



## Material Safety Data Sheet

acc. to ISO/DIS 11014

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### 1 Identification of Substance

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- **Product details**
- **Trade name: DUAL CURE CERAMIC EMULSION 201**
- **Article number: 6062-201**
- **Application of the substance / the preparation: Screen Printing Emulsion**
- **Manufacturer/Supplier:**  
**SMILEY PRINTING SOLUTIONS CO.,LTD.**  
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Bangpre Yai, Bangpre, Samutprakarn 10540 Thailand  
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Fax: +662-757-4769  
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- **Information department: Technical Services Department.**

### 2 Hazards Identification

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Hazard description: Xi Irritant

Information concerning particular hazards for human and environment: The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 37/38 Irritating to respiratory system and skin.

R 43 May cause sensitization by skin contact.

Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

GHS label elements

Warning

3.2/2 - Causes skin irritation.

3.4/1 - May cause an allergic skin reaction.

3.8/3 - May cause respiratory irritation.

Prevention: Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment (see label). If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/ Information on Ingredients

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Chemical characterization

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

Trade Secret Xi; R 37/38 10-30%

Warning: 3.2/2, 3.8/3

Trade Secret Xi; R 36/37/38-43 < 10%

Warning: 3.2/2, 3.3/2A, 3.4.S/1, 3.8/3

Trade Secret T, F; R 11-23/24/25-39/23/24/25 < 1.0%

Danger: 2.6/2; 3.1.O/2, 3.1.D/2, 3.1.I/2; 3.8/1

Additional information: For the wording of the listed risk phrases refer to section 16.

#### **4 First Aid Measures**

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After inhalation: Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: If symptoms persist consult doctor.

#### **5 Fire Fighting Measures**

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Suitable extinguishing agents: CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment: No special measures required.

#### **6 Accidental Release Measures**

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Person-related safety precautions: Not required.

Measures for environmental protection: Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

#### **7 Handling and Storage**

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Handling:

Information for safe handling: Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Information about fire - and explosion protection: No special measures required.

Storage: Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

#### **8 Exposure Controls/ Personal Protection**

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Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the skin.

Avoid contact with the eyes and skin.

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands: Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refilling

#### **9 Physical and Chemical Properties**

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General Information

Form: Fluid

Colour: According to product specification

Odour: Characteristic

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 100oC

Flash point: Not applicable.

Self-igniting: Product is not self igniting.  
Danger of explosion: Product does not present an explosion hazard.  
Vapour pressure at 20°C: 23.0 hPa  
Density: Not determined.  
Solubility in / Miscibility with water: Fully miscible.  
Solvent content:  
Organic solvents: 0.0 %

## 10 Stability and Reactivity

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Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.  
Dangerous reactions: No dangerous reactions known.  
Dangerous decomposition products: No dangerous decomposition products known.

## 11 Toxicological Information

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Acute toxicity:  
Primary irritant effect:  
On the skin: Irritant to skin and mucous membranes.  
On the eye: No irritating effect.  
Sensitization: Sensitization possible through skin contact.

Additional toxicological information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant  
Sensitization: May cause sensitization by skin contact.

## 12 Ecological Information

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General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

## 13 Disposal Consideration

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Product:  
Recommendation:  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
  
Uncleaned packaging:  
Recommendation: Disposal must be made according to official regulations.  
Recommended cleansing agents: Water, if necessary together with cleansing agents.

## 14 Transport Information

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Maritime transport IMDG: Marine pollutant: No

## 15 Regulatory Information

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Labeling according to EU guidelines: The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.  
Code letter and hazard designation of product: Xi Irritant  
Hazard-determining components of labeling: Trade Secret

Risk phrases:  
37/38 Irritating to respiratory system and skin.  
43 May cause sensitization by skin contact.

Safety phrases:  
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
24/25 Avoid contact with skin and eyes.  
37 Wear suitable gloves.  
60 This material and its container must be disposed of as hazardous waste.

National regulations:  
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

## 16 Other Information

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This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant R-phrases  
11 Highly flammable.  
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
36/37/38 Irritating to eyes, respiratory system and skin.

37/38 Irritating to respiratory system and skin.

39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

43 May cause sensitization by skin contact.

Department issuing MSDS: Technical Services

Contact: Mr Medhi Kulasiriswatdi

Abbreviations and acronyms:

ADR: Accord europeen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Reglement internationale concernent le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals