



4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 17/06/2015

Revision date:

Version: 1.0

CLM-7389-S

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name. : 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE
Product code : CLM-7389-S

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | |
|-------------------------------------|------|
| Flam. Liq. 2 | H225 |
| Acute Tox. 4 (Oral) | H302 |
| Acute Tox. 4 (Dermal) | H312 |
| Acute Tox. 4 (Inhalation:dust,mist) | H332 |
| Eye Irrit. 2 | H319 |

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11

Full text of R-phrases: see section 16

GHS-US classification

| | |
|-------------------------------------|------|
| Flam. Liq. 2 | H225 |
| Acute Tox. 4 (Oral) | H302 |
| Acute Tox. 4 (Dermal) | H312 |
| Acute Tox. 4 (Inhalation:dust,mist) | H332 |
| Eye Irrit. 2A | H319 |

Adverse physicochemical, human health and environmental effects

Lungs, Blood, Kidney, Liver, Central nervous system.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Danger

Hazardous ingredients :

ACETONITRILE UNLABELED

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour
H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H319 - Causes serious eye irritation

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P261 - Avoid breathing dust, fume, gas, mist, spray, vapours
P264 - Wash Both hands thoroughly after handling
P270 - Do no eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS02

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapour
H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H319 - Causes serious eye irritation

Precautionary statements (GHS-US) :

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing dust, fume, gas, mist, spray, vapours
P264 - Wash Both hands thoroughly after handling
P270 - Do no eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)
P330 - If swallowed, rinse mouth
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide., Dry chemical, Water spray for extinction
P403+P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container to Comply with applicable regulations.

2.3. Other hazards

No additional information available

4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE CLM-7389-S

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according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification according to Directive 67/548/EEC |
|--|--|--------|--|
| ACETONITRILE UNLABELED | (CAS No) 75-05-8 (EC no) 200-835-2 (EC index no) 608-001-00-3 (REACH-no) 01-2119471307-38 | 99.987 | F; R11 Xi; R36 Xn; R20/21/22 |
| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) | (CAS No) 77279-89-1 (Unlabeled) | 0.013 | Xn; R22 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|--------|---|
| ACETONITRILE UNLABELED | (CAS No) 75-05-8 (EC no) 200-835-2 (EC index no) 608-001-00-3 (REACH-no) 01-2119471307-38 | 99.987 | Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 |
| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) | (CAS No) 77279-89-1 (Unlabeled) | 0.013 | Acute Tox. 4 (Oral), H302 |

| Name | Product identifier | % | GHS-US classification |
|------------------------|--------------------|--------|--|
| ACETONITRILE UNLABELED | (CAS No) 75-05-8 | 99.987 | Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319 |

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. |
| First-aid measures after inhalation | : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell. |
| First-aid measures after skin contact | : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor/physician. Specific measures (see Hazard pictograms (CLP) on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse. |
| First-aid measures after eye contact | : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| First-aid measures after ingestion | : Rinse mouth. Call a POISON CENTER/doctor/physician if you feel unwell. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|--------------------------------------|---|
| Symptoms/injuries after inhalation | : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. |
| Symptoms/injuries after skin contact | : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. |
| Symptoms/injuries after eye contact | : Causes eye irritation. |
| Symptoms/injuries after ingestion | : Swallowing a small quantity of this material will result in serious health hazard. |

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 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

| | |
|------------------|--|
| Fire hazard | : Highly flammable liquid and vapour. |
| Explosion hazard | : May form flammable/explosive vapour-air mixture. |
| Reactivity | : Vapors may form explosive mixture with air. |

5.3. Advice for firefighters

| | |
|--------------------------------|---|
| Firefighting instructions | : Use water spray to cool unopened containers. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |

