



# 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE

## 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: 16/11/2015

Revision date:

Version: 1.0

**CNLM-3643-S**

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

### 1.1. Product identifier

Product form : Mixtures  
Product name. : 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE  
Product code : CNLM-3643-S

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only.

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

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

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://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  
Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
Muta. 1B H340  
Carc. 1A H350  
STOT SE 3 H335  
Asp. Tox. 1 H304

Full text of H-phrases: see section 16

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

Carc.Cat.1; R45  
Carc.Cat.1; R49  
Muta.Cat.1; R46  
F; R11  
Xn; R22  
Xn; R65  
Xi; R36/37/38  
R19

Full text of R-phrases: see section 16

#### Classification (GHS-US)

Flam. Liq. 2 H225  
Skin Irrit. 2 H315  
Eye Irrit. 2A H319  
Muta. 1B H340  
Carc. 1A H350

# 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE CNLM-3643-S

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STOT SE 3 H335  
Asp. Tox. 1 H304  
Aquatic Acute 2 H401

### Adverse physicochemical, human health and environmental effects

Blood, Eyes, Female reproductive system, Bone marrow.

## 2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazardous ingredients

: BENZENE UNLABELED

Hazard statements (CLP)

: H225 - Highly flammable liquid and vapor  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H340 - May cause genetic defects  
H350 - May cause cancer

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  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear eye protection, face protection, protective clothing, protective gloves

### GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapor  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H340 - May cause genetic defects (Dermal, Inhalation, oral)  
H350 - May cause cancer (Dermal, Inhalation, oral)  
H401 - Toxic to aquatic life

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 dust, fume, gas, mist, spray, vapors  
P264 - Wash Both hands thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P273 - Avoid release to the environment  
P280 - Wear eye protection, face protection, protective clothing, protective gloves  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water

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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  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P312 - Call a POISON CENTER/doctor/physician if you feel unwell  
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)  
P331 - If swallowed, do NOT induce vomiting  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P337+P313 - If eye irritation persists: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P370+P378 - In case of fire: Use Alcohol resistant foam., Carbon dioxide., Dry chemical., Water spray for extinction  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P403+P235 - Store in a well-ventilated place. Keep cool  
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
BENZENE UNLABELED	(CAS No) 71-43-2 (EC no) 200-753-7 (EC index no) 601-020-00-8	99.848	F; R11 Xn; R65 Xi; R38 Carc.Cat.1; R45 Carc.Cat.1; R49 Muta.Cat.2; R46
2,4,6-TRINITROTOLUENE (TNT)	(CAS No) 118-96-7 (Unlabeled) (EC no) 204-289-6	0.114	E; R2 E; R3 T; R23 T; R24 T; R25
WATER UNLABELED	(CAS No) 7732-18-5 (EC no) 231-791-2	0.038	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
BENZENE UNLABELED	(CAS No) 71-43-2 (EC no) 200-753-7 (EC index no) 601-020-00-8	99.848	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1A, H350
2,4,6-TRINITROTOLUENE (TNT)	(CAS No) 118-96-7 (Unlabeled) (EC no) 204-289-6	0.114	Expl. 1.1, H201 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT RE 2, H373 Aquatic Chronic 2, H411
WATER UNLABELED	(CAS No) 7732-18-5 (EC no) 231-791-2	0.038	Not classified

Name	Product identifier	%	Classification (GHS-US)
BENZENE UNLABELED	(CAS No) 71-43-2	99.848	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Acute Tox. Not classified (Inhalation:dust,mist) Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1A, H350 Asp. Tox. 1, H304 Aquatic Acute 2, H401

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

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

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

Symptoms/injuries	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. May be fatal if swallowed and enters airways.

#### 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.

#### 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 vapours, 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

Avoid release to the environment.

