SAFETY DATA SHEET

Preparation Date: 1/18/2016
Revision Date: Not Applicable
Revision Number: Not Applicable

1. IDENTIFICATION

Product code: D2516
Product Name: N,N-DIMETHYLFORMAMIDE-D7, 99.5 ATOM PERCENT D

Other means of identification

Synonyms: N,N-Di(2H3)methyl(2H)formamide
CAS #: 4472-41-7
RTECS #: LQ2100000 (For CAS no. 68-12-2 - N,N-Dimethylformamide)
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against: No information available

Supplier:
Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA  90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number: Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Gases)</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
</tr>
<tr>
<td>Flammable liquids</td>
</tr>
</tbody>
</table>

Label elements

Product code: D2516
Product name: N,N-DIMETHYLFORMAMIDE-D7, 99.5 ATOM PERCENT D
Danger

Hazard statements
Harmful if swallowed
Toxic if inhaled
Causes serious eye irritation
May damage fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure
Flammable liquid and vapor

Other hazards
May be harmful in contact with skin
Causes mild skin irritation

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/.? /equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Specific treatment (see .? on this label)
In case of fire: Use CO2, dry chemical, or foam to extinguish.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide-d7</td>
<td>4472-41-7</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Severe skin and eye irritation or burns

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Alcohol-resistant foam. Water spray.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

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Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide; nitrogen oxides, dimethylamine

Specific hazards:
- Flammable
- May be ignited by heat, sparks or flames
- Vapor may travel considerable distance to source of ignition and flash back
- Vapors may form explosive mixtures with air
- Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks)
- Container explosion may occur under fire conditions or when heated

Special Protective Actions for Firefighters

Specific Methods:
- Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.

Special Protective Equipment for Firefighters:
- As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions:
- Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment:
- Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up:
- Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling
7. HANDLING AND STORAGE

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice
Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

<table>
<thead>
<tr>
<th>United States</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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<tr>
<td>N,N-Dimethylformamide-d7 4472-41-7</td>
<td>For CAS no. 68-12-2 - N,N-Dimethylformamide: 10 ppm TWA 30 mg/m³TWA</td>
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<td>For CAS no. 68-12-2 - N,N-Dimethylformamide: 10 ppm TWA</td>
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<th>Ontario</th>
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<table>
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<tr>
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<th>Australia</th>
<th>Mexico</th>
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</tbody>
</table>

Appropriate engineering controls

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ATOM PERCENT D
Engineering measures to reduce exposure: 
Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- **Eye protection:** Goggles.
- **Skin and body protection:** Chemical resistant apron. Long sleeved clothing. Gloves.
- **Respiratory protection:** Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g., generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
- **Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

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<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
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<td>Molecular/Formula weight</td>
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<td>Melting point/range (°C/°F):</td>
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<td>Vapor pressure @ 20°C (kPa):</td>
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<tr>
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<tr>
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<tr>
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</tr>
<tr>
<td>Odor threshold (ppm):</td>
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</tr>
<tr>
<td>Miscibility</td>
<td>Miscible with water</td>
</tr>
<tr>
<td>Miscible with many organic solvents</td>
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</tr>
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10. STABILITY AND REACTIVITY

Reactivity
Dimethylformamide forms explosive reactions with: Bromine, Potassium permanganate, Lithium azide, Triethylaluminum and heat, and Uranium perchlorate
Reacts vigorously with oxidizing agents
Reactive with reducing agents
Reactive with acids

Chemical stability
Stability: Stable under recommended storage conditions
Possibility of Hazardous Reactions: Hazardous polymerization does not occur


Other Information
Corrosivity: No information available
Special Remarks on Corrosivity: Pure Dimethylformamide is essentially noncorrosive to metals. However, copper, tin and their alloys should be avoided

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Principal Routes of Exposure:
Ingestion. Skin. Inhalation.