4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE CLM-7389-S

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For containment : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling : No naked lights. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist or spray.
Hygiene measures : Do no eat, drink or smoke when using this product. Wash Both hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.
Storage conditions : Store at room temperature away from light and moisture.
Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE | | |
|--|-------------------------|---|
| Italy - Portugal - USA ACGIH | ACGIH TWA (ppm) | 20.0000000000 ppm Lower Respiratory Tract irritation. Not classifiable as a human carcinogen. |
| ACETONITRILE UNLABELED (75-05-8) | | |
| Italy - Portugal - USA ACGIH | ACGIH TWA (ppm) | 20.0000000000 ppm Lower Respiratory Tract irritation. Not classifiable as a human carcinogen. |
| USA NIOSH | NIOSH REL (TWA) (mg/m3) | 34 mg/m ³ Forms Cyanide in the body. |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 20 ppm Forms Cyanide in the body. |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 70 mg/m ³ The value in mg/m3 is approximate. |
| USA OSHA | OSHA PEL (TWA) (ppm) | 40.0000000000 ppm The value in mg/m3 is approximate. |

8.2. Exposure controls

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Hand protection : Wear suitable protective clothing and gloves.
Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Wear approved mask.

4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE CLM-7389-S

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

| | |
|--|--|
| Physical state | : Liquid |
| Appearance | : Liquid, clear. |
| Molecular mass | : 41.05 g/mol |
| Colour | : Colourless. |
| Odour | : ether-like. |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : -48 °C (-54°F) |
| Freezing point | : No data available |
| Boiling point | : 81 - 82 °C (178 - 180 °F) |
| Flash point | : 2.0 °C (35.6 °F) - closed cup |
| Self ignition temperature | : 523 °C (973 °F) |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Highly flammable liquid and vapour |
| Vapour pressure | : 73.18 hPa (54.89 mmHg) at 15°C (59 °F), 119.81 hPa (89.86 mmHg) at 25°C(77 °F) |
| Relative vapour density at 20 °C | : 1.42 - (Air = 1.0) |
| Relative density | : No data available |
| Density | : 0.786 g/ml |
| Solubility | : Water: 100 % |
| Log Pow | : -0.34 |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : 4.4 - 16 vol % |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Acids, Bases, Oxidizing agents, Reducing agents, Alkali metals.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.

| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE | |
|--|---------------|
| LD50 oral rat | 2460 mg/kg |
| LD50 dermal rabbit | 2000 mg/kg |
| LC50 inhalation rat (mg/l) | ≥ 26.8 mg/l |
| LC50 inhalation rat (ppm) | 7551 ppm - 8h |

4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE CLM-7389-S

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| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE | |
|--|---------------------------|
| ATE (oral) | 500.000 mg/kg bodyweight |
| ATE (dermal) | 1100.000 mg/kg bodyweight |
| ATE (gases) | 4500.000 ppmV/4h |
| ATE (vapours) | 11.000 mg/l/4h |
| ATE (dust,mist) | 1.500 mg/l/4h |

| ACETONITRILE UNLABELED (75-05-8) | |
|----------------------------------|---------------------------|
| LD50 oral rat | 2460 mg/kg |
| LD50 dermal rabbit | 2000 mg/kg |
| LC50 inhalation rat (mg/l) | ≥ 26.8 mg/l |
| LC50 inhalation rat (ppm) | 7551 ppm - 8h |
| ATE (oral) | 500.000 mg/kg bodyweight |
| ATE (dermal) | 2000.000 mg/kg bodyweight |
| ATE (gases) | 4500.000 ppmV/4h |
| ATE (vapours) | 11.000 mg/l/4h |
| ATE (dust,mist) | 1.500 mg/l/4h |

| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) (77279-89-1 (Unlabeled)) | |
|---|--------------------------|
| ATE (oral) | 500.000 mg/kg bodyweight |

| | |
|---|---|
| Skin corrosion/irritation | : Not classified Skin - rabbit - No skin irritation |
| Serious eye damage/irritation | : Causes serious eye irritation. Eyes - Rabbit - Irritating to eyes |
| Respiratory or skin sensitisation | : Did not cause sensitization on laboratory animals. Buehler Test - guinea pig - Did not cause sensitisation on laboratory animals. |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : No evidence of carcinogenicity in animal studies (when indicated). |
| Reproductive toxicity | : Animal testing did not show any effects on fertility. |
| Specific target organ toxicity (single exposure) | : Not classified The substance or mixture is not classified as specific target organ toxicant. |
| Specific target organ toxicity (repeated exposure) | : Not classified The substance or mixture is not classified as specific target organ toxicant. |
| Aspiration hazard | : Not classified |
| Potential Adverse human health effects and symptoms | : Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. |
| Symptoms/injuries after inhalation | : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. |
| Symptoms/injuries after skin contact | : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. |
| Symptoms/injuries after eye contact | : Causes eye irritation. |
| Symptoms/injuries after ingestion | : Swallowing a small quantity of this material will result in serious health hazard. |