#### 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.

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- Precautions for safe handling : No naked lights. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. In case of leaking gas fire, eliminate all ignition sources if safe to do so. Use only outdoors or in a well-ventilated area.
- 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 : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
- Storage conditions : Store in freezer. Protect from light, air 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

2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	0.5000000000 ppm Leukemia Substances for which there is a Biological Exposure Index or Indices.
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	2.5000000000 ppm Leukemia Substances for which there is a Biological Exposure Index or Indices.
BENZENE UNLABELED (71-43-2)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	0.5000000000 ppm Leukemia Substances for which there is a Biological Exposure Index or Indices.
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	2.5000000000 ppm Leukemia Substances for which there is a Biological Exposure Index or Indices.
USA OSHA	OSHA PEL (TWA) (ppm)	10.0000000000 ppm
2,4,6-TRINITROTOLUENE (TNT) (118-96-7 (Unlabeled))		
USA OSHA	Remark (US OSHA)	1,5 MG/m3 NDS (limit value - eight hours)

### 8.2. Exposure controls

- Personal protective equipment : Safety glasses. Gloves. Protective clothing. Respiratory protection of the dependent type.



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

## 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.
- Molecular mass : 78.11 g/mol
- Color : Colourless.
- Odor : No data available.
- Odor threshold : No data available
- pH : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : 5.5 °C (41.9 °F) - lit
- Freezing point : No data available
- Boiling point : 80 °C (176 °F) - lit
- Flash point : -11.0 °C (12.2 °F) - closed cup
- Self ignition temperature : 562 °C (1,044 °F)

# 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE CNLM-3643-S

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Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 221.3 hPa (166.0 mmHg) at 37.7°C (99.9°F), 99.5 hPa (74.6 mmHg) at 20°C (68°F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.874 g/cm <sup>3</sup> at 25 °C (77 °F)
Solubility	: No data available
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	: No data available
Explosive limits	: 1.3 - 8 % (V)

### 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, Halogens, Strong oxidizing agents, Metallic salts.

### 10.6. Hazardous decomposition products

May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE	
LD50 oral rat	2990 mg/kg
LD50 dermal rabbit	8263 mg/kg
LC50 inhalation rat (mg/l)	44700 mg/m <sup>3</sup> female - 4 h
ATE (oral)	2990.000 mg/kg body weight
ATE (dermal)	8263.000 mg/kg body weight
ATE (vapors)	44.700 mg/l/4h
ATE (dust, mist)	44.700 mg/l/4h

### WATER UNLABELED (7732-18-5)

LD50 oral rat	> 90000 mg/kg
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### BENZENE UNLABELED (71-43-2)

LD50 oral rat	2990 mg/kg
LD50 dermal rabbit	8263 mg/kg
LC50 inhalation rat (mg/l)	44700 mg/m <sup>3</sup> female - 4 h

### 2,4,6-TRINITROTOLUENE (TNT) (118-96-7 (Unlabeled))

LD50 oral rat	795 ml/kg bw
LC50 inhalation rat (mg/l)	1.01 inhalation,4h
ATE (oral)	100.000 mg/kg body weight
ATE (dermal)	300.000 mg/kg body weight
ATE (gases)	700.000 ppmV/4h
ATE (vapors)	1.010 mg/l/4h

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<b>2,4,6-TRINITROTOLUENE (TNT) (118-96-7 (Unlabeled))</b>	
ATE (dust, mist)	1.010 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation. Skin - rabbit - Skin irritation
Serious eye damage/irritation	: Causes serious eye irritation. Eyes - rabbit - Eye irritation
Respiratory or skin sensitization	: Not available No data available
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation. No data available
Specific target organ toxicity (repeated exposure)	: Not classified No data available
Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: Toxic if swallowed.
IARC group	: 1
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. May be fatal if swallowed and enters airways.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : May cause long lasting harmful effects to aquatic life.

<b>2,4,6-TRINITROTOLUENE WETTED W/&gt;33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE</b>	
LC50 fish 1	5.90 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h
LC50 other aquatic organisms 1	230 mg/l Lepomis macrochirus (Bluegill) - 96 h
EC50 Daphnia 1	22.0 mg/l Daphnia magna (Water flea) - 48 h
LC50 fish 2	15 - 32 mg/l Pimephales promelas (Fathead minnow) - 96 h
LC50 other aquatic organisms 2	9.2 mg/l Daphnia magna (Water flea) - 48 h
ErC50 (algae)	29.0 mg/l Pseudokirchneriella subcapitata (Green algae) - 72 h
LOEC (acute)	17.2 mg/l Pimephales promelas (Fathead minnow) - 7 d
NOEC (chronic)	10.2 mg/l Pimephales promelas (Fathead minnow) - 7 d

