



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

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HYSOL KL 1000-3A

SDS No. : 1040066  
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 1000-3A

#### Contains:

Phenol-formaldehyde polymer  
3-Trimethoxysilylpropane-1-thiol

#### 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:



##### 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

Filler

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

Hazardous components CAS-No.	EC Number	content	Classification
Silica 7631-86-9	231-545-4	50- < 70%	Not classified
Silica, vitreous 60676-86-0	262-373-8	10- < 30 %	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
Antimony trioxide 1309-64-4	215-175-0	0,1- < 1 %	Carc. 2 H351
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
3-Trimethoxysilylpropane-1-thiol 4420-74-0	224-588-5	0,1- < 1 %	Acute Tox. 4; Oral H302 Skin Sens. 1 H317 Aquatic Chronic 2 H411

**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.

Extract when the product is heated.

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 7631-86-9	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Austria		4 inhalable aerosol		
Belgium		10		
Denmark		2 inhalable aerosol		4 inhalable aerosol
Finland		5		
Germany (AGS)		4 inhalable aerosol		
Germany (DFG)		4 inhalable aerosol		
Ireland		6 Inhalable fraction		
		2,4 Respirible fraction		
Latvia		1		
Switzerland		4 inhalable aerosol		
USA - OSHA		80/ % silica total dust		
United Kingdom		6 inhalable aerosol		
		2,4 respirable aerosol		

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		

**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:

Do not inhale dust.

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 &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:  
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	solid material granules, tablet black
Odor	characteristic
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	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)	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: ketones)	Partially miscible
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.  
Bromine compounds  
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:**

Prolonged or repeated contact may cause eye irritation.

**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	Not specified
Antimony trioxide 1309-64-4	LD50	> 20.000 mg/kg	oral		rat	
3- Trimethoxysilylpropane- 1-thiol 4420-74-0	LD50	850 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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## 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
Antimony trioxide 1309-64-4	LC50	> 1.000 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Antimony trioxide 1309-64-4	EC50	> 1.000 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Antimony trioxide 1309-64-4	EC50	67 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
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)
3-Trimethoxysilylpropane-1- thiol 4420-74-0	LC50	439 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
3-Trimethoxysilylpropane-1- thiol 4420-74-0	EC50	6,7 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
3-Trimethoxysilylpropane-1- thiol 4420-74-0	EC50	267 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	40 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition 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)
3-Trimethoxysilylpropane-1- thiol 4420-74-0		aerobic	51 %	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
Antimony trioxide 1309-64-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
3-Trimethoxysilylpropane-1-thiol 4420-74-0	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:

Special 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

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 %  
(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.  
H302 Harmful 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.  
H351 Suspected of causing cancer.  
H411 Toxic to aquatic life with long lasting effects.

### 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.