

222000

T: +86 518-85155187

F: +86 518-85155060

SDS@hysolhuawei.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +86 18115208319

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Skin sensitizer

H317 May cause an allergic skin reaction.

Category 1

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word:

Warning

Hazard statement: H317 May cause an allergic skin reaction.

Precautionary statement: P280 Wear protective gloves.
Prevention

Precautionary statement: P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
Response

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Epoxy resin

Base substances of preparation:

resins

organic amine

Filler

Declaration of the ingredients according to CLP (EC) No 1272/2008:

| Hazardous components CAS-No. | EC Number REACH-Reg No. | content | Classification |
|--|----------------------------|---------------|---|
| Silica 7631-86-9 | 231-545-4 | 60- < 80% | Not classified |
| Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol 29690-82-2 | - | 10- < 20 % | Not classified |
| Phenol-formaldehyde polymer 9003-35-4 | 500-005-2 | >= 5- < 10 % | Eye Irrit. 2 H319 STOT SE 3 H335 Skin Sens. 1 H317 |
| 2,2',6,6'-Tetrabromo-4,4'- isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane 40039-93-8 | 500-107-7 | >= 1- < 5 % | Not classified |
| Carbon Black 1333-86-4 | 215-609-9 | >= 0,1- < 1 % | Not classified |

For full text of the H - statements and other abbreviations see section 16 "Other information".

Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap.

Eye contact:

Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remains (intensive smarting, sensitivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

SKIN: Rash, Urticaria.

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, foam, powder, water spray jet, fine water spray

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

Danger of decomposition if exposed to heat.

See section 10.

5.3. Advice for firefighters

Do not breathe combustion gases.

Wear self-contained breathing apparatus.

Additional information:

Avoid open flames and sources of ignition.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

Depending on workplace dust concentration, wear dust filter mask with particle filter P1, P2 or P3.

Wear protective equipment.

Ensure adequate ventilation.

6.2. Environmental precautions

Do not allow to enter the ground / soil.

6.3. Methods and material for containment and cleaning up

Remove all sources of ignition.

Remove mechanically.

Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.

Ensure adequate ventilation.

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid naked flames, sparking and sources of ignition.

Extract when the product is heated.

Avoid dust development and deposition - dust explosion risk. Take precautionary measures against static discharges.

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container.
Store in a cool, dry place.
Keep away from heat and direct sunlight.

7.3. Specific end use(s)

Molding Compound

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**

| Silica | Limit value - Eight hours | Limit value - Eight hours | Limit value - Short term | Limit value - Short term |
|----------------|---------------------------|---------------------------|--------------------------|--------------------------|
| 7631-86-9 | ppm | mg/m ³ | ppm | mg/m ³ |
| Austria | Not available | 4 inhalable aerosol | Not available | Not available |
| Belgium | Not available | 10 | Not available | Not available |
| Denmark | Not available | 2 inhalable aerosol | Not available | 4 inhalable aerosol |
| Finland | Not available | 5 | Not available | Not available |
| Germany (AGS) | Not available | 4 inhalable aerosol | Not available | Not available |
| Germany (DFG) | Not available | 4 inhalable aerosol | Not available | Not available |
| Ireland | Not available | 6 Inhalable fraction | Not available | Not available |
| Ireland | Not available | 2,4 Respirible fraction | Not available | Not available |
| Latvia | Not available | 1 | Not available | Not available |
| Switzerland | Not available | 4 inhalable aerosol | Not available | Not available |
| USA - OSHA | Not available | 80/ % silica total dust | Not available | Not available |
| United Kingdom | Not available | 6 inhalable aerosol | Not available | Not available |
| United Kingdom | Not available | 2,4 respirable aerosol | Not available | Not available |

| Carbon Black (1333-86-4) | | |
|--------------------------|-------------------------------------|--|
| France | Nom local | Noir de carbone |
| France | VME (mg/m ³) | 3,5 mg/m ³ |
| France | Note (FR) | Valeurs recommandées/admises |
| France | Référence réglementaire | Circulaire du Ministère du travail (réf.: INRS ED 984, 2016) |
| USA - ACGIH | Nom local | Carbon black |
| USA - ACGIH | ACGIH TWA (mg/m ³) | 3 mg/m ³ (Inhalable fraction) |
| USA - ACGIH | Remarque (ACGIH) | Bronchitis |
| USA - ACGIH | Référence réglementaire | ACGIH 2018 |
| USA - OSHA | Nom local | Carbon black |
| USA - OSHA | OSHA PEL (TWA) (mg/m ³) | 3,5 mg/m ³ |

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:
In use may form flammable/explosive dust-air mixtures.
Thorough dedusting.
Avoid naked flames, sparking and sources of ignition.
Ensure good ventilation/suction at the workplace.
No further information, see section 7.