<b>BENZENE UNLABELED (71-43-2)</b>	
LC50 fish 1	5.90 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h
EC50 Daphnia 1	22.0 mg/l Daphnia magna (Water flea) - 48 h
LC50 fish 2	15 - 32 mg/l Pimephales promelas (Fathead minnow) - 96 h
LC50 other aquatic organisms 2	230 mg/l Lepomis macrochirus (Bluegill) - 96 h
EC50 Daphnia 2	9.2 mg/l Daphnia magna (Water flea) - 48 h
ErC50 (algae)	29.0 mg/l Pseudokirchneriella subcapitata (Green algae) - 72 h
LOEC (acute)	17.2 mg/l Pimephales promelas (Fathead minnow) - 7 d
NOEC (chronic)	10.2 mg/l Pimephales promelas (Fathead minnow) - 7 d

<b>2,4,6-TRINITROTOLUENE (TNT) (118-96-7 (Unlabeled))</b>	
LC50 fish 1	2.7 mg/l 96 h EPA -821-R-02-012

### 12.2. Persistence and degradability

<b>2,4,6-TRINITROTOLUENE WETTED W/&gt;33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE</b>	
Persistence and degradability	May cause long-term adverse effects in the environment.

<b>WATER UNLABELED (7732-18-5)</b>	
Persistence and degradability	Not available.

# 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE CNLM-3643-S

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BENZENE UNLABELED (71-43-2)	
Persistence and degradability	Biodegradability Result: - Readily biodegradable.

2,4,6-TRINITROTOLUENE (TNT) (118-96-7 (Unlabeled))	
Persistence and degradability	Biodegradability: Result: < 5 % - Not readily biodegradable.

### 12.3. Bioaccumulative potential

WATER UNLABELED (7732-18-5)	
Log Pow	No data available
Bioaccumulative potential	Not available.

### 12.4. Mobility in soil

WATER UNLABELED (7732-18-5)	
Ecology - soil	Not available.

BENZENE UNLABELED (71-43-2)	
Ecology - soil	Not available.

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

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

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

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

Ecology - waste materials : Hazardous waste due to toxicity.

## SECTION 14: Transport information

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

### 14.1. UN number

UN-No.(DOT) : 1114  
DOT NA no. UN1114

### 14.2. UN proper shipping name

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



Packing group (DOT) : II - Medium Danger  
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

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.



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### Overland transport

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



Orange plates : An orange rectangular label with a black border, divided into two horizontal sections. The top section contains the number '33' and the bottom section contains the number '1114'.

Tunnel restriction code : D/E  
Limited quantities (ADR) : 1L  
EAC : 3WE  
APP : A(fl)  
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 : 130

### Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L  
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

#### 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE

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
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#### BENZENE UNLABELED (71-43-2)

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
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# 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE CNLM-3643-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

### 15.2. International regulations

#### CANADA

##### 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE

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

##### BENZENE UNLABELED (71-43-2)

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

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

##### 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE()

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  
WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or other reproductive harm.

##### BENZENE UNLABELED (71-43-2)

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  
WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or 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. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Expl. 1.1	Explosive Category 1.1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Muta. 1B	Germ cell mutagenicity Category 1B
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H201	Explosive; mass explosion hazard
H225	Highly flammable liquid and vapor
H301	Toxic if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H340	May cause genetic defects
H350	May cause cancer
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
R11	Highly flammable

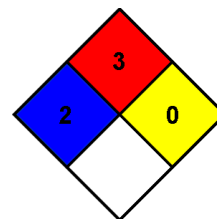
# 2,4,6-TRINITROTOLUENE WETTED W/>33% H2O WT:WT(TNT) (13C7, 99%; 15N3, 98%) 1 MG/ML IN BENZENE CNLM-3643-S

## 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

R19	May form explosive peroxides
R2	Risk of explosion by shock, friction, fire or other sources of ignition
R22	Harmful if swallowed
R23	Toxic by inhalation
R24	Toxic in contact with skin
R25	Toxic if swallowed
R3	Extreme risk of explosion by shock, friction, fire or other sources of ignition
R36/37/38	Irritating to eyes, respiratory system and skin
R38	Irritating to skin
R45	May cause cancer
R46	May cause heritable genetic damage
R49	May cause cancer by inhalation
R65	Harmful: may cause lung damage if swallowed
E	Explosive
F	Highly flammable
T	Toxic
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*