



HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 1/13/2023 Revision date: 1/13/2023 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 GR 2220

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Molding Compound

1.2.2. Uses advised against

Restrictions on use : No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Hysol Huawei Electronic Co., Ltd.
No.8 Zhenhua Road, High-tech Industrial Development Zone,
Lianyungang, Jiangsu
T +86 518-85155187 - F +86 518 85153825

Only Representative

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.

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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.

2.3. Other hazards

Other hazards which do not result in classification : No information available.

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/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 is 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

3.1. Substances

Not applicable.

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Silica, vitreous	CAS-No.: 60676-86-0 EC-No.: 262-373-8;424-440-1	$\geq 70 - \leq 90$	Not classified
Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	CAS-No.: 29690-82-2 EC-No.: 608-398-3	$\geq 10 - \leq 20$	Not classified
Phenol-formaldehyde polymer	CAS-No.: 9003-35-4 EC-No.: 500-005-2	$\geq 5 - \leq 10$	Eye Irrit. 2, H319 Skin Sens. 1, H317
Carbon black	CAS-No.: 1333-86-4 EC-No.: 215-609-9;435-640-3	$\geq 0.1 - \leq 1$	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.

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.

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 : Carbon oxides. Irritating organic vapours.

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. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

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

Precautions for safe handling : Ensure good ventilation of the work station. Take action to prevent static discharges. Avoid contact with skin and eyes. 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

Technical measures : Keep in original containers closed.

Storage conditions : Protect from heat and direct sunlight. Store in a well-ventilated place. Keep cool.

Incompatible materials : Hydrofluoric acid. Strong alkalis. Reacts with strong oxidants.

7.3. Specific end use(s)

No additional information available

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Silica, vitreous (60676-86-0)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	0.3 mg/m ³ (respirable fraction (Silica, amorphous))
Belgium - Occupational Exposure Limits	
OEL TWA	0.1 mg/m ³ (alveolar dust)
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	0.08 mg/m ³ (respirable dust)
Denmark - Occupational Exposure Limits	
OEL TWA [1]	0.1 mg/m ³ (respirable)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	0.3 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-respirable fraction)
Ireland - Occupational Exposure Limits	
OEL TWA [1]	0.08 mg/m ³ (respirable dust)
OEL STEL	0.24 mg/m ³ (calculated-total inhalable dust)
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	2 mg/m ³ (inhalable fraction) 1 mg/m ³ (respirable fraction)
Slovenia - Occupational Exposure Limits	
OEL TWA	0.3 mg/m ³ (respirable fraction)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	0.08 mg/m ³ (respirable dust)
WEL STEL (OEL STEL)	0.24 mg/m ³ (calculated-respirable dust)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	0.3 mg/m ³ (including Silica, amorphous-respirable dust)
Phenol-formaldehyde polymer (9003-35-4)	
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	5 mg/m ³ (dust)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	1.25 mg/m ³ (respirable fraction (plastic dust)) 10 mg/m ³ (inhalable fraction (plastic dust))
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	3 mg/m ³ (thermoset dust)
Carbon black (1333-86-4)	
Belgium - Occupational Exposure Limits	
OEL TWA	3 mg/m ³

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Carbon black (1333-86-4)	
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	3.5 mg/m ³
KGVI (OEL STEL)	7 mg/m ³
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	2 mg/m ³ (dust)
Denmark - Occupational Exposure Limits	
OEL TWA [1]	3.5 mg/m ³
Estonia - Occupational Exposure Limits	
OEL TWA	3 mg/m ³ (dust (Dusts))
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	3.5 mg/m ³
HTP (OEL STEL)	7 mg/m ³
France - Occupational Exposure Limits	
VME (OEL TWA)	3.5 mg/m ³
Greece - Occupational Exposure Limits	
OEL TWA	3.5 mg/m ³
OEL STEL	7 mg/m ³
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	3 mg/m ³ (respirable (flying and fibrous powders))
Ireland - Occupational Exposure Limits	
OEL TWA [1]	3 mg/m ³ (inhalable fraction)
OEL STEL	15 mg/m ³ (calculated-inhalable fraction)
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	4 mg/m ³ (inhalable fraction)
Portugal - Occupational Exposure Limits	
OEL TWA	3 mg/m ³
OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	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 - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	3.5 mg/m ³
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	3 mg/m ³ (inhalable fraction)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	3.5 mg/m ³
WEL STEL (OEL STEL)	7 mg/m ³
Norway - Occupational Exposure Limits	
Grønseverdi (OEL TWA) [1]	3.5 mg/m ³

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Carbon black (1333-86-4)	
Korttidsverdi (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

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Emergency eye wash fountain with clean water. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Protective goggles or face shield. Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust)

Hand protection:

Chemical resistant gloves (according to European standard EN 374 or equivalent)

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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
Appearance	: Black powder or pellets
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable.

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Boiling point	: Not available
Flammability	: Non flammable.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: Not applicable.
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	: Insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable.
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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

Danger of decomposition if exposed to heat. Danger of dust explosions. Take measures to prevent the build-up of electrostatic charges.

10.5. Incompatible materials

Hydrofluoric acid. Strong alkalis. Reacts with strong oxidants.

10.6. Hazardous decomposition products

Carbon oxides. Irritating organic vapours.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Phenol-formaldehyde polymer (9003-35-4)

LD50 oral rat	> 5 g/kg
LD50 dermal rat	> 2000 mg/kg

Carbon black (1333-86-4)

LD50 oral rat	> 15400 mg/kg
LD50 dermal rabbit	> 8000 mg/kg Source: ECHA
LC50 Inhalation - Rat	> 4.6 mg/l/4h

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, vitreous (60676-86-0)

IARC group	3 - Not classifiable
------------	----------------------

Carbon black (1333-86-4)

IARC group	2B - Possibly carcinogenic to humans
------------	--------------------------------------

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Carbon black (1333-86-4)

LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.0071 mg/l air Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0011 mg/l air Animal: rat, Animal sex: male

Aspiration hazard	: Not classified
-------------------	------------------

11.2. Information on other hazards

11.2.1. 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 is 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 %
--	--

11.2.2. Other information

No additional information available

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

Carbon black (1333-86-4)

LC50 - Fish [1]	> 1000 mg/l
-----------------	-------------

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Carbon black (1333-86-4)

EC50 72h - Algae [1]	> 10000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 10000 mg/l Test organisms (species):
ErC50 algae	> 10000 mg/l Source: EHCA

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Phenol-formaldehyde polymer (9003-35-4)

Partition coefficient n-octanol/water (Log Pow)	3.564 (at 25 °C (at pH 4.6))
---	------------------------------

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

HYSOL GR 2220

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 is 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.
Product/Packaging disposal recommendations : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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 regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

15.1.1. EU-Regulations

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 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 drug precursors)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 16: Other information

Indication of changes:

Not applicable.

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
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
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
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
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
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 disrupting properties

HYSOL GR 2220

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Version	: 1.0
Issue date	: 1/13/2023
Revision date	: 1/13/2023
Data sources	: ECHA reference. 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:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
Skin Sens. 1	Skin sensitisation, Category 1

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.