

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/03/2015 Revision date: 30/07/2019 Supersedes: 10/03/2015 Version: 1.1

DLM-4460-S

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

1.1. Product identifier

Product form : Mixtures

Product name : GENISTEIN (3',5',6,8-D4, 94%) 100 UG/ML IN ACETONITRILE

Product code : DLM-4460-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) H332
Eye Irrit. 2 H319

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11 Xi; R36 Xn; R20/21/22

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) H332 Eye Irrit. 2A H319

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

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

30/07/2019 EN (English US) 1/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2 **Label elements**

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

Hazard pictograms (CLP)





Signal word (CLP) : Danger

: ACETONITRILE UNLABELED Hazardous ingredients

Hazard statements (CLP) : H225 - Highly flammable liquid and vapor

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

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P261 - Avoid breathing fume, mist, spray, vapors. P264 - Wash both hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

GHS-US labeling

Hazard pictograms (GHS-US)





: Danger

Signal word (GHS-US)

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapor

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 fume, mist, spray, vapors. P264 - Wash Both hands thoroughly after handling. P270 - Do not 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 if you feel unwell

P302+P352 - If on skin: Wash with plenty of water

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower

P304+P340 - If inhaled: Remove person to fresh air and keep 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 or doctor if you feel unwell

P321 - Specific treatment (see Hazard pictograms (CLP) on this label)

P330 - 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 to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container to Comply with applicable regulations

Other hazards

No additional information available

30/07/2019 EN (English US) 2/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 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 Mixtures

| 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 | 99.9873 | F; R11 Xi; R36 Xn; R20/21/22 |
| GENISTEIN (3',5',6,8-D4, 94%) | (CAS-No.) 446-72-0 (Unlabeled) (EC-No.) 207-174-9 (Unlabeled) | 0.0127 | 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 | 99.9873 | Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 |
| GENISTEIN (3',5',6,8-D4, 94%) | (CAS-No.) 446-72-0 (Unlabeled) (EC-No.) 207-174-9 (Unlabeled) | 0.0127 | Acute Tox. 4 (Oral), H302 |
| Name | Product identifier | % | GHS-US classification |
| ACETONITRILE UNLABELED | (CAS-No.) 75-05-8 | 99.9873 | 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- and H- phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Evacuate area.

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. If not breathing, give artificial respiration. Call a physician immediately. Get immediate medical

advice/attention.

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 : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Get

immediate medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/effects after inhalation : Harmful if inhaled. May cause respiratory irritation.

Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant

health hazard. Harmful in contact with skin.

Symptoms/effects after eye contact : Causes serious eye irritation

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Harmful if

swallowed.

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 : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Reactivity : Vapors may form explosive mixture with air.

30/07/2019 EN (English US) 3/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.3. Advice for firefighters

Firefighting instructions : Wear a self contained breathing apparatus. Fight fire with normal precautions from a

reasonable distance.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

Other information : Use water spray to cool unopened containers.

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 open flames. No

smoking.

6.1.1. For non-emergency personnel

Emergency procedures

: Use personal protective equipment as required. Avoid breathing vapors, mist, gas. Ensure adequate air ventilation. Evacuate unnecessary personnel. Eliminate all ignition sources if safe to do so. Provide adequate ventilation to minimize dust and/or vapor concentrations. Special attention should be given to low areas/pits where flammable vapors can accumulate.

6.1.2. For emergency responders

Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Dike and contain spill. Disposal should be in accordance with applicable Federal, State and

local regulations

Methods for cleaning up : Collect spillage. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. This material and its container must be disposed of in a

and shovel into container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

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 : Avoid all eye and skin contact and do not breathe vapor and mist. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Handle empty

containers with care because residual vapors are flammable.

Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in freezer (-20°C). Protect from light.