Respiratory protection:

Do not inhale dust.

In case of insufficient ventilation, wear suitable respiratory equipment.

Depending on workplace dust concentration, wear dust filter mask with particle filter P1, P2 or P3.

Ensure adequate ventilation.

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Protective goggles

Skin protection:
Wear suitable protective clothing.
Protective clothing that covers arms and legs.

Advices to personal protection equipment:
Do not breathe dust and vapors.
Avoid eye contact.
Wash off any dirt that gets onto the skin with lots of soap and water, skin care.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Appearance | solid material granules, or, tablet black |
| Odor | little intrinsic odour |
| Odour threshold | No data available / Not applicable |
| pH | No data available / Not applicable |
| Initial boiling point | Polymerization may occur at elevated temperature. |
| Flash point | Not applicable |
| Decomposition temperature | No data available / Not applicable |
| Vapour pressure | No data available / Not applicable |
| Density (20 °C (68 °F)) | 1,8 - 2,1 g/cm ³ |
| Bulk density | No data available / Not applicable |
| Viscosity | No data available / Not applicable |
| Viscosity (kinematic) | No data available / Not applicable |
| Explosive properties | No data available / Not applicable |
| Solubility (qualitative) (20 °C (68 °F); Solvent: Water) | Not miscible or difficult to mix |
| Solubility (qualitative) (20 °C (68 °F); Solvent: ketones) | Partially miscible |
| Solidification temperature | No data available / Not applicable |
| Melting point | No data available / Not applicable |
| Flammability | No data available / Not applicable |
| Auto-ignition temperature | No data available / Not applicable |
| Explosive limits | No data available / Not applicable |
| Partition coefficient: n-octanol/water | No data available / Not applicable |
| Evaporation rate | No data available / Not applicable |
| Vapor density | No data available / Not applicable |
| Oxidising properties | No data available / Not applicable |

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with strong oxidants.
Polymerization may occur at elevated temperature or in the presence of incompatible materials.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Danger of dust explosions.
Take measures to prevent the build-up of electrostatic charges.
See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).
No decomposition if stored and applied as directed.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

Irritating vapors.
Hydrocarbons
Oxides of carbon.
Bromine compounds
Oxides of silicon.
May produce fumes when heated to decomposition. Fumes may contain carbon monoxide and other toxic fumes.
See section 5.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****General toxicological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Prolonged or repeated contact may cause eye irritation.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---------------|-------------|-------------------------|------------------|---------|--------|
| Phenol-formaldehyde polymer 9003-35-4 | LD50 | 4.100 mg/kg | oral | | rat | |

| | |
|----------------------------|--|
| Carbon Black (1333-86-4) | |
| DL50 orale rat | > 8000 mg/kg (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value, Oral) |
| DL50 cutanée lapin | > 3000 mg/kg (Rabbit, Literature study, Dermal) |
| CL50 inhalation rat (mg/l) | > 4,6 mg/l air (4 h, Rat, Experimental value, Inhalation) |

Acute inhalative toxicity:

No data available

Acute dermal toxicity:

No data available

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

SECTION 12: Ecological information**General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity**Ecotoxicity:**

Harmful to aquatic life with long lasting effects.

Do not empty into drains / surface water / ground water.

| | |
|--------------------------|--|
| Carbon Black (1333-86-4) | |
| CL50 poisson 1 | > 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Literature study) |
| CE50 Daphnie 1 | > 5600 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Experimental value) |
| EC50 72h algae 1 | > 10000 mg/l (OECD 201: Alga, Growth Inhibition Test, Scenedesmus subspicatus, Static system, Fresh water, Experimental value) |

12.2. Persistence and degradability**Persistence and Biodegradability:**

The product is not biodegradable.

| | |
|---------------------------------|---|
| Carbon Black (1333-86-4) | |
| Persistence and degradability | Biodegradability in soil: not applicable. Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

12.3. Bioaccumulative potential / 12.4. Mobility in soil**Mobility:**

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

12.5. Results of PBT and vPvB assessment

| | |
|--------------------------|---|
| Carbon Black (1333-86-4) | |
| Ecology - soil | Adsorbs into the soil. Not toxic to plants. Not toxic to animals. |

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product disposal:

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.4. Packaging group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content < 3 %
(1999/13/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.