



# 1,3-BUTADIENE (D6, 98%) + HYDROQUINONE

## 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: 17/12/2010

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Supersedes: 31/07/2014

Version: 7.0

**DLM-876**

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

#### 1.1. Product identifier

Product form	: Substance
Substance name	: 1,3-BUTADIENE (D6, 98%) + HYDROQUINONE
EC index no	: 601-013-00-X (Unlabeled)
EC no	: 203-450-8 (Unlabeled)
CAS No	: 1441-56-1
Product code	: DLM-876
Formula	: CD <sub>2</sub> =CD <sub>2</sub> CD <sub>2</sub>
Other means of identification	: Also applicable to: DLM-876-1-LB (D6, 98%)

#### 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](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. Gas 1 H220  
Liquefied gas H280  
Muta. 1B H340  
Carc. 1A H350

Full text of H-statements: see section 16

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

R5  
F+; R12  
Carc.Cat.1; R45  
Muta.Cat.2; R46  
Carc.Cat.1; R49

Full text of R-phrases: see section 16

##### GHS-US classification

Flam. Gas 1 H220  
Compressed gas H280  
Muta. 1A H340  
Carc. 1A H350

#### Adverse physicochemical, human health and environmental effects

Blood, Heart. Eyes, Central nervous system.

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### 2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

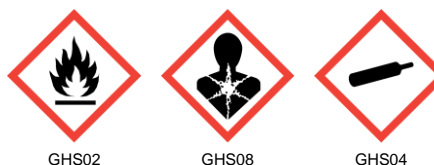
H220 - Extremely flammable gas  
H280 - Contains gas under pressure; may explode if heated  
H340 - May cause genetic defects (in contact with skin, if inhaled, if swallowed)  
H350 - May cause cancer (in contact with skin, if inhaled, if swallowed)

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P280 - Wear protective clothing, protective gloves  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely  
P381 - Eliminate all ignition sources if safe to do so  
P403 - Store in a well-ventilated place  
P405 - Store locked up  
P410+P403 - Protect from sunlight. Store in a well-ventilated place

#### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H220 - Extremely flammable gas  
H280 - Contains gas under pressure; may explode if heated  
H340 - May cause genetic defects (Dermal, Inhalation, oral)  
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  
P280 - Wear protective clothing, protective gloves  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely  
P381 - Eliminate all ignition sources if safe to do so  
P403 - Store in a well-ventilated place  
P405 - Store locked up  
P410+P403 - Protect from sunlight. Store in a well-ventilated place  
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. Substance

Name	Product identifier	%	Classification according to Directive 67/548/EEC
1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (Main constituent)	(CAS No) 1441-56-1 (EC no) 203-450-8 (Unlabeled) (EC index no) 601-013-00-X (Unlabeled)	100	R5 F+; R12 Carc.Cat.1; R45 Muta.Cat.2; R46 Carc.Cat.1; R49

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (Main constituent)	(CAS No) 1441-56-1 (EC no) 203-450-8 (Unlabeled) (EC index no) 601-013-00-X (Unlabeled)	100	Flam. Gas 1, H220 Liquefied gas, H280 Muta. 1B, H340 Carc. 1A, H350

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

Name	Product identifier	%	GHS-US classification
1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (Main constituent)	(CAS No) 1441-56-1	100	Flam. Gas 1, H220 Compressed gas, H280 Muta. 1A, H340 Carc. 1A, H350

Full text of H-statements: see section 16

### 3.2. Mixture

Not applicable

## 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 with soap and plenty of water. Consult a physician.
First-aid measures after eye contact	: Flush eyes with water as a precaution.
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.

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

Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be 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

Reactivity : Test for peroxide formation before using or discard after 3 months.