Acute Toxicity

Component Information

N,N-Dimethylformamide-d7 - 4472-41-7
LD50/oral/rat = For CAS no. 68-12-2 N,N-Dimethylformamide:
2800 mg/kg (LOLI)
2000 mg/kg (RTECS)
4000 mg/kg (RTECS)
LD50/oral/mouse = For CAS no. 68-12-2 N,N-Dimethylformamide:
2900 mg/kg (RTECS)
4000 mg/kg (RTECS)

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ATOM PERCENT D
LD50/oral/rat = For CAS no. 68-12-2 - N,N-Dimethylformamide:
1100 mg/kg (LOLI)
>3.2 g/kg (RTECS)
LD50/oral/mouse = For CAS no. 68-12-2 - N,N-Dimethylformamide:
Value - Acute Tox Oral = 2900mg/kg
LD50/dermal/rabbit = For CAS no. 68-12-2 - N,N-Dimethylformamide:
VALUE - Acute Tox Dermal = 4720mg/kg
LD50/dermal/rat = For CAS no. 68-12-2 - N,N-Dimethylformamide:
VALUE - Acute Tox Dermal = 1100mg/kg
LC50/inhalation/rat = For CAS no. 68-12-2 - N,N-Dimethylformamide:
3421 ppm 1hr (RTECS)
1948 ppm 4 hr (RTECS)
LC50/inhalation/mouse = For CAS no. 68-12-2 - N,N-Dimethylformamide:
9.4 g/m³2 hr (RTECS)
Other LD50 or LC50 information = For CAS no. 68-12-2 - N,N-Dimethylformamide: 5000 mg/kg oral LD50 Rabbit (LOLI)

Product Information
LD50/oral/rat =
VALUE- Acute Tox Oral = 2000mg/kg
LD50/oral/mouse =
Value - Acute Tox Oral = 2900mg/kg
LD50/dermal/rabbit
VALUE-Acute Tox Dermal = 4720mg/kg
LD50/dermal/rat
VALUE -Acute Tox Dermal = 1100mg/kg
LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = 1948ppm (4-hr)
VALUE-Dust/Mist = No information available
LC50/inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = 9400 mg/m³2 hr

Symptoms
Skin Contact:
May cause skin irritation. Mild skin irritation. It can be absorbed through the skin. May be harmful in contact with skin. It may facilitate the absorption of other dissolved substances. Absorption through the skin may cause systemic effects similar to those of inhalation or ingestion.

Eye Contact:
Causes eye irritation. Severe eye irritation. Causes conjunctivitis. Lachrymator (substance which increases the flow of tears).
Inhalation
Toxic by inhalation. May cause irritation of respiratory tract. Symptoms may include coughing and wheezing. Can cause dyspnea (shortness of breath and difficulty breathing). Causes lacrimation. May cause conjunctival irritation. May cause loss of appetite. May cause nausea, vomiting. May cause abdominal pain. May cause diarrhea or constipation. May cause cyanosis. May cause methemoglobinemia (the formation of methemoglobin in the blood which causes deficient oxygenation of the blood due to decreased available hemoglobin). Methemoglobinemia can lead to cyanosis (bluish skin and lips due to deficient oxygenation of the blood). May cause carboxyhemoglobinemia (the binding of hemoglobin to carbon monoxide in place of oxygen - also known as carbon monoxide poisoning). May affect the brain. It may affect behavior/central nervous system (convulsions). May affect behavior/central nervous system (somnolence). May affect behavior/central nervous system (central nervous system depresson, headache, confusion, fatigue, irritability, muscle weakness, coma). It may affect the cardiovascular system (bradycardia, hypotension). May affect the kidneys. It may affect the liver (hepatotoxic - enlarged liver, elevated liver enzymes, jaundice). It may affect the blood (changes in serum composition). Exposure to dimethylformamide can cause ethanol intolerance. When occupationally exposed workers also ingest ethanol, it can cause flushing of