Incompatible materials : Heat sources

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| GENISTEIN (3',5',6,8-D4, 94%) 100 UG/ML IN ACETONITRILE | | |
|---|-------------------------|---|
| Italy - Portugal - USA ACGIH | ACGIH TWA (ppm) | 20.0000000 ppm Lower Respiratory Tract irritation. Not classifiable as a human carcinogen. |
| ACETONITRILE UNLABELED |) (75-05-8) | |
| Italy - Portugal - USA ACGIH | ACGIH TWA (ppm) | 20.00000000 ppm Lower Respiratory Tract irritation. Not classifiable as a human carcinogen. |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 34 mg/m³ 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/m³ The value in mg/m3 is approximate. |
| USA OSHA | OSHA PEL (TWA) (ppm) | 40 ppm The value in mg/m3 is approximate. |

8.2. Exposure controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety procedures.

30/07/2019 EN (English US) 4/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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









Materials for protective clothing : Wear suitable protective clothing and gloves. Hand protection : Wear suitable protective clothing and gloves. Eye protection Chemical goggles or face shield with safety glasses.

Skin and body protection Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended.

Environmental exposure controls Avoid release to the environment.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture. Physical state : Liquid : Liquid, clear **Appearance** Molecular mass : 41.05 g/mol Color : Colorless Odor : Ether-like

: No data available Odor threshold : No data available pΗ Relative evaporation rate (butyl acetate=1) : No data available Melting point : -48 °C (-54°F) Freezing point : No data available : 81 - 82 °C (178 - 180 °F) **Boiling** point Flash point : 2 °C (35.6 °F) - closed cup

Auto-ignition temperature : 523 °C (973 °F) Decomposition temperature : No data available

: Highly flammable liquid and vapor Flammability (solid, gas)

Vapor pressure : 73.18 hPa (54.89 mmHg) at 15°C (59 °F), 119.81 hPa (89.86 mmHg) at 25°C(77 °F)

Relative vapor density at 20 °C : 1.42 - (Air = 1.0) Relative density No data available Specific gravity / density : 0.786 g/ml Solubility : Water: 100 % Log Pow : -0.34

Log Kow No data available Viscosity, kinematic No data available : No data available Viscosity, dynamic Explosive properties : No data available Oxidizing properties : No data available **Explosion limits** : 4.4 - 16 vol %

Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity

Vapors may form explosive mixture with air.

Chemical stability

See storage and expiration date on CoA.

Possibility of hazardous reactions

Highly flammable liquid and vapor.

Conditions to avoid

Heat. Open flame. Direct sunlight. Sparks. Extremely high or low temperatures.

30/07/2019 EN (English US) 5/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Incompatible materials

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

Hazardous decomposition products

May release flammable gases. Carbon oxides (CO, CO2). Nitrogen oxides.

SECTION 11: Toxicological information

| 11.1. Information on toxicological effects | |
|--|---|
| Acute toxicity | : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled. |
| GENISTEIN (3',5',6,8-D4, 94%) 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 |
| ATE CLP (oral) | 500.000 mg/kg body weight |
| ATE CLP (dermal) | 1100.000 mg/kg body weight |
| ATE CLP (gases) | 4500.000 ppmV/4h |
| ATE CLP (vapors) | 11.000 mg/l/4h |
| ATE CLP (dust, mist) | 1.500 mg/l/4h |
| GENISTEIN (3',5',6,8-D4, 94%) (446-72-0 (Unla | beled)) |
| LD50 oral | 500 mg/kg - Mouse |
| ATE CLP (oral) | 500.000 mg/kg body weight |
| 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 CLP (oral) | 500.000 mg/kg body weight |
| ATE CLP (dermal) | 2000.000 mg/kg body weight |
| ATE CLP (gases) | 4500.000 ppmV/4h |
| ATE CLP (vapors) | 11.000 mg/l/4h |
| ATE CLP (dust, mist) | 1.500 mg/l/4h |
| Skin corrosion/irritation | : Not classified |
| | Skin – Rabbit - No skin irritation |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| | Rabbit – Eyes - Irritating to eyes |
| Respiratory or skin sensitization | : Did not cause sensitization on laboratory animals. Buehler Test - guinea pig - Did not cause sensitization on laboratory animals. (OECD 406 method) |
| 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 |
| . 3 3 1, 1 3 1 , 1 2 1 | The substance or mixture is not classified as specific target organ toxicant. |
| Specific target organ toxicity – repeated | : Not classified |
| exposure | The substance or mixture is not classified as specific target organ toxicant. |
| Aspiration hazard | : Not classified |

symptoms

Potential Adverse human health effects and

Treat as cyanide poisoning. Always have on hand a cyanide first-aid kit, together with proper instructions. The onset of symptoms is generally delayed pending conversion to cyanide. Nausea, Vomiting, Diarrhea, Headache, Dizziness, Rash, Cyanosis, Excitement, Depression, Drowsiness, Impaired judgment, Lack of coordination, Stupor, Death. Lungs - Lung edema -Based on human evidence. Harmful if swallowed. Harmful in contact with skin. 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.