### 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.
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 : Flammable in the presence of an oxidizing gas (eg air), a source of ignition, and when the concentration of the gas is between the lower and upper explosive limits. Keep away from heat, sparks, open flames, hot surfaces, oxidizing gases. No smoking.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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### 6.3. Methods and material for containment and cleaning up

For containment : Clean up promptly by sweeping or vacuum.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid inhalation of vapour or mist. 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 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

1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	2.000000000 ppm Remarks: Cancer. Suspected human carcinogen. Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Component: 1,3-Butadien CAS-No.: 106-99-0 Parameters: 1,2-Dihydroxy-4-(N-acetylcysteinyl)-butane Value: 2.5000 mg/l Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI); Component: 1,3-Butadien CAS-No.: 106-99-0 Parameters: Mixture of N-1 and N-2(hydroxybutenyl)valine Value: 2.5 pmol/g Biological specimen: Hemoglobin (Hb) adducts in blood Remarks: Not critical Basis: ACGIH - Biological Exposure Indices (BEI)
USA OSHA	OSHA PEL (TWA) (ppm)	1.000000000 ppm Remarks: Substance listed; for mor information see OSHA document 29 CFR 1910.1051; 29 CFR 1910.19(1) Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants.
USA OSHA	OSHA PEL (STEL) (mg/m³)	11 mg/m³ Remarks: see section 5201 Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107)

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1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)		
USA OSHA	OSHA PEL (STEL) (ppm)	5.000000000 ppm Remarks: Substance listed; for mor information see OSHA document 29 CFR 1910.1051; 29 CFR 1910.19(1). See 1910.1051 Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants. 910.1051 This section applies to all occupational exposures to 1,3-Butadiene (BD), Chemical Abstracts Service Registry No. 106-99-0, except as provided in paragraph (a)(2) of this section. Except for the recordkeeping provisions in paragraph (m)(1) of this section, this does not apply to the processing, use, or handling of products containing BD or to other work operations and streams in which BD is present where objective data are reasonably relied upon that demonstrate the work operation or the product or group of products or operations to which it belongs may not reasonably be foreseen to release BD in airborne concentrations at or above the action level or in excess of the STEL under the expected conditions of processing, use, or handling that will cause the greatest possible release or in any plausible accident. This section also does not apply to work operations, products or streams where the only exposure to BD is from liquid mixtures containing 0.1% or less of BD by volume or the vapors released from such liquids, unless objective data become available that show that airborne concentrations generated by such mixtures can exceed the action level or STEL under reasonable predicable conditions of processing, use or handling that will cause the greatest possible release. Except for labeling requirements and requirements for emergency response, this section does not apply to the storage, transportation, distribution or sale of BD or liquid mixtures in intact containers or in transportation pipelines sealed in such a manner as to fully contain BD vapors or liquid. Where products or processes containing BD are exempted under paragraph (a)(2) of this section, the employer shall maintain records of the objective data supporting that exemption and the basis for the employer's reliance on the data, as provided in paragraph (m)(1) of this section. 1,3-Butadiene means an organic compound with chemical formula CH <sub>2</sub> =CH-CH=CH <sub>2</sub> that has a molecular weight of approximately 54.15 g/mole. OSHA specifically regulated carcinogen. Basis: OSHA Specifically Regulated Chemicals/Carcinogens.
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	2.2 mg/m <sup>3</sup> Remarks: see section 5201 Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107)

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1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)		
USA OSHA	OSHA PEL (Ceiling) (ppm)	1 ppm 1910.1051 This section applies to all occupational exposures to 1,3-Butadiene (BD), Chemical Abstracts Service Registry No. 106-99-0, except as provided in paragraph (a)(2) of this section. Except for the recordkeeping provisions in paragraph (m)(1) of this section, this does not apply to the processing, use, or handling of products containing BD or to other work operations and streams in which BD is present where objective data are reasonably relied upon that demonstrate the work operation or the product or group of products or operations to which it belongs may not reasonably be foreseen to release BD in airborne concentrations at or above the action level or in excess of the STEL under the expected conditions of processing, use, or handling that will cause the greatest possible release or in any plausible accident. This section also does not apply to work operations, products or streams where the only exposure to BD is from liquid mixtures containing 0.1% or less of BD by volume or the vapors released from such liquids, unless objective data become available that show that airborne concentrations generated by such mixtures can exceed the action level or STEL under reasonable predictable conditions of processing, use or handling that will cause the greatest possible release. Except for labeling requirements and requirements for emergency response, this section does not apply to the storage, transportation, distribution or sale of BD or liquid mixtures in intact containers or in transportation pipelines sealed in such a manner as to fully contain BD vapors or liquid. Where products or processes containing BD are exempted under paragraph (a)(2) of this section, the employer shall maintain records of the objective data supporting that exemption and the basis for the employer's reliance on the data, as provided in paragraph (m)(1) of this section. 1,3-Butadiene means an organic compound with chemical formula CH <sub>2</sub> =CH-CH=CH <sub>2</sub> that has a molecular weight of approximately 54.15 g/mole. OSHA specifically regulated carcinogen. Basis: OSHA Specifically Regulated Chemicals/Carcinogens.
USA OSHA	Remark (OSHA)	Component: 1,3-Butadien CAS-No.: 106-99-0 Parameters: PEL Value: 2.2 mg/m <sup>3</sup> Remarks: see section 5201 Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107)

