



**SAFETY DATA SHEET**  
**1-Hydroxycyclohexyl phenyl ketone**  
**IHT- PI 184**

Page 1

Issued: 2009-02-13

Revision No. 01

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product name:** 1-Hydroxycyclohexyl phenyl ketone

**CAS number:** 947-19-3

**EINECS number:** 213-426-9

**Product code:** IHT-PI 184

**Use/description of product:** Photo initiator for UV-cure.

**Company name:** Insight High Technology Co., Ltd  
4F,TH-UNIS Building II, Tsinghua University  
Beijing 100084 , P. R. China  
Tel: +86-10-62798088 62772207  
Fax: +86-10-62620366 62793514

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

**Contains:** 1-Hydroxycyclohexyl phenyl ketone 99+%

**3. HAZARDS IDENTIFICATION**

**Main hazards:** No significant hazard.

**4. FIRST AID MEASURES**

**Skin contact:** Wash off with soap and plenty of water. Do not use organic solvents.

**Eye contact:** Rinse immediately with plenty of water for at least 15 minutes. In case of eye irritation, seek medical attention.

**Ingestion:** Move to fresh air. In case of irritation of respiratory system or mucous membranes, seek medical attention. In case of indisposition, seek medical attention. In case of prolonged exposure, seek medical attention.

**Inhalation:** Move to fresh air. In case of irritation of respiratory system or mucous membranes, seek medical attention. In case of indisposition, seek medical attention. In case of prolonged exposure, seek medical attention.

**5. FIRE FIGHTING MEASURES**

**Extinguishing media:** Water spray, Foam, Carbon dioxide (CO2), Dry powder

[Continue...]



**SAFETY DATA SHEET**  
**1-Hydroxycyclohexyl phenyl ketone**  
**IHT- PI 184**

Page 2

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

High volume water jet.

**Exposure hazards:**

Contaminated water from fire hoses or sprinklers, etc., must be prevented from draining into watercourses, sewers, or the ground water. Sufficient measures must be taken to retain water used for extinguishing. Contaminated water and soil must be disposed of in conformity with local regulations.

**Special protective equipment for firefighters:**

Wear full protective clothing. Wear self-contained breathing apparatus.

**Hazardous decomposition products:**

Oxides of carbon, Toxic gases/vapours.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Do not breathe vapours/dust. Remove all sources of ignition. Avoid contact with skin, eyes and clothing.

**Environmental precautions:**

Do not flush into surface water, sanitary sewer or ground water system.

**Clean-up procedures:**

Use mechanical handling equipment. Collect the spilled product into suitable containers, which must be tightly sealed and properly labelled. Avoid dust formation.

#### 7. HANDLING AND STORAGE

**Handling requirements:**

Avoid dust formation and ignition sources. Ensure good local exhaust ventilation. Do not eat, drink or smoke at the workplace.

**Storage conditions:**

Keep away from food and drink. Store in the original container securely closed.

Protect from light and heat. Danger! Explosion risk. Risk of explosion if an air-dust mixture forms. Avoid creating dusty conditions. If container is larger than 2000 liter in volume, or when flammable solvents are present inert container or use a system otherwise designed to prevent or contain an explosion -- seek expert advice.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limit(s):**

internal exposure limit (8 hour time weighted average)

Value 10 mg/m<sup>3</sup> Justification to exposure limit.

[Continue...]



**SAFETY DATA SHEET**  
**1-Hydroxycyclohexyl phenyl ketone**  
**IHT- PI 184**

Page 3

Exposure limit for inhalable dust.

**Technical measures/Precautions:** Exposure limit(s) should be monitored using suitable analytical equipments.

**Respiratory:** Effective dust mask

**Hand protection:** Protective gloves.

**Eye protection:** Suitable goggles or face protection

**Skin protection:** Working clothes , Closed footwear.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** powder or crystal

**Color:** White

**Odour:** Characteristic odour

**Melting/freezing temperature** 46-50 °C

**Boiling point/range** > 225 °C

**Density 20 °C** 1.17 g/cm<sup>3</sup>

**Flash point** > 150 °C

**Ignition Temperature** 420 °C

**Oxidising properties** not tested

**Self-ignition temperature** not tested

**Water solubility 20 °C** > 0.01 g/l

**Vapour pressure 25 °C** 0.02 Pa

**Partition coe.; Log Pow 20 °C** 2.81

**pH-value** 5.7 (1 % suspension in water 20 - 25 °C)

**Dynamic Viscosity 20 °C** not tested

**Explosive properties** not tested

## 10. STABILITY AND REACTIVITY

**Decomposition temperature:** > 300 °C

**Conditions to avoid:** Static discharges.

[Continue...]



**SAFETY DATA SHEET**  
**1-Hydroxycyclohexyl phenyl ketone**  
**IHT- PI 184**

Page 4

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

**Hazardous decomposition products:** Oxides of carbon, Toxic gases/vapours

**11. TOXICOLOGICAL INFORMATION**

**Acute oral toxicity:** Rat  
LD50 > 2000 mg/kg

**Acute dermal irritation/corrosion:** Rabbit  
not irritant

**Acute eye irritation/corrosion:** Rabbit  
not irritant

**Acute skin sensitization:** Guinea pig  
not sensitising

**12. ECOLOGICAL INFORMATION**

**Acute toxicity to fish:** Fish 96 h  
LC50 24 mg/l

**Acute toxicity to daphnia:** Daphnia magna 24h  
EC50 105 mg/l

**Acute toxicity to bacteria:** Sewage sludge 3h  
IC50 >100mg/l

**Acute toxicity to algae:** EC50 not tested

**Biodegradability:** Readily biodegradable

**Ecotoxic effects:** Do not discharge product uncontrolled into the environment.

**13. DISPOSAL CONSIDERATIONS**

**Waste from residues / unused products:** Residual chemical should be disposed by incineration or by other modes of disposal in compliance with local legislation.

**Contaminated packaging:** Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.

[Continue...]



**SAFETY DATA SHEET**  
**1-Hydroxycyclohexyl phenyl ketone**  
**IHT- PI 184**

Page 5

**14. TRANSPORT INFORMATION**

**ADR/RID:** Class: Free

**IMO:** Class: Free

**ICAO:** Class: Free

**15. REGULATORY INFORMATION**

**Classification:** Classification not required.

**16. OTHER INFORMATION**

**Other information:** Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

[Final page]