



## Safety Data Sheet

SDS No.: TI-R42K1A  
Version 1.0  
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### 1. PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT

Product Name: Reactive Orange KY1  
Recommended Use: Digital Textile Printing

#### COMPANY IDENTIFICATION

Manufacturer/supplier identification

CHINA GLAZE CO., LTD

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### 2. HAZARDS IDENTIFICATION

#### Precautionary Statements

P261 Avoid breathing fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P363 Wash contaminated clothing before reuse.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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

P501 Dispose of contents/ container in accordance with regional/ international regulations.

Dispose of contents/container in accordance with local regulation

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixtures:

Chemical Components	CAS No.	Amount (%w/w)	Classification according to 67/548/EEC	Classification according to Regulation (EC) No 1272/2008
Dyestuff	Proprietary	0-20%	Xn;R22	Acute Tox. 4,H302
Propylene Glycol	57-55-6	0-40%	Not classified	Not classified
Glycerol	56-81-5	0-30%	Not classified	Not classified
Water	7732-18-5	40-70%	Not classified	Not classified



## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### **Inhalation:**

Remove the victim from exposure into fresh air if adverse effects (e.g. dizziness, drowsiness or respiratory irritation) occur. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice if cough or other symptoms appear.

#### **Skin contact:**

Wash affected skin area with plenty of water and soap for at least 10 minutes while removing contaminated clothing and shoes. Seek medical advice if irritation develops and persists.

#### **Eye contact:**

Immediately wash eyes with plenty of running water for at least 10 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. Occasionally lift the upper and lower eyelids. Seek medical advice if irritation develops and persists.

#### **Ingestion:**

Seek medical advice if the victim feels unwell. Wash out mouth with plenty of water and give 2-4 cupfuls of water or milk to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting.

#### **Most important symptoms and effects:**

See Section 11 for more detailed information on effects and symptoms

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### **Suitable extinguishing media**

Water fog, foam, dry chemical, dry powder or carbon dioxide; alcohol resistant foam (ACT type) are preferred

#### **Unsuitable extinguishing media**

Direct water stream

### 5.2 Special hazards arising from the substance or mixture

#### **Specific Hazards during Fire Fighting:**

Smoke, fumes, incomplete combustion products, oxides of carbon

### 5.3 Advice for firefighters

#### **Special Protective Equipment for Fire-fighters:**

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

**Further Information:**

Oxides of carbon. Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed and to protect personnel.

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions:**

Wear appropriate personal protective equipment (see section 8) during cleaning. Avoid contact with eyes and skin. Avoid inhalation. No smoking in the area. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Check area with combustible gas detector before reentering area.

**6.2 Environmental Precautions:**

Prevent the material from entering surface water or sanitary sewer system. Do not discharge directly to a water source. If accidental spillage or washings enter drains or watercourses contact local Environment Agency.

**6.3 Method for Cleaning up:**

Pick up with absorbent material. Sweep up absorbed substance, place in suitable and properly labeled waste containers for later disposal. Residual trace can be wiped away. Prevent entry into sewers and waterways. For large spills: Contain spilled material if possible. Ground and bond all containers and handling equipment. Pump with explosion-proof equipment. If available, use foam to smother or suppress.

**6.4 Reference to other sections**

See Section 1 for emergency contact information.

See Section 8 for information on personal protective equipment.

See section 13 for waste treatment information

**7. HANDLING AND STORAGE****7.1 handling****Personal precautions:**

Wear personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapor. No smoking, open flames or sources of ignition in handling and storage area.

**Technical measures / Precautions:**

K Provide good ventilation (local exhaust) of the working area, safety showers and eye wash station near the workplace. Avoid release to the environment. Ground/Bond container and



receiving equipment. Use explosion-proof electrical equipment. Use only non-sparking tools. Keep product away from heat, sparks, flame and other sources of ignition. Avoid exposure the sunlight, UV light or fluorescent light.

## 7.2 Storage

### Technical measures/ Storage conditions:

Flammable mixtures may exist within the vapor space of containers at room temperature. Keep in the original container. Keep container tightly closed in a cool, dry, well-ventilated place. Keep product away from heat, sparks, flame and other sources of ignition and out of direct sunlight and away from incompatible materials.

### Incompatible products:

Strong oxidizing agents, bases and aqueous acids.

## 7.3 Specific end use:

**Specific end use(s):** Digital textile printing

# 8. EXPOSURE CONTROLS

## 8.1 Control parameters

8 hours time weighted average exposure limits (TWA): Data not yet available

## 8.2 Exposure controls

### 8.2.1 Technical measures:

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### 8.2.2 Organizational measures:

Only personnel who have received appropriate training and are authorized are allowed to handle the substance. Organize regular exposure monitoring to check that exposure levels of operators stay beyond the Exposure Limit. Sampling and analysis should be carried out according to accepted methods.

