

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN

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: 14/01/2021 Revision date: 01/02/2021 Supersedes: 14/01/2021 Version: 2.0

CDLM-11210-S

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

Product identifier

Product form : Mixtures

Product name : 2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2;

BISBENZYL-D4, 95%)100UG/ML IN ACN

Product code : CDLM-11210-S

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

Uses advised against

No additional information available

Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

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

Classification of the substance or mixture

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

Flam. Liq. 2 H225 H302 Acute Tox. 4 (Oral) Acute Tox. 4 (Dermal) H312 Acute Tox. 4 (Inhalation:dust,mist) 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

Xn; R20/21/22

Xi; R36

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 Eve Irrit. 2 H319 Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

1/10 EN (English US) 01/02/2021

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN

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

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/ventilating/lighting equipment P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P264 - Wash hands, forearms and face 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)





Signal word (GHS-US) : Danger

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

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/sparks/open flames/hot surfaces. - No smoking.

P233 - Keep container tightly closed.

P240 - Ground/Bond container and receiving equipment

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

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face 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 gloves/protective clothing/eye protection/face protection.

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

P322 - Specific treatment (see supplemental first aid instruction 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 media other than water to extinguish.

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

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

Other hazards

No additional information available

01/02/2021 EN (English US) 2/10

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN CDLM

Droduct identifie

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

Classification according to

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

Namo

3.2. Mixtures

name	Product identifier	70	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
2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2, 95%; BISBENZYL-D4, 95%)	(CAS-No.) 92339-07-6 (Unlabeled) (EC Index-No.)	0.013	Not classified
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
2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2, 95%; BISBENZYL-D4, 95%)	(CAS-No.) 92339-07-6 (Unlabeled) (EC Index-No.)	0.013	Not classified
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
2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95%	(CAS-No.) 92339-07-6 (Unlabeled)	0.013	Not classified

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

CP) (BISBENZYL-13C2, 95%; BISBENZYL-D4, 95%)

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

breathing, give artificial respiration. Call a physician immediately. Get immediate me 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.

01/02/2021 EN (English US) 3/10

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN CDL

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

Reactivity : Vapors may form explosive mixture with air.

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

safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

Precautions for safe handling

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

: No open flames. No smoking. Use only non-sparking tools.

ignition - No smoking. Take precautionary measures against static discharges. Handle empty

containers with care because residual vapors are flammable.

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

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment. Use explosion-proof Lighting equipment, ventilating

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

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN		
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.

01/02/2021 EN (English US) 4/10

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN CDLM

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

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.

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









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

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 : Colorless

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 °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
Explosion limits : 4.4 - 16 vol %

9.2. Other information

No additional information available

01/02/2021 EN (English US) 5/10

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN

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 10: Stability and reactivity

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

Highly flammable liquid and vapor.

Conditions to avoid

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

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

Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation:dust,mist: Harmful if inhaled.

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN	
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

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 : 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

: No evidence of carcinogenicity in animal studies (when indicated). Carcinogenicity

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

The substance or mixture is not classified as specific target organ toxicant.

Aspiration hazard : Not classified

01/02/2021 EN (English US) 6/10

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN

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

Potential Adverse human health effects and symptoms

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.

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 eve irritation.

Symptoms/effects after ingestion

Swallowing a small quantity of this material will result in serious health hazard. Harmful if

swallowed.

SECTION 12: Ecological information

Toxicity

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN	
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)	
ACETONITRILE UNLABELED (75-05-8) LC50 fish 1	1640 mg/l Pimephales promelas (fathead minnow) - 96h
,	1640 mg/l Pimephales promelas (fathead minnow) - 96h 3600 mg/l Daphnia magna (Water flea) - 48h

12.2. Persistence and degradability

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN		SBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN
Persistence and degradability	Biodegradability	Result: - Readily biodegradable.
ACETONITRILE UNLABELED (75-05-8)		
Persistence and degradability	Biodegradability	Result: - Readily biodegradable.

Bioaccumulative potential

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN	
Log Pow	-0.34
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).
ACETONITRILE UNLABELED (75-05-8)	
Log Pow	-0.34

Loa Pow

Bioaccumulative potential No bioaccumulation is to be expected (log Pow <= 4)	209 1 0 11	0.01
	Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4)

Mobility in soil

2,3,3,0-TETRAFLOORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZTL-13C2; BISBENZTL-D4, 95%) 1000G/ML IN ACN		
Ecology - soil	Not expected to absorb on soil.	
ACETONITOU E LINEADEL ED (75.05.9)		

ACETONITRILE UNLABELED (75-05-8)

07

Results of PBT and vPvB assessment

No additional information available

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

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 Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

01/02/2021 EN (English US) 7/10

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN CDLM-1

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 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

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

14.3. Additional information

Other information : No supplementary information available

Overland transport

Hazard identification number (Kemler No.) : 33

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)

01/02/2021 EN (English US) 8/10

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN CDLM-1

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

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

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETH	ANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN
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

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2, 95%; BISBENZYL-D4, 95%) (92339-07-6 (Unlabeled))	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

15.2. International regulations

CANADA

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN()	
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 -U.S. - California -U.S. - California -U.S. - California -No significant risk level Proposition 65 -Proposition 65 -Proposition 65 -Proposition 65 -(NSRL) **Developmental Toxicity** Reproductive Toxicity -Reproductive Toxicity -Carcinogens List Male No No No Nο

2,3,5,6-TETRAFLUORO-1,4	6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2, 95%; BISBENZYL-D4, 95%) (92339-07-6 (Unlabeled))			
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	

Female

01/02/2021 EN (English US) 9/10

Male

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2; BISBENZYL-D4, 95%)100UG/ML IN ACN CDLM-1

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

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2, 95%; BISBENZYL-D4, 95%) (92339-07-6		39-07-6 (Unlabeled))			
	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

2,3,5,6-TETRAFLUORO-1,4-BENZENEDIMETHANOL (95% CP) (BISBENZYL-13C2, 95%; BISBENZYL-D4, 95%) (92339-07-6 (Unlabeled))

State or local regulations

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

toxt of it; if and both philaboo.		
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	
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	
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.

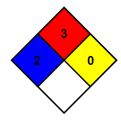
NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended

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

01/02/2021 EN (English US) 10/10