



HYSOL GR510-HP

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 7/10/2017 Revision date: 11/24/2024 Version: 1.1

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

1.1. Product identifier

Product form : Mixture
Trade name : HYSOL GR510-HP

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

Relevant identified uses

Use of the substance/mixture : Used as epoxy molding compound.

Uses advised against

Restrictions on use : 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

CAPLINQ Europe BV
Industrieweg 15E
1566JN Assendelft
Netherlands
+31 (20) 893 2224

1.4. Emergency telephone number

Emergency number : +86 518-81089316

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- and EUH-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

Hazard statements (CLP)

: H317 - May cause an allergic skin reaction.

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Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P302+P352 - IF ON SKIN: Wash with plenty of water. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: Not applicable

2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Silica, amorphous	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 EC-No.: 608-398-3	0.5 – 1.5	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Carbon black	CAS-No.: 1333-86-4 EC-No.: 215-609-9	0.3 – 0.5	Not classified
Ion Catcher	-	0.2 - 0.4	Not classified
1-Propanethiol, 3-(trimethoxysilyl)-	CAS-No.: 4420-74-0 EC-No.: 224-588-5	0.1 – 0.3	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Stress modifier	-	0.1 - 0.3	Not classified

Full text of H- and EUH-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.
First-aid measures for first aider	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects : 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.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
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

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

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".
Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.
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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

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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

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Keep cool. Protect from sunlight.
Incompatible materials : Strong oxidants.
Packaging materials : Store always product in container of same material as original container.

7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Silica, amorphous (7631-86-9)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	4 mg/m ³ (also Silica manufactured through wet process-inhalable fraction)
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	0.1 mg/m ³ (respirable fraction) 4 mg/m ³
Estonia - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (amorphous-respirable dust)
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5 mg/m ³ (Silicon dioxide, amorphous)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	4 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Ireland - Occupational Exposure Limits	
OEL TWA	6 mg/m ³ (total inhalable dust) 2.4 mg/m ³ (respirable dust)
OEL STEL	18 mg/m ³ (calculated-respirable dust) 7.2 mg/m ³ (calculated-respirable dust)
Latvia - Occupational Exposure Limits	
OEL TWA	1 mg/m ³
Slovakia - Occupational Exposure Limits	
NPHV (OEL C)	3 mg/m ³ (details in source table-solid aerosol)
Slovenia - Occupational Exposure Limits	
OEL TWA	4 mg/m ³ (inhalable fraction, gel)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	6 mg/m ³ (inhalable dust) 2.4 mg/m ³ (respirable dust)
WEL STEL (OEL STEL)	18 mg/m ³ (calculated-inhalable dust) 7.2 mg/m ³ (calculated-respirable dust)

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Silica, amorphous (7631-86-9)	
Norway - Occupational Exposure Limits	
Grønseverdi (OEL TWA)	1.5 mg/m³ (respirable dust)
Korttidsverdi (OEL STEL)	3 mg/m³ (value calculated-respirable dust)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	4 mg/m³ (including Silica, amorphous-inhalable dust)
Carbon black (1333-86-4)	
Belgium - Occupational Exposure Limits	
OEL TWA	3 mg/m³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	3.5 mg/m³
KGVI (OEL STEL)	7 mg/m³
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	2 mg/m³ (dust)
Denmark - Occupational Exposure Limits	
OEL TWA	3.5 mg/m³
OEL STEL	7 mg/m³
Estonia - Occupational Exposure Limits	
OEL TWA	3 mg/m³
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	3.5 mg/m³
HTP (OEL STEL)	7 mg/m³
France - Occupational Exposure Limits	
VME (OEL TWA)	3.5 mg/m³
Greece - Occupational Exposure Limits	
OEL TWA	3.5 mg/m³
OEL STEL	7 mg/m³
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	3 mg/m³ (inhalable concentration (flying and fibrous powders))
Ireland - Occupational Exposure Limits	
OEL TWA	3 mg/m³ (inhalable fraction)
OEL STEL	15 mg/m³ (calculated-inhalable fraction)
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	4 mg/m³ (inhalable fraction)
Portugal - Occupational Exposure Limits	
OEL TWA	3 mg/m³ (inhalable fraction)
OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

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Carbon black (1333-86-4)

Slovakia - Occupational Exposure Limits

NPHV (OEL TWA)	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)
NPHV (OEL C)	10 mg/m ³ (details in source table-solid aerosol)

Spain - Occupational Exposure Limits

VLA-ED (OEL TWA)	3.5 mg/m ³
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Sweden - Occupational Exposure Limits

NGV (OEL TWA)	3 mg/m ³ (inhalable fraction)
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United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	3.5 mg/m ³
WEL STEL (OEL STEL)	7 mg/m ³

Norway - Occupational Exposure Limits

Grenseverdi (OEL TWA)	3.5 mg/m ³
Kortidsverdi (OEL STEL)	7 mg/m ³ (value calculated)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	3 mg/m ³ (inhalable particulate matter)
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Eye and face protection

Eye protection:

Safety glasses

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Black.
Appearance	: Black solid.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.8 – 2.1 g/cm ³
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
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Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

1-Propanethiol, 3-(trimethoxysilyl)- (4420-74-0)

LD50 oral rat	500 mg/kg
LD50 dermal rabbit	2494 mg/kg

Silica, amorphous (7631-86-9)

LD50 oral rat	7900 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	> 5.01 mg/l/4h

Carbon black (1333-86-4)

LD50 oral rat	> 10000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 4.6 mg/m ³ (Exposure time: 4 h)

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

Silica, amorphous (7631-86-9)

IARC group	3 - Not classifiable
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Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Silica, amorphous (7631-86-9)

LC50 - Fish [1]	5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 - Crustacea [1]	7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)
EC50 72h - Algae [1]	440 mg/l (Species: Pseudokirchneriella subcapitata)

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12.2. Persistence and degradability

HYSOL GR510-HP BULK

Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Silica, amorphous (7631-86-9)

BCF - Fish [1]

No bioaccumulation expected

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

HYSOL GR510-HP BULK

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties

: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. 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.

Contaminated packaging

: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.

Additional information

: Do not re-use empty containers.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID 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.

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ADR	IMDG	IATA	ADN	RID
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
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. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

EU-Regulations

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EN	European Standard
IARC	International Agency for Research on Cancer
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

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Data sources	: ECHA (European Chemicals Agency). Loli.
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information	: No information available.

Full text of H- and EUH-statements:	
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.