## 8.3 Personal Protective Equipment

### Respiratory Protection:

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. Use the following CE approved air-purifying respirator: Organic vapor cartridge, type A (boiling point >65°C) Recommended: NIOSH-approved respirator with minimum APF 10

### Hand Protection:



Chemical-resistant, impervious gloves complying with an approved standard EN374 should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. After contamination with product change the gloves immediately and dispose them off according to relevant national and local regulations.

### Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: Safety goggles should be consistence with EN 166 or equivalent.

### Skin and body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Recommended: Wear chemical-resistant protective clothing

### 8.4 Environmental exposure controls

Procedural and/or control technologies are used to minimize emissions and the resulting exposure during cleaning and maintenance procedures. Transfer waste gases to a combustion unit or to a powder separator.

Do not apply industrial sludge to natural soils. Sealing of all relevant soil surfaces in the facility.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Liquid
<b>Odor:</b>	No data available
<b>pH:</b>	7.5-8.5
<b>Melting/Freezing temperature:</b>	No data available
<b>Boiling point:</b>	No data available
<b>Flash-point:</b>	>100°C
<b>Auto ignition temperature:</b>	No data available
<b>Flammability:</b>	No data available
<b>Oxidizing properties:</b>	No data available
<b>Vapor pressure:</b>	No data available
<b>Viscosity:</b>	5.0-6.0 cps (Dynamic, 32°C)
<b>Specific gravity:</b>	No data available
<b>Specific conductivity:</b>	No data available



## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Advice: stable under recommended storage conditions.

### 10.2 Chemical Stability

Advice: stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous Reactions: Not expected

### 10.4 Condition to advice

Conditions to avoid: Static discharges. Keep product away from heat, sparks, flame and other sources of ignition. Avoid direct sunlight and UV light

### 10.5 Incompatible materials

Materials to avoid: Strong oxidizing agents, bases and strong acids.

### 10.6 Hazardous decomposition products

Thermal decomposition and burning may produce carbon monoxide, nitrogen oxides and other toxic gases and vapors

## 11. TOXICOLOGICAL INFORMATION

Routes of exposure:	Skin, inhalation, ingestion, eyes.
<b>ACUTE TOXICITY</b>	
Acute oral toxicity, LD50:	No data available
Acute dermal toxicity, LD50:	No data available
Acute inhalation toxicity, LC50:	No data available
<b>LOCAL EFFECTS</b>	
Skin irritation:	No data available
Eye irritation:	No data available
Skin sensitization:	No data available
<b>OTHER</b>	
Repeated dose toxicity:	No data available
Mutagenicity:	No data available
Reproductive toxicity:	No data available
Carcinogenicity:	No data available

## 12. ECOLOGICAL INFORMATION

### ACUTE TOXICITY-Short-term toxicity



LC50-Fish-96h:	No data available.
EC50-Algae-72h:	No data available.
IC50-Bacteria-3h:	No data available.
EC50-Invertebrate-24h:	No data available.
<b>OTHER</b>	
Biodegradation:	No data available
Bioaccumulation	No data available
Results of PBT and vPvB assessment:	No data available

### 13. DISPOSAL CONSIDERATIONS

#### Waste from residues:

Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required. Do not dump into any sewers, on the ground, or into any body of water.

#### Container:

Containers should be cleaned by appropriate method and then re-used or disposed by landfill or incineration as appropriate, in accordance with local and national regulations. Do not remove label until container is thoroughly cleaned.

### 14. TRANSPORT INFORMATION

#### 14.1 UN number

None

#### 14.2 UN proper shipping name

ADR: None

RID: None

IMDG: None

#### 14.3 Transport hazard class(es)

ADR-Class: Not regulated

(Labels; Classification Code; Hazard identification Number; Tunnel restriction code)

RID-Class: Not regulated

(Labels; Classification Code; Hazard identification Number)

IMDG-Class: Not regulated

(Labels; EmS)

IATA-Cargo Class: Not regulated

(Labels; Packing Instruction; Quantities)



IATA-Passenger Class: Not regulated

(Labels; Packing Instruction; LQ's)

49 CFR-Class: Not regulated

(Labels)

TDG-Class: Not regulated

(Labels)

#### 14.4 Packing group:

ADR: Not regulated

RID: Not regulated

IMDG: Not regulated

#### 14.5 Environment hazards

Not an environmental Hazard

#### 14.6 Special precautions for user

Review classification requirements before shipping materials at elevated temperatures.

### 15. Regulatory Considerations

#### HMIS Classification

Health Hazard: 1 Flammability:0 Physical Hazards: 1 Personal Protection: B

#### NFPA Classification

Health Hazard: 1 Flammability: 0 Instability:1

### 16. OTHER INFORMATION

#### Shelf life

6 months after shipping date in sealed containers protected from light and air.

#### Reference documents

European Chemical Substance Information System (ESIS)

United States Environmental Protection Agency (US EPA)

#### Further information

Other information:

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

*The information herein is given in good faith, but no warranty, expressed or implied, is made.*

*If you have any questions, please contact China Glaze Corporation.*

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