Symptoms/effects after inhalation : Harmful if inhaled. May cause respiratory irritation.

Repeated exposure to this material can result in absorption through skin causing significant Symptoms/effects after skin contact

health hazard. Harmful in contact with skin.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion Swallowing a small quantity of this material will result in serious health hazard. Harmful if

swallowed.

30/07/2019 EN (English US) 6/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

| GENISTEIN (3',5',6,8-D4, 94%) 100 UG/ML IN ACETONITRILE | | |
|---|--|--|
| LC50 fish 1 | 1640 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 fish 1 | 1640 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

| GENISTEIN (3',5',6,8-D4, 94%) 100 UG/ML IN ACETONITRILE | | |
|---|------------------|----------------------------------|
| Persistence and degradability | Biodegradability | Result: - Readily biodegradable. |
| ACETONITRILE UNLABELED (75-05-8) | | |
| Persistence and degradability | Biodegradability | Result: - Readily biodegradable. |

12.3. Bioaccumulative potential

| GENISTEIN (3',5',6,8-D4, 94%) 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

| GENISTEIN (3',5',6,8-D4, 94%) 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. Disposal must be done according to official regulations. May cause long lasting harmful effects to aquatic life.

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.

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

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

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

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Acetonitrile

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid



30/07/2019 EN (English US) 7/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II

Class (ADR) : 3 - Flammable liquid

Hazard identification number (Kemler No.) : 33 Classification code (ADR) : F1

Hazard labels (ADR) : 3 - Flammable liquids



Orange plates

33 1648

Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 11
EAC : •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 : 5L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

Civil Aeronautics Law : Flammable liquids

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

30/07/2019 EN (English US) 8/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

| 10.1. Ou Federal regulations | | |
|---|---|--|
| GENISTEIN (3',5',6,8-D4, 94%) 100 UG/ML IN ACETONITRILE | | |
| SARA Section 302 Threshold Planning Quantity (TPQ) | Not subject to reporting requirements of United States SARA Section 302 | |
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard | |
| SARA Section 313 - Emission Reporting | Subject to reporting requirements of United States SARA Section 313 | |
| ACETONITRILE UNLABELED (75-05-8) | | |
| SARA Section 302 Threshold Planning Quantity (TPQ) | Not subject to reporting requirements of United States SARA Section 302 | |
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard | |
| SARA Section 313 - Emission Reporting | Subject to reporting requirements of United States SARA Section 313 | |

15.2. International regulations

CANADA

GENISTEIN (3',5',6,8-D4, 94%) 100 UG/ML IN ACETONITRILE

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. **National regulations**

No additional information available

15.3. US State regulations

| GENISTEIN (3',5',6,8-D4, 94%) 100 UG/ML IN ACETONITRILE | | |
|--|--|--|
| U.S California - Proposition 65 - Carcinogens List | No | |
| U.S California - Proposition 65 - Developmental Toxicity | No | |
| U.S California - Proposition 65 - Reproductive Toxicity - Female | No | |
| U.S California - Proposition 65 - Reproductive Toxicity - Male | No | |
| State or local regulations | U.S Massachusetts - Right To Know List U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List | |

ACETONITRILE UNLABELED (75-05-8)

| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) |
|--|--|---|---|----------------------------------|
| No | No | No | No | |

ACETONITRILE UNLABELED (75-05-8)

State or local regulations

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

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 (inhalation) Category 4 |

30/07/2019 EN (English US) 9/10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| 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 vapor |
| 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 - Materials that, under emergency conditions, can cause

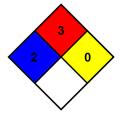
temporary incapacitation or residual injury.

NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient

temperature conditions.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



Hazard 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

30/07/2019 EN (English US) 10/10