## 8.2. Exposure controls

Appropriate engineering controls	: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.
	
Materials for protective clothing	: Wear suitable protective clothing and gloves.
Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Safety glasses with side-shields conforming to EN166.
Skin and body protection	: Wear complete suit protecting against chemicals according to concentration and amount of substance.
Respiratory protection	: When appropriate, use NIOSH/CEN approved respirator.
Environmental exposure controls	: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Liquified gas.
Molecular mass	: 60.13 g/mol (Labeled)
Colour	: Colourless.

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Odour	: No data available.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -109 °C (-164 °F) - lit.
Freezing point	: No data available
Boiling point	: -4.5 °C (23.9 °F) - lit.
Flash point	: -76 °C (-105 °F) - closed cup - Tested according to Annex V of Directive 67/548/EEC.
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 2400 hPa (1,800 mmHg) at 20 °C (68 °F); 3,200 hPa (2,400 mmHg) at 30 °C (86 °F)
Vapour pressure at 50 °C	: 5700 hPa (4,275 mmHg) at 50 °C (122 °F)
Relative vapour density at 20 °C	: No data available
Relative density	: 0.62 g/cm <sup>3</sup> at 20 °C (68 °F)
Solubility	: Water: 0.5 g/l at 20 °C (68 °F) - Tested according to Annex V of Directive 67/548/EEC.
Log Pow	: 1.85 at 23 °C (73 °F)
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 1.4 - 16.3 % (V)

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Test for peroxide formation before using or discard after 3 months.

### 10.2. Chemical stability

Two years after receipt of order if stored as above. Re-QC after two years.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Heat, flames and sparks.

### 10.5. Incompatible materials

Oxidizing agents. Oxygen. copper. Copper alloys. Carbides. Halogens. Metal oxides, Metals.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)	
LD50 oral rat	5480 mg/kg
LC50 inhalation rat (mg/l)	≥ 285 mg/l
ATE CLP (oral)	5480.000 mg/kg bodyweight
ATE CLP (vapours)	285.000 mg/l/4h
ATE CLP (dust,mist)	285.000 mg/l/4h

Skin corrosion/irritation	: Not classified No data available
Serious eye damage/irritation	: Not classified No data available
Respiratory or skin sensitisation	: Not available No data available
Germ cell mutagenicity	: In vivo tests showed mutagenic effects.

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Carcinogenicity : Carcinogenicity - Rat - Inhalation. Tumorigenic: Carcinogenic by RTEC criteria. Cardiac: Tumors. Lungs, Thorax, or Respiration: Tumors. . This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. . Human carcinogen.

1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)	
	OSHA specifically regulated carcinogen.

Reproductive toxicity : Reproductive toxicity - mouse - inhalation. Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). . Developmental Toxicity - Rat - Inhalation. Specific Developmental Abnormalities: Musculoskeletal system.

Specific target organ toxicity (single exposure) : Not classified  
No data available

Specific target organ toxicity (repeated exposure) : Not classified  
No data available

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Cholinesterase inhibitors can cause heavy salivation and secretion in the lungs, lachrymation, blurred vision, involuntary defecation, diarrhea, tremor, ataxia, sweating, hypothermia, lowered heart rate, and/or a fall in blood pressure as a result of their action at cholinergic nerve sites, narcosis, headache, nausea, vomiting, dizziness, drowsiness, confusion, weakness, muscle cramps/spasms, change in pupil size, tremors, seizures, incoordination, convulsions, coma. Stomach - Irregularities - Based on Human Evidence. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

IARC group : 1

Symptoms/injuries after inhalation : May be harmful if inhaled. May cause respiratory tract irritation.

