



2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

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

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Version: 2.0

DLM-2207-S

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

1.1. Product identifier

Product form : Mixtures
Product name : 2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3
Product code : DLM-2207-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:vapour)	H332
Eye Irrit. 2	H319
Carc. 1B	H350

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

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

Carc.Cat.1; R45
Carc.Cat.1; R49
F; R11
T; R23/24/25
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:vapour)	H332
Eye Irrit. 2A	H319
Carc. 1B	H350

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS08

GHS07

Signal word (CLP) :

Danger

Hazardous ingredients :

2,4-DINITROTOLUENE (RING-D3, 98%)

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
H350 - May cause cancer (in contact with skin, if inhaled, if swallowed)

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P261 - Avoid breathing 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) :



GHS02

GHS08

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
H350 - May cause cancer (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
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
P308+P313 - If exposed or concerned: Get medical advice/attention.
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 Alcohol resistant foam, Carbon dioxide, Dry chemical, Water spray to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.

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P405 - Store locked up.

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

2.3. Other hazards

No additional information available

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-D3 (D, 99.8%)	(CAS-No.) 2206-26-0 (EC-No.) 218-616-5 (EC Index-No.) 608-001-00-3 (Unlabeled) (REACH-no) 01-2119471307-38	99.88	F; R11 Xi; R36 Xn; R20/21/22
2,4-DINITROTOLUENE (RING-D3, 98%) substance listed as REACH Candidate (2,4-Dinitrotoluene) substance listed in REACH Annex XIV (2,4-Dinitrotoluene (2,4-DNT))	(CAS-No.) 93951-68-9 (EC-No.) 204-450-0 (EC Index-No.) 609-007-00-9	0.12	Carc.Cat.1; R45 Carc.Cat.1; R49 Muta.Cat.3; R68 Repr.Cat.3; R62 Repr.Cat.3; R63 T; R23/24/25 N; R50/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ACETONITRILE-D3 (D, 99.8%)	(CAS-No.) 2206-26-0 (EC-No.) 218-616-5 (EC Index-No.) 608-001-00-3 (Unlabeled) (REACH-no) 01-2119471307-38	99.88	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319
2,4-DINITROTOLUENE (RING-D3, 98%) substance listed as REACH Candidate (2,4-Dinitrotoluene) substance listed in REACH Annex XIV (2,4-Dinitrotoluene (2,4-DNT))	(CAS-No.) 93951-68-9 (EC-No.) 204-450-0 (EC Index-No.) 609-007-00-9	0.12	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Muta. 2, H341 Carc. 1B, H350 Repr. 2, H361fd Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	GHS-US classification
ACETONITRILE-D3 (D, 99.8%)	(CAS-No.) 2206-26-0	99.88	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319
2,4-DINITROTOLUENE (RING-D3, 98%)	(CAS-No.) 93951-68-9	0.12	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Muta. 2, H341 Carc. 1B, H350 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
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	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Symptoms/effects	: May cause cancer.
Symptoms/effects after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Harmful in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: 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 : 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.
Reactivity	: Vapors may form explosive mixture with air.

5.3. Advice for firefighters

Firefighting instructions	: Wear self contained breathing apparatus for fire fighting if necessary.
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

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	: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm USA. ACGIH Threshold Limit Values (TLV) Lower Respiratory Tract irritation. Not classifiable as a human carcinogen. Danger of cutaneous absorption

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

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2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	34 mg/m ³ USA. NIOSH Recommended Exposure Limits. Forms Cyanide in the body.
USA NIOSH	NIOSH REL (TWA) (ppm)	20 ppm USA. NIOSH Recommended Exposure Limits. Forms Cyanide in the body.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	70 mg/m ³ USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants. The value in mg/m ³ is approximate.
USA OSHA	OSHA PEL (TWA) (ppm)	40 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants. The value in mg/m ³ is approximate.

