Wako Pure Chemical Industries, Ltd.

SAFETY DATA SHEET

According to JIS Z 7253:2012

Revision Date 20-Jun-2014
Version 2

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product name	Mefenacet Reference Material
Product code	130-16921
CAS No	73250-68-7

Formula C16H14N2O2S

Manufacturer
Wako Pure Chemical Industries, Ltd
1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan
Phone: +81 (0)6-6203-3741
Fax: +81 (0)6-6201-5964

Supplier
Wako Pure Chemical Industries, Ltd
1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan
Phone: +81 (0)6-6203-3741
Fax: +81 (0)6-6201-5964

Emergency telephone number +81-6-6203-3741 / +81-3-3270-8571

Recommended uses and restrictions on use For research purposes

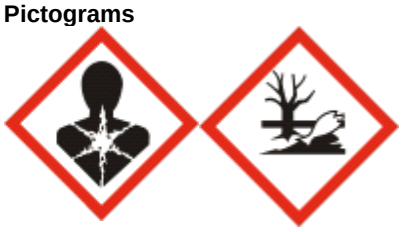
Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Reproductive Toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Category 2 Blood system, kidneys	
aquatic environment (acute hazard)	Category 1
aquatic environment (long-term hazard)	Category 1

Pictograms



Signal word Warning

Hazard statements
H361 - Suspected of damaging fertility or the unborn child
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H373 - May cause damage to the following organs through prolonged or repeated exposure: Blood system, kidneys

Precautionary statements-(Prevention)
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Do not breathe dust/fume/gas/mist/vapors/spray
- Avoid release to the environment

Precautionary statements-(Response)
- IF exposed or concerned: Get medical advice/attention
- Collect spillage

Precautionary statements-(Storage)
- No

Precautionary statements-(Disposal)
- Dispose of contents/container to an approved waste disposal plant

Others
Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance
Formula C16H14N2O2S

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS No
Mefenacet Reference Material	99.0	298.36	N/A	8-（7）-827	73250-68-7

Impurities and Stabilizing additives which constitute the substance No

Section 4: FIRST AID MEASURES

Inhalation
Remove to fresh air If symptoms persist, call a physician

Skin contact
Wash off immediately with soap and plenty of water If symptoms persist, call a physician

Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediate medical attention is required

Ingestion
Rinse mouth Never give anything by mouth to an unconscious person Call a physician or poison control center immediately Do not induce vomiting without medical advice

Protection of first-aiders
Use personal protective equipment as required

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media
Water spray (fog), carbon dioxide (CO2), Foam, Extinguishing powder,

Unsuitable extinguishing media
No information available

Special extinguishing method
Evacuate area and fight fire from a safe distance

Specific hazards arising from the chemical product
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Protection of fire-fighters
Use personal protective equipment as required Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated

Methods and materials for contaminent and methods and materials for cleaning up

Do not touch spilled material without suitable protection(See section 8). After material is completely picked up, wash the spill sit e with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or di spose of contaminated clothing.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Use personal protective equipment as required

Storage

Safe storage conditions

Storage conditions	Keep container protect from light tightly closed. Store in a cool (2-10 degree C) place.
Safe packaging material	Glass
Incompatible substances	Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Control parameters	Not regulated
Exposure limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Personal protective equipment

Respiratory protection	Dust mask
Hand protection	Protection gloves
Eye protection	protective eyeglasses or chemical safety goggles
Skin and body protection	Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form	white crystalline powder
Odor	No data available
pH	
Melting point/freezing point	134-138 °C
Boiling point, initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits	
Upper：	No data available
Lower：	No data available
Vapour pressure	No data available
Vapour density	No data available
Specific Gravity (relatinve density)	No data available
Solubilities	acetone : soluble . water : practically insoluble,or insoluble .
n-Octanol/water partition coefficient: (log Pow)	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity (coefficient of viscosity)	No data available
Dynamic viscosity	No data available

Section 10: STABILITY AND REACTIVITY

Stability

Stability May be altered by light.
Reactivity No data available

Hazardous reactions
May cause ignition on contact with strong oxidizing agents

Conditions to avoid
Extremes of temperature and direct sunlight

Incompatible materials
Strong oxidizing agents

Hazardous decomposition products
Carbon monooxide (CO), carbon dioxide (CO2), Sulfur oxides (SOx), Nitrogen oxides (NOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Mefenacet Reference Material	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 0.134 mg/L (Rat) 4 h

Component	Acute toxicity -oral- source information	Based on the NITE GHS classification results.	Acute toxicity -inhalation gas- source information
Mefenacet Reference Material 73250-68-7 (99.0)	LD50(orl,rat):> 5,000 mg/kg(RTECS (2006)、IUCLID (2000)).	LD50 (skn,rat):> 5,000 mg/kg(RTECS (2006)、IUCLID (2000)).	Based on the NITE GHS classification results.

Skin irritation/corrosion

Component	Skin corrosion irritation source information
Mefenacet Reference Material 73250-68-7 (99.0)	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Component	Serious eye damage source information
Mefenacet Reference Material 73250-68-7 (99.0)	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Component	Respiratory, Skin sensitization source information
Mefenacet Reference Material 73250-68-7 (99.0)	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Component	Mutagenic source information
Mefenacet Reference Material 73250-68-7 (99.0)	Based on the NITE GHS classification results.

Carcinogenicity

Component	Carcinogenicity source infotmation
Mefenacet Reference Material 73250-68-7 (99.0)	Based on the NITE GHS classification results.

Reproductive toxicity

Component	Reproductive toxicity source information
Mefenacet Reference Material 73250-68-7 (99.0)	No description about the general toxicity of the parent animal, but effect (fetal death, abnormal musculoskeletal system)can be seen in the development of offspring. (IUCLID (2000)、RTECS (2006)).

STOT-single exposure

Component	STOT -single exporsure- source information
Mefenacet Reference Material 73250-68-7 (99.0)	Based on the NITE GHS classification results.

STOT-repeated exposure

Component	STOT -repeated exposure- source information
Mefenacet Reference Material 73250-68-7 (99.0)	Based on the NITE GHS classification results.

Aspiration hazard

Component	Aspiration Hazard source information
Mefenacet Reference Material 73250-68-7 (99.0)	Based on the NITE GHS classification results.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Mefenacet Reference Material	*N/A*	*LC50:Oncorhynchus mykiss 6.8 mg/L 96 h*	*N/A*

Other data

Component	Aquatic toxicity -Acute- source information	Aquatic toxicity -Chronic- source information
Mefenacet Reference Material 73250-68-7 (99.0)	ErC50(Chlorophyta):0.226mg/L (Pesticide registration application materials、2004).	Acute toxicity is a Category 1, but it is estimated bioaccumulation is low (log Kow=3.23 (PHYSPROP Database、2005)) 、Estimated that there is no rapid degradation. (BIOWIN).

Persistence and degradability No information available
Bioaccumulative potential No information available
Mobility in soil No information available
Hazard to the ozone layer No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number	UN3077
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. Mefenacet
UN classfication	9
Subsidiary hazard class	
Labels	
Packing group	III
ERG Code	9L
Marine pollutant	Yes

IMDG

UN number	UN3077
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. Mefenacet
UN classfication	9
Subsidiary hazard class	
Packing group	III
EmS-No	F-A, S-F
Marine pollutant (Sea)	Yes

IATA

UN number	UN3077
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. Mefenacet
UN classfication	9
Subsidiary hazard class	
Packing group	III
Enviromenntally Hazardous Substance	Yes

Section 15: REGULATORY INFORMATION

International Inventories

EINECS/ELINCS	Listed
TSCA	-

Japanese regulations

Fire Service Act	No
Poisonous and Deleterious Substances Control Law	No
Industrial Safety and Health Act	No
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc	No
Regulations for the carriage and storage of dangerous goods in ship	Noxious Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
Civil Aeronautics Law	Misellaneous Dangerous Substances and Articles (Ordinance Art.194, MITL Nortification for Air Transportation of Explosives etc., Attached Table 1)
Marine Pollution Prevention Law	
Pollutant Release and Transfer Register Law	Class 1
第1種-No.	402
Water Pollution Control Act	No
ETCO	Not applicable

Section 16: OTHER INFORMATION

Literature and references
Revision Note No information available

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
GHS Classification is acoording to JIS Z7252(2010). *JIS: Japanese Industrial Standards

End of Safety Data Sheet