Symptoms/injuries after skin contact : May be harmful if absorbed through skin. May cause skin irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

Symptoms/injuries after ingestion : May be harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)	
LC50 fish 1	71.5 mg/l Other fish - 24 h

### 12.2. Persistence and degradability

1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)	
Persistence and degradability	Not available.

### 12.3. Bioaccumulative potential

1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)	
Log Pow	1.85 at 23 °C (73 °F)
Bioaccumulative potential	Not available.

### 12.4. Mobility in soil

1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)	
Ecology - soil	Not available.

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Other adverse effects : Not available.

## 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 : 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.



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### SECTION 14: Transport information

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

#### 14.1. UN number

UN-No.(DOT) : 1010  
DOT NA no. : UN1010

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Butadienes, stabilized  
containing more than 40% butadienes  
Transport hazard class(es) (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115  
Hazard labels (DOT) : 2.1 - Flammable gas



DOT Special Provisions (49 CFR 172.102) : T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the applicable liquefied compressed gases are authorized to be transported in portable tanks in accordance with the requirements of 173.313 of this subchapter.  
DOT Packaging Exceptions (49 CFR 173.xxx) : 306  
DOT Packaging Non Bulk (49 CFR 173.xxx) : 304  
DOT Packaging Bulk (49 CFR 173.xxx) : 314;315  
DOT RQ : 10 lbs  
Marine pollutant : No

#### 14.3. Additional information

Other information : No supplementary information available.  
Special transport precautions : IATA Passenger: Not permitted for transport.

#### Overland transport

Class (ADR) : 2 - Gases  
Hazard identification number (Kemler No.) : 239  
Classification code (ADR) : 2F  
Danger labels (ADR) : 2.1 - Flammable gases



Orange plates : An orange rectangular label with a black border. It is divided into two horizontal sections. The top section contains the number '239' and the bottom section contains the number '1010'.

Tunnel restriction code : B/D  
Limited quantities (ADR) : 0  
EAC code : 2YE  
Excepted quantities (ADR) : E0

#### 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 : 116P

#### Air transport

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

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DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)

Civil Aeronautics Law : Gases under pressure/Gases flammable under pressure(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement Regulations)

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

Special transport precautions : IATA Passenger: Not permitted for transport.

### 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

#### 1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)

Subject to reporting requirements of United States SARA Section 313

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 311/312 Hazard Classes	Fire hazard Sudden release of pressure hazard Delayed (chronic) health hazard
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### 15.2. International regulations

#### CANADA

#### 1,3-BUTADIENE (D6, 98%) + HYDROQUINONE (1441-56-1)

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

#### 1,3-BUTADIENE (D6, 98%) + HYDROQUINONE(1441-56-1)

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.
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## 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-statements:

Carc. 1A	Carcinogenicity, Category 1A
Flam. Gas 1	Flammable gases, Category 1
Liquefied gas	Gases under pressure : Liquefied gas
Muta. 1B	Germ cell mutagenicity, Category 1B
H220	Extremely flammable gas
H280	Contains gas under pressure; may explode if heated
H340	May cause genetic defects
H350	May cause cancer
R12	Extremely flammable
R45	May cause cancer

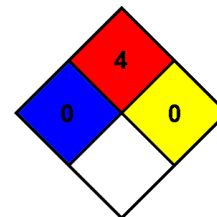
# 1,3-BUTADIENE (D6, 98%) + HYDROQUINONE DLM-876

## 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

R46	May cause heritable genetic damage
R49	May cause cancer by inhalation
R5	Heating may cause an explosion
F+	Extremely flammable

- NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
- NFPA fire hazard : 4 - Materials that rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and burn readily.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



### HMIS III Rating

- Health : 0 Minimal Hazard - No significant risk to health
- Flammability : 4 Severe Hazard
- Physical : 3 Serious Hazard

### CIL Multi-Solvent 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*