ACETONITRILE-D3 (D, 99.8%) (2206-26-0)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm USA. ACGIH Threshold Limit Values (TLV) Lower Respiratory Tract irritation. Not classifiable as a human carcinogen. Danger of cutaneous absorption
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	34 mg/m ³ USA. NIOSH Recommended Exposure Limits. Forms Cyanide in the body.
USA NIOSH	NIOSH REL (TWA) (ppm)	20 ppm USA. NIOSH Recommended Exposure Limits. Forms Cyanide in the body.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	70 mg/m ³ USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants. The value in mg/m ³ is approximate.
USA OSHA	OSHA PEL (TWA) (ppm)	40 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants. The value in mg/m ³ is approximate.

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	32.2 mg/kg bodyweight/day Long-term systemic effects
Acute - systemic effects, inhalation	68 mg/m ³ Acute local effects, Acute systemic
Acute - local effects, inhalation	68 mg/m ³ Long-term local effects, Long-term systemic effects
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	22 mg/m ³ Consumers
Acute - local effects, inhalation	220 mg/m ³ Consumers
Long-term - systemic effects, inhalation	4.8 mg/m ³ Consumers
PNEC (Water)	
PNEC aqua (freshwater)	10 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	7.53 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.41 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	32 mg/l

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.

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

: When appropriate, use NIOSH/CEN approved respirator.

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

Physical state	: Liquid
Appearance	: Liquid, clear
Molecular mass	: 44.07 g/mol (Labeled)
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	: 524 °C (975.2 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 73.18 hPa (54.89 mmHg) at 15°C (59 °F) ,121.44 hPa (91.09 mmHg) at 25 °C (77 °F), 413.23 hPa (309.95 mmHg) at 55 °C (131 °F),98.64 hPa (73.99 mmHg) at 20 °C (68 °F)
Relative vapor density at 20 °C	: 1.42 - (Air = 1.0)
Relative density	: No data available
Specific gravity / density	: 0.786 g/ml at 25 °C (77 °F)
Solubility	: Water: Completely Soluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Explosion limits	: 3 - 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

Extremes of temperature and direct sunlight. Avoid Heat, Flames and Sparks.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Formed under fire conditions: Carbon oxides, 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:vapour: Harmful if inhaled.

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

LD50 oral rat	1320 - 6690 mg/kg
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2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

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2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
LD50 dermal rabbit	> 2000 mg/kg male and female (OECD Test Guideline 402)
LC50 inhalation rat (mg/l)	≥ 26.8 mg/l - 4h
LC50 inhalation rat (ppm)	3587 ppm Mouse - 4h (OECD Test Guideline 403)
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

2,4-DINITROTOLUENE (RING-D3, 98%) (93951-68-9)	
LD50 oral rat	268 mg/kg
ATE CLP (oral)	268.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (dust, mist)	0.500 mg/l/4h

ACETONITRILE-D3 (D, 99.8%) (2206-26-0)	
LD50 oral rat	1320 - 6690 mg/kg
LD50 dermal rabbit	> 2000 mg/kg male and female (OECD Test Guideline 402)
LC50 inhalation rat (mg/l)	≥ 26.8 mg/l - 4h
LC50 inhalation rat (ppm)	3587 ppm Mouse - 4h (OECD Test Guideline 403)
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 - OECD Test Guideline 404
Serious eye damage/irritation	: Causes serious eye irritation. Eyes - Rabbit - Irritating to eyes - OECD Test Guideline 405
Respiratory or skin sensitization	: Did not cause sensitization on laboratory animals. Buehler Test - Guinea pig - Did not cause sensitisation on laboratory animals. (OECD Test Guideline 406)
Germ cell mutagenicity	: Hamster Ovary Result: negative. Mutation in mammalian somatic cells. Ames test. Not mutagenic in Ames Test. S. typhimurium result: negative. Hamster - Ovary - Sister chromatid exchange. Result: Equivocal evidence. Mutagenicity (micronucleus test) Mouse Result: Positive results were obtained in some in vivo tests.
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	: The substance or mixture is not classified as specific target organ toxicant, single exposure.
Specific target organ toxicity – repeated exposure	: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard	: Not classified
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. 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	: Harmful in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
LC50 fish 1	1640 mg/l Pimephales promelas (fathead minnow) - 96h