SECTION 12: Ecological information

12.1. Toxicity

| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE | |
|--|---|
| LC50 fishes 1 | 1640.00 mg/l Pimephales promelas (fathead minnow) - 96h |
| EC50 Daphnia 1 | 3600 mg/l Daphnia magna (Water flea) - 48h |
| NOEC (chronic) | 640 mg/l Daphnia magna (Water flea) - 14d |

| ACETONITRILE UNLABELED (75-05-8) | |
|----------------------------------|---|
| LC50 fishes 1 | 1640.00 mg/l Pimephales promelas (fathead minnow) - 96h |
| EC50 Daphnia 1 | 3600 mg/l Daphnia magna (Water flea) - 48h |
| NOEC (chronic) | 640 mg/l Daphnia magna (Water flea) - 14d |

12.2. Persistence and degradability

| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE | |
|--|---|
| Persistence and degradability | Biodegradability Result: - Readily biodegradable. |

4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE CLM-7389-S

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| ACETONITRILE UNLABELED (75-05-8) | | |
|----------------------------------|------------------|----------------------------------|
| Persistence and degradability | Biodegradability | Result: - Readily biodegradable. |

12.3. Bioaccumulative potential

| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE | |
|--|--|
| Log Pow | -0.34 |
| Bioaccumulative potential | No bioaccumulation is to be expected (log Pow <= 4). |

| ACETONITRILE UNLABELED (75-05-8) | |
|----------------------------------|--|
| Log Pow | -0.34 |
| Bioaccumulative potential | No bioaccumulation is to be expected (log Pow <= 4). |

12.4. Mobility in soil

| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE | |
|--|---------------------------------|
| Ecology - soil | Not expected to absorb on soil. |

| ACETONITRILE UNLABELED (75-05-8) | |
|----------------------------------|---------------------------------|
| Ecology - soil | Not expected to absorb on soil. |

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No.(DOT) : 1648
DOT NA no. : UN1648

14.2. UN proper shipping name

DOT Proper Shipping Name : Acetonitrile
Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242

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14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II
Class (ADR) : 3 - Flammable liquids
Hazard identification number (Kemler No.) : 33
Classification code (ADR) : F1
Danger labels (ADR) : 3 - Flammable liquids



Orange plates : An orange rectangular label with a black border. It is divided into two horizontal sections. The top section contains the number '33' and the bottom section contains the number '1648'.

Tunnel restriction code : D/E
Limited quantities (ADR) : 1L
EAC code : •2YE
Excepted quantities (ADR) : E2

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"
MFAG-No : 127

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
Civil Aeronautics Law : Flammable liquids(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement Regulations)

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

| 4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE | |
|--|---|
| Listed on SARA Section 313 (Specific toxic chemical listings) | |
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard |
| ACETONITRILE UNLABELED (75-05-8) | |
| Listed on SARA Section 313 (Specific toxic chemical listings) | |
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard |

4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE CLM-7389-S

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15.2. International regulations

CANADA

4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE

Listed on the Canadian DSL (Domestic Substances List) inventory.

ACETONITRILE UNLABELED (75-05-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE()

State or local regulations

U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

ACETONITRILE UNLABELED (75-05-8)

U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases::

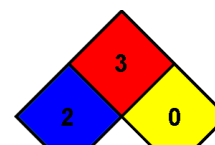
| | |
|-------------------------------------|--|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 |
| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Liq. 2 | Flammable liquids, Category 2 |
| H225 | Highly flammable liquid and vapour |
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| R11 | Highly flammable |
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed |
| R22 | Harmful if swallowed |
| R36 | Irritating to eyes |
| F | Highly flammable |
| Xi | Irritant |
| Xn | Harmful |

NFPA health hazard

: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 3 - Liquids and solids that can be ignited under almost all ambient conditions.



4-FLUORO-3-PHENOXYBENZOIC ACID (13C6, 99%) 100 UG/ML IN ACETONITRILE CLM-7389-S

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 3 Serious Hazard
Physical : 0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product