



SAFETY DATA SHEET

According to GHS Globally Harmonised System

907

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

Product name: 2-Methyl-1- [4-(methylthio) phenyl]-2-(4-morpholinyl)-1- propanone

CAS number: 71868-10-5

ELINCS number: 400-600-6

Product code: VL-1070

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

2. COMPOSITION / INFORMATION ON INGREDIENTS

Contains: 2-Methyl-1- [4-(methylthio) phenyl]-2-(4-morpholinyl)-1- propanone
99+%

3. HAZARDS IDENTIFICATION

Main hazards: Xn - N
Harmful
Dangerous for the environment.

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: Immediately give plenty (> 500 ml) of water (if possible charcoal slurry). In case of spontaneous vomiting be sure that vomitus can freely drain due of danger of suffocation. Give water repeatedly. Artificial induction of vomiting should be restricted to first aid staff. Give nothing by mouth in cases of unconsciousness or convulsion. Seek medical advice.

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

Extinguishing media which must not be used for safety reasons: High volume water jet. [Continue...]

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, Oxides of nitrogen (NOx), Oxides of sulfur, Toxic gases/vapours.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: 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: Harmful. Dangerous for the environment. Handle and open container with care. 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. Close containers immediately after use. Danger! Explosion risk. Risk of explosion if an air-dust mixture forms. Avoid creating dusty conditions. Empty only into earthed containers. 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: 5 mg/m³

Justification to exposure limit

Neurotoxic effects in animal studies

[Continue...]

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 to pale yellow

Odour: faint

Melting/freezing temperature 73-76 °C

Boiling point/range 98.3 kPa >300 °C

Density 20 °C 1.21 g/cm³

Flash point >165 °C

Ignition Temperature 380°C



Oxidising properties	not oxidizing
Self-ignition temperature	no self-ignition
Water solubility 20 °C	18 mg/l
Vapour pressure 20 °C	1.2E-4 Pa
Partition coe.; Log Pow 20-25 °C	3.09
pH-value	not tested
Explosive properties	not explosive

10. STABILITY AND REACTIVITY

Decomposition temperature:	> 200 °C	
Conditions to avoid:	Static discharges.	[Continue...]
Materials to avoid:	Strong acids, strong bases and strong oxidising agents.	
Hazardous decomposition products:	Oxides of carbon, Oxides of nitrogen (NOx), Oxides of sulfur, Toxic gases/vapours	

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:	Rat LD50 1984 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:	Zebra fish (Brachydanio rerio) LC50 9 mg/l
Acute toxicity to daphnia:	Daphnia magna EC50 15.3 mg/l
Acute toxicity to bacteria:	Sewage sludge IC50 >100 mg/l
Acute toxicity to algae:	Scenedesmus sp. 72 h EC50 1.7 mg/l
Biodegradability:	not 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.

14. TRANSPORT INFORMATION

ADR/RID: Class: 9 [Continue...]

Cipher: 12C

UN-No: 3077

Proper shipping name: ENVIRONMENTALLY HAZARDOUS
SUBSTANCE,SOLID,N.O.S.

Additional Information: 2-METHYL-1-(4-(METHYLTHIO)PHENYL-2-
MORPHOLINO PROPANONE-1

IMO: Class: Free

ICAO: Class: Free

15. REGULATORY INFORMATION

Hazard symbols: Xn Harmful

N Dangerous for the environment

Risk phrases: R22 Harmful if swallowed.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: S22 Do not breathe dust.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

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.

[Continue...]

[Final page]