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

SDS No. : 1754192
V001.0

HYSOL GR 2720

Revision: 25.03.2018
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
HYSOL GR 2720

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

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 — Category 1
H317 May cause an allergic skin reaction.

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

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	content	Classification
Silica, vitreous 60676-86-0	262-373-8	60- < 80 %	Not classified
Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol 29690-82-2	-	5- < 10 %	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
Si-oxide Quartz 14808-60-7	238-878-4	1- < 5 %	Not classified
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	229-713-7	0,1- < 1 %	Acute Tox. 3; Oral H301 Skin Corr. 1B H314

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, sensivity 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 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.

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.
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.
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, vitreous 60676-86-0	Limit value - Eight hours	Limit value - Eight hours	Limit value - Short term	Limit value - Short term
	ppm	mg/m ³	ppm	mg/m ³
Austria		0,3		
Belgium		0,1		
Denmark		0,1		0,2
Germany (AGS)		0,3 respirable aerosol		
Germany (DFG)		0,3 respirable aerosol		
Ireland		0,08		
Switzerland		0,3 respirable aerosol		
USA - NIOSH		0,05		
United Kingdom		0,08		

Quartz	Limit value - Eight hours	Limit value - Eight hours	Limit value - Short term	Limit value - Short term
14808-60-7	ppm	mg/m ³	ppm	mg/m ³
Austria		0,15 respirable aerosol		
Belgium		0,1		
Denmark		0,3 inhalable aerosol		0,6 inhalable aerosol
Denmark		0,1 respirable aerosol		0,2 respirable aerosol
Finland		0,05 (Respirable fraction)		
France		**0,1 respirable aerosol**		
Hungary		0,15 respirable aerosol		
Ireland		0,1 (Respirable fraction)		
Spain		0,1 (Respirable fraction)		
Sweden		0,1 respirable aerosol		
Switzerland		0,15 respirable aerosol		

The Netherlands		0,075 respirable dust		
USA - NIOSH		0,05		
USA - OSHA		30/(%silica+2) total dust		
USA - OSHA		10/(%silica+2) respirable dust		

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:
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.

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
Avoid eye contact.

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

Advices to personal protection equipment:
Do not breathe dust and vapors.
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	powder solid black
Odor	odorless
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	Polymerization may occur at elevated temperature.
Flash point	Product is a solid. (ASTM D 4359)
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density (20 °C (68 °F))	No data available / Not applicable
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)	Insoluble
Solubility (qualitative) (20 °C (68 °F); Solvent: ketones)	Soluble
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.
Danger of decomposition if exposed to heat.
See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

10.5. Incompatible materials
See section reactivity

10.6. Hazardous decomposition products
Hydrocarbons
Irritating vapors.
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:
slightly irritating, does not require labeling.

Eye irritation:
slightly irritating, does not require labeling.

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	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method

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

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	LC50	> 100 - 220 mg/l	Fish	96 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2	EC50	50 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

12.2. Persistence and degradability

Persistence and Biodegradability:
The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
1,8-Diazabicyclo[5.4.0]undec-7-ene 6674-22-2		aerobic	< 20 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)

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

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:
Waste incineration with the approval of the responsible local authority.

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

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

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 %
(2010/75/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:

H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory 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.