



BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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: 31/08/2016

Revision date:

Version: 1.0

ULM-9868-S

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

1.1. Product identifier

Product form : Mixture
Product name : BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE
Product code : ULM-9868-S

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

1.2.1. Relevant identified uses

Main use category : Professional use
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 [DSD] or 1999/45/EC [DPD]

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

Full text of R-phrases: see section 16

Classification (GHS-US)

Flam. Liq. 2 H225
Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Dermal) H312
Acute Tox. 4 (Inhalation) H332
Eye Irrit. 2A H319

Adverse physicochemical, human health and environmental effects

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

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-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

2.2. Label elements

Labeling 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 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 smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical equipment
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
P264 - Wash 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) :



GHS02

GHS07

Signal word (GHS-US) :

Danger

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 equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing dust, fume, gas, 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 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 or 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 Use personal protective equipment as required to extinguish
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

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-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

SECTION 3: Composition/Information on ingredients

3.1. Substance

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 |
| BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED | (CAS No) 2095-03-6 (EC no) 218-257-4 | 0.013 | Xi; R36/37/38 Muta.Cat.3; R68 N; R50 |

| 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 |
| BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED | (CAS No) 2095-03-6 (EC no) 218-257-4 | 0.013 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Muta. 2, H341 STOT SE 3, H335 Aquatic Acute 1, H400 |

| Name | Product identifier | % | Classification (GHS-US) |
|------------------------|--------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------|
| 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- and H- 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 victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. |
| First-aid measures after skin contact | : Wash off with soap and plenty of water. Consult a physician. |
| 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 or 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 vapor. |
| Explosion hazard | : May form flammable/explosive vapor-air mixture. |
| Reactivity | : Vapors may form explosive mixture with air. |

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-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

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.

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 vapors are flammable.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep container tightly closed in a cool, dry and well-ventilated place.
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

| BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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/m ³) | 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/m ³) | 70 mg/m ³ The value in mg/m ³ is approximate. |
| USA OSHA | OSHA PEL (TWA) (ppm) | 40.0000000000 ppm The value in mg/m ³ is approximate. |

8.2. Exposure controls

- Personal protective equipment : Gas mask with filter type NO at conc. in air >. Protective clothing. Protective goggles. Self-contained breathing apparatus. Gloves.



- Hand protection : Wear suitable protective clothing and gloves.

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-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

| | |
|--------------------------|------------------------------------------------------------------------------------------------------------------|
| Eye protection | : Wear safety glasses with side shields (or goggles) and a face shield. |
| Skin and body protection | : Choose body protection according to the amount and concentration of the dangerous substance at the work place. |
| Respiratory protection | : Wear approved mask. |

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 |
| Color | : Colourless. |
| Odor | : ether-like. |
| Odor threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butyl acetate=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 |
| Auto-ignition temperature | : 523 °C (973 °F) |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Highly flammable liquid and vapor |
| 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 |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidizing 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.

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-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

| BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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 |

| 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. Eyes - Rabbit - Irritating to eyes |
| Respiratory or skin sensitization | : 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

| BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE | |
|---------------------------------------------------------------------------------|---------------------------------------------------------|
| LC50 fish 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 fish 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 |

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-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

12.2. Persistence and degradability

| BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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

| BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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

| BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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.

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

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
Transport hazard class(es) (DOT) : 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

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-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

DOT Packaging Bulk (49 CFR 173.xxx) : 242
Marine pollutant : No

14.3. Additional information

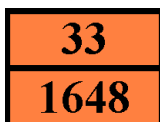
Other information : No supplementary information available.

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 :



Tunnel restriction code : 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 (49 CFR 173.27) : 5L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
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

SECTION 15: Regulatory information

15.1. US Federal regulations

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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)

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-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)

| | |
|-------------------------------------|-----------------------------------------------------------------------------------|
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard |
|-------------------------------------|-----------------------------------------------------------------------------------|

15.2. International regulations

CANADA

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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

BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 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 (inhalation) Category 4 |
| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation Category 2 |
| Flam. Liq. 2 | Flammable liquids Category 2 |
| Muta. 2 | Germ cell mutagenicity Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| Skin Sens. 1 | Skin sensitization Category 1 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H225 | Highly flammable liquid and vapor |
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H335 | May cause respiratory irritation |
| H341 | Suspected of causing genetic defects |

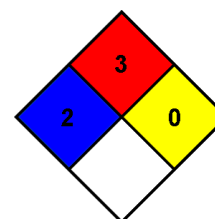
BISPHENOL F DIGLYCIDYL ETHER (BFDGE) UNLABELED 100 UG/ML IN ACETONITRILE ULM-9868-S

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

| | |
|-----------|--------------------------------------------------------------|
| H400 | Very toxic to aquatic life |
| R11 | Highly flammable |
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed |
| R36 | Irritating to eyes |
| R36/37/38 | Irritating to eyes, respiratory system and skin |
| R50 | Very toxic to aquatic organisms |
| R68 | Possible risk of irreversible effects |
| F | Highly flammable |
| N | Dangerous for the environment |
| 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.
- 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