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

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2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
EC50 Daphnia 1	3600 mg/l Daphnia magna (Water flea) - 48h (OECD Test Guideline 202)
NOEC (acute)	102 mg/l Oryzias latipes - 21d
NOEC (chronic)	160 mg/l Daphnia magna (Water flea) - 21d

2,4-DINITROTOLUENE (RING-D3, 98%) (93951-68-9)	
LC50 fish 1	31 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	26.2 mg/l Daphnia magna (Water flea) - 48 h

ACETONITRILE-D3 (D, 99.8%) (2206-26-0)	
LC50 fish 1	1640 mg/l Pimephales promelas (fathead minnow) - 96h
EC50 Daphnia 1	3600 mg/l Daphnia magna (Water flea) - 48h (OECD Test Guideline 202)
NOEC (acute)	102 mg/l Oryzias latipes - 21d
NOEC (chronic)	160 mg/l Daphnia magna (Water flea) - 21d

12.2. Persistence and degradability

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
BOD (% of ThOD)	84 % ThOD
Biodegradation	Readily biodegradable. (OECD Test Guideline 301C)

ACETONITRILE-D3 (D, 99.8%) (2206-26-0)	
BOD (% of ThOD)	84 % ThOD
Biodegradation	Readily biodegradable. (OECD Test Guideline 301C)

12.3. Bioaccumulative potential

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).

ACETONITRILE-D3 (D, 99.8%) (2206-26-0)	
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).

12.4. Mobility in soil

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
Ecology - soil	Not expected to absorb on soil.

ACETONITRILE-D3 (D, 99.8%) (2206-26-0)	
Ecology - soil	Not expected to absorb on soil.

12.5. Results of PBT and vPvB assessment

2,4-DINITROTOLUENE (RING-D3, 98%) (93951-68-9)	
This substance/mixture does not meet the PBT criteria of REACH, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH, annex XIII	

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.
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.

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

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-

D3 DLM-2207-S

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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

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

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

DOT Packaging Bulk (49 CFR 173.xxx) : 242

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 (ADR) : D/E

Limited quantities (ADR) : 1I

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

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

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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

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
Listed on the United States SARA Section 302	
SARA Section 302 Threshold Planning Quantity (TPQ)	Subject to reporting requirements of United States SARA Section 302
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
2,4-DINITROTOLUENE (RING-D3, 98%) (93951-68-9)	
SARA Section 302 Threshold Planning Quantity (TPQ)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
ACETONITRILE-D3 (D, 99.8%) (2206-26-0)	
Subject to reporting requirements of United States SARA Section 313	
Listed on the United States SARA Section 302	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard

15.2. International regulations

CANADA

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3	
Listed on the Canadian DSL (Domestic Substances List)	
ACETONITRILE-D3 (D, 99.8%) (2206-26-0)	
Listed on the Canadian DSL (Domestic Substances List)	

15.2.1. National regulations

No additional information available

15.3. US State regulations

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3()				
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. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List			
2,4-DINITROTOLUENE (RING-D3, 98%) (93951-68-9)				
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)
Yes	Yes	Yes	Yes	

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

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ACETONITRILE-D3 (D, 99.8%) (2206-26-0)				
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	

2,4-DINITROTOLUENE (RING-D3, 98%) (93951-68-9)
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

ACETONITRILE-D3 (D, 99.8%) (2206-26-0)
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

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. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 1B	Carcinogenicity Category 1B
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Muta. 2	Germ cell mutagenicity Category 2
Repr. 2	Reproductive toxicity Category 2
H225	Highly flammable liquid and vapor
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H341	Suspected of causing genetic defects
H350	May cause cancer
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R36	Irritating to eyes
R45	May cause cancer
R49	May cause cancer by inhalation
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child

2,4-DINITROTOLUENE (RING-D3, 98%) 1 MG/ML IN ACETONITRILE-D3

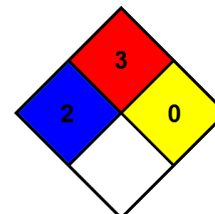
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R68	Possible risk of irreversible effects
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

- 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