



HYSOL GR510

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 21/03/2018

Revision date: 21/03/2018

Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : HYSOL GR510
Intended Use : Epoxy Molding Compound

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

1.2.1. Relevant identified uses

Used as epoxy molding compound.

1.2.2. Uses advised against

No additional information available

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

Importer

1.4. Emergency telephone number

Emergency number : +86 18115208319

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1 H317

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning
Hazardous ingredients : Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol; 3-Mercaptopropyltrimethoxysilane
Hazard statements (CLP) : H317 - May cause an allergic skin reaction
Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 - IF ON SKIN: Wash with plenty of water
P321 - Specific treatment (see supplemental first aid instruction on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

SECTION 3: Composition/information on ingredients

Mixtures

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| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---------------------------------------------------------------------|-----------------------------------------------------|-----------|----------------------------------------------------------------------------|
| Silica, vitreous | (CAS-No.) 7631-86-9 (EC-No.) 231-545-4 | 75 - 85 | Not classified |
| Epoxy resin | - | 5 - 6 | Not classified |
| Phenolic resin | - | 3.5-4.5 | Not classified |
| Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol | (CAS-No.) 29690-82-2 | 0.5 - 1.5 | Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| Carbon black | (CAS-No.) 1333-86-4 (EC-No.) 215-609-9;435-640-3 | 0.3 - 0.5 | Carc. 2, H351 |
| Ion Catcher | - | 0.2 - 0.4 | Not classified |
| 3-Mercaptopropyltrimethoxysilane | (CAS-No.) 4420-74-0 (EC-No.) 224-588-5 | 0.1 - 0.3 | Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| Stress modifier | - | 0.1 - 0.3 | Not classified |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- 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 eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

- Symptoms/effects after skin contact : May cause an allergic skin reaction.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

- 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

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. 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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| 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) | | |
|--------------------------|--------------------------------------------------------------------------|------------------------------------------|
| Belgium | Limit value (mg/m ³) | 3.5 mg/m ³ |
| Croatia | GVI (granična vrijednost izloženosti) (mg/m ³) | 3.5 mg/m ³ |
| Croatia | KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³) | 7 mg/m ³ |
| Czech Republic | Expoziční limity (PEL) (mg/m ³) | 2 mg/m ³ (dust) |
| Denmark | Grænseværdie (langvarig) (mg/m ³) | 3.5 mg/m ³ |
| Estonia | OEL TWA (mg/m ³) | 3 mg/m ³ (dust) |
| Finland | HTP-arvo (8h) (mg/m ³) | 3.5 mg/m ³ |
| Finland | HTP-arvo (15 min) | 7 mg/m ³ |
| France | VME (mg/m ³) | 3.5 mg/m ³ |
| Greece | OEL TWA (mg/m ³) | 3.5 mg/m ³ |
| Greece | OEL STEL (mg/m ³) | 7 mg/m ³ |
| Ireland | OEL (8 hours ref) (mg/m ³) | 3 mg/m ³ (inhalable fraction) |

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| Carbon black (1333-86-4) | | |
|--------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ireland | OEL (15 min ref) (mg/m ³) | 15 mg/m ³ (calculated-inhalable fraction) |
| Poland | NDS (mg/m ³) | 4 mg/m ³ (applies to Carbon black containing Benzo(a)pyrene < 35 mg in 1 kg of Carbon black-total inhalable dust) |
| Portugal | OEL TWA (mg/m ³) | 3.5 mg/m ³ |
| Slovakia | NPHV (priemerná) (mg/m ³) | 2 mg/m ³ (respirable fraction, 5% or less fibrogenic component) 10 mg/m ³ (respirable fraction, greater than 5% fibrogenic component) 10 mg/m ³ (total aerosol) |
| Spain | VLA-ED (mg/m ³) | 3.5 mg/m ³ |
| Sweden | nivågränsvärde (NVG) (mg/m ³) | 3 mg/m ³ (total dust) |
| United Kingdom | WEL TWA (mg/m ³) | 3.5 mg/m ³ |
| United Kingdom | WEL STEL (mg/m ³) | 7 mg/m ³ |
| Norway | Grenseverdier (AN) (mg/m ³) | 3.5 mg/m ³ |
| Norway | Grenseverdier (Korttidsverdi) (mg/m ³) | 7 mg/m ³ (value calculated) |
| Australia | TWA (mg/m ³) | 3 mg/m ³ |
| Canada (Quebec) | VEMP (mg/m ³) | 3.5 mg/m ³ |
| USA - ACGIH | ACGIH TWA (mg/m ³) | 3 mg/m ³ (inhalable particulate matter) |
| USA - IDLH | US IDLH (mg/m ³) | 1750 mg/m ³ |
| USA - NIOSH | NIOSH REL (TWA) (mg/m ³) | 3.5 mg/m ³ 0.1 mg/m ³ (Carbon black in presence of Polycyclic aromatic hydrocarbons) |
| USA - OSHA | OSHA PEL (TWA) (mg/m ³) | 3.5 mg/m ³ |

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

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

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--------------------------------------------|---------------------|
| Physical state | : Solid |
| Colour | : Black. |
| Odour | : No data available |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : Not applicable |
| Boiling point | : No data available |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : No data available |

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| | |
|----------------------------------|-------------------------------|
| Flammability (solid, gas) | : Non flammable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : Not applicable |
| Density | : 1.8 - 2.1 g/cm ³ |
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity, kinematic | : Not applicable |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : Not applicable |

9.2. Other information

No additional information available

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

Strong oxidants.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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 |

Carbon black (1333-86-4)

| | |
|---------------|---------------|
| LD50 oral rat | > 15400 mg/kg |
|---------------|---------------|

3-Mercaptopropyltrimethoxysilane (4420-74-0)

| | |
|---------------|-----------|
| LD50 oral rat | 730 µl/kg |
|---------------|-----------|

| | |
|-----------------------------------|----------------------------------------|
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : May cause an allergic skin reaction. |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Acute aquatic toxicity | : Not classified |

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Chronic aquatic toxicity : Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID |
|-----------------------------------------|----------------|----------------|----------------|----------------|
| 14.1. UN number | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.2. UN proper shipping name | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| No supplementary information available | | | | |

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

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Germany

VwVwS Annex reference : Water hazard class (WGK) 2, hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

None.

Abbreviations and acronyms:

| | |
|------|-------------------------------------------------------------------------------------------------|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| EC50 | Median effective concentration |
| IATA | International Air Transport Association |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| IMDG | International Maritime Dangerous Goods |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |

Data sources : LOLI.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information : None.

Full text of H- and EUH-statements:

| | |
|---------------------|-------------------------------------------------------------------|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Carc. 2 | Carcinogenicity, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| H302 | Harmful if swallowed |
| H317 | May cause an allergic skin reaction |
| H351 | Suspected of causing cancer |
| H411 | Toxic to aquatic life with long lasting effects |

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