



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

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HYSOL KL-G 200S

SDS No. : 1173700  
V001.0

Revision: 31.03.2018  
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

HYSOL KL-G 200S

#### Contains:

Phenol-formaldehyde polymer  
1H-Imidazole, 2-ethyl-4-methyl-

#### 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  
H317 May cause an allergic skin reaction.

Category 1

#### 2.2. Label elements

##### Label elements (CLP):

Hazard pictogram:



<b>Signal word:</b>	Warning
<b>Hazard statement:</b>	H317 May cause an allergic skin reaction.
<b>Precautionary statement: Prevention</b>	P280 Wear protective gloves.
<b>Precautionary statement: Response</b>	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

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

Hazardous components CAS-No.	EC Number	content	Classification
Si-oxide Quartz 14808-60-7	238-878-4	30- <50%	Not classified
Silicon dioxide 7631-86-9	231-545-4	10- <30%	Not classified
Silica, vitreous 60676-86-0	262-373-8	10- <30%	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
1H-Imidazole, 2-ethyl-4-methyl- 931-36-2	213-234-5	0,1- < 1 %	Acute Tox. 4; Oral H302 Eye Dam. 1 H318 Skin Irrit. 2 H315 Skin Sens. 1B H317

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:

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

#### Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

#### Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

**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:**

water, carbon dioxide, foam, powder

**Extinguishing media which must not be used for safety reasons:**

High pressure waterjet

**5.2. Special hazards arising from the substance or mixture**

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) can be released.

In case of fire, keep containers cool with water spray.

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Additional information:**

In case of fire, keep containers cool with water spray.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

Remove sources of ignition.

**6.2. Environmental precautions**

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

**6.3. Methods and material for containment and cleaning up**

For small spills wipe up with paper towel and place in container for disposal.

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

**6.4. Reference to other sections**

See advice in section 8

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Avoid skin and eye contact.

See advice in section 8

**Hygiene measures:**

Good industrial hygiene practices should be observed.

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**

Ensure good ventilation/extraction.

Keep container tightly sealed.

Refer to Technical Data Sheet

**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 - Short term	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
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		

Silica, vitreous 60676-86-0	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
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 <sup>3</sup>	ppm	mg/m <sup>3</sup>
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		<b>0,1 respirable aerosol</b>		
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		

**Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
2-Ethyl-4-methylimidazole 931-36-2	aqua (freshwater)					0,0681 mg/L	
2-Ethyl-4-methylimidazole 931-36-2	aqua (marine water)					0,00681 mg/L	
2-Ethyl-4-methylimidazole 931-36-2	aqua (intermittent releases)					0,681 mg/L	
2-Ethyl-4-methylimidazole 931-36-2	STP					65 mg/L	
2-Ethyl-4-methylimidazole 931-36-2	sediment (freshwater)				34,9 mg/kg		
2-Ethyl-4-methylimidazole 931-36-2	sediment (marine water)				3,49 mg/kg		
2-Ethyl-4-methylimidazole 931-36-2	soil				6,91 mg/kg		

**Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2-Ethyl-4-methylimidazole 931-36-2	Workers	inhalation	Long term exposure - systemic effects		4,41 mg/m <sup>3</sup>	
2-Ethyl-4-methylimidazole 931-36-2	Workers	Dermal	Long term exposure - local effects		0,289 mg/cm <sup>2</sup>	

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A

Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR;  $\geq$  0.4 mm thickness)

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

nitrile rubber (NBR;  $\geq$  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:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:

Wear suitable protective clothing.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	solid black
Odor	odorless
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	Not applicable
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density	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) (Solvent: Water)	Insoluble
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 alcohols and amines.  
Reacts with oxidants, acids and lyes

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

### 10.4. Conditions to avoid

No decomposition if stored and applied as directed.

### 10.5. Incompatible materials

None if used properly.

### 10.6. Hazardous decomposition products

Hydrocarbons  
carbon oxides.  
nitrogen oxides  
Rapid polymerisation may generate excessive heat and pressure.

## 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 sensitization by skin contact.

#### 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	
1H-Imidazole, 2-ethyl-4- methyl- 931-36-2 4420-74-0	LD50	622 mg/kg	oral		rat	

#### Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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#### Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1H-Imidazole, 2-ethyl-4-methyl-931-36-2	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1H-Imidazole, 2-ethyl-4-methyl-931-36-2	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**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
1H-Imidazole, 2-ethyl-4-methyl-931-36-2	LC50	68,1 mg/l	Fish	96 h	Leuciscus idus	DIN 38412-15

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

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
1H-Imidazole, 2-ethyl-4-methyl-931-36-2	readily biodegradable	aerobic	86 %	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**

Hazardous components CAS-No.	PBT/vPvB
1H-Imidazole, 2-ethyl-4-methyl-931-36-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

**12.6. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Product disposal:

Do not empty into drains / surface water / ground water.  
Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

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:

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- 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.