Metaflumizone (cas 139968-49-3) MSDS

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

1.1 Product identifiers
Product name : Metaflumizone
Product Number : 32966
Brand : Fluka
CAS-No. : 139968-49-3

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses : Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Acute aquatic toxicity (Category 1)
This substance is not classified as dangerous according to Directive 67/548/EEC.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008 [CLP]
Pictogram

Signal word Warning
Hazard statement(s) H400 Very toxic to aquatic life.
Precautionary statement(s) P273 Avoid release to the environment.
Supplemental Hazard Statements none
Caution - substance not yet tested completely.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Synonyms : 2 ?-2-(4-Cyanophenyl)-1-(??,??,?? -trifluoro-m-tolyl)ethylidene)-4-(trifluoromethoxy)carbanilohydrazide
Formula : C24H16F6N4O2
Molecular Weight : 506.4 g/mol

4. FIRST AID MEASURES

4.1 Description of first aid measures
General advice Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact Wash off with soap and plenty of water. Consult a physician.
In case of eye contact Flush eyes with water as a precaution.
If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed
5. **FIREFIGHTING MEASURES**

5.1 *Extinguishing media*

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 *Special hazards arising from the substance or mixture*
Carbon oxides, nitrogen oxides (NOx), Hydrogen fluoride, Hydrogen cyanide (hydrocyanic acid)
Nature of decomposition products not known.
Carbon oxides, nitrogen oxides (NOx), Hydrogen fluoride, Hydrogen cyanide (hydrocyanic acid)

5.3 *Advice for firefighters*
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 *Further information*
no data available

6. **ACCIDENTAL RELEASE MEASURES**

6.1 *Personal precautions, protective equipment and emergency procedures*
Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 *Environmental precautions*
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 *Methods and materials for containment and cleaning up*
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 *Reference to other sections*
For disposal see section 13.

7. **HANDLING AND STORAGE**

7.1 *Precautions for safe handling*
Provide appropriate exhaust ventilation at places where dust is formed.

7.2 *Conditions for safe storage, including any incompatibilities*
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 *Specific end uses*
no data available

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 *Control parameters*
Components with workplace control parameters

8.2 *Exposure controls*
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

*Eye/face protection*
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

*Skin protection*
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

*Body Protection*
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

*Respiratory protection*
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance
   Form: powder
   Colour: white

b) Odour
   no data available

c) Odour Threshold
   no data available

d) pH
   no data available

e) Melting point/freezing point
   186 °C

f) Initial boiling point and boiling range
   no data available

g) Flash point
   no data available

h) Evaporation rate
   no data available

i) Flammability (solid, gas)
   no data available

j) Upper/lower flammability or explosive limits
   no data available

k) Vapour pressure
   no data available

l) Vapour density
   no data available

m) Relative density
   1.461 g/cm³

n) Water solubility
   0.001 g/l

o) Partition coefficient: n-octanol/water
   log Pow: 5.1

p) Autoignition temperature
   no data available

q) Decomposition temperature
   no data available

r) Viscosity
   no data available

s) Explosive properties
   no data available

t) Oxidizing properties
   no data available

9.2 Other safety information

Bulk density
   368 - 536 kg/m³

10. STABILITY AND REACTIVITY

10.1 Reactivity
   no data available

10.2 Chemical stability
   no data available

10.3 Possibility of hazardous reactions
   no data available

10.4 Conditions to avoid
   no data available

10.5 Incompatible materials
   Strong oxidizing agents, Strong reducing agents

10.6 Hazardous decomposition products
   Other decomposition products - no data available

11. TOXICOCLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
   LD₅₀ Oral - rat - > 5.000 mg/kg
   LC₅₀ Inhalation - rat - 4 h - > 5.2 mg/l
   LD₅₀ Dermal - rat - > 5.000 mg/kg

Skin corrosion/irritation
   Skin - rabbit - No skin irritation

   Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
guinea pig - Did not cause sensitization on laboratory animals.

Germ cell mutagenicity
no data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation
May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion
May be harmful if swallowed.

Skin
May be harmful if absorbed through skin. May cause skin irritation.

Eyes
May cause eye irritation.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information
RTECS: MV1576452

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish
LC50 - Oncorhynchus mykiss (rainbow trout) - > 0.343 mg/l - 96 h
Remarks: Aquatic toxicity is unlikely due to low solubility.

Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - > 0.331 mg/l - 48 h

Toxicity to algae
EC50 - Pseudokirchneriella subcapitata - > 0.313 mg/l - 120 h

12.2 Persistence and degradability

12.3 Bioaccumulative potential
Bioaccumulation
Danio rerio (zebra fish) - Bioconcentration factor (BCF): > 1,00

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects
Very toxic to aquatic life.
no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 3077  IMDG: 3077  IATA: 3077

14.2 UN proper shipping name
ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metaflumizone)
14.3 Transport hazard class(es)  
ADR/RID: 9  
IMDG: 9  
IATA: 9

14.4 Packaging group  
ADR/RID: III  
IMDG: III  
IATA: III

14.5 Environmental hazards  
ADR/RID: yes  
IMDG Marine pollutant: yes  
IATA: yes

14.6 Special precautions for user

Further information  
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

15. REGULATORY INFORMATION  
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
no data available

15.2 Chemical Safety Assessment  
no data available

16. OTHER INFORMATION  
Further information  
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information this document is based on the resent state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product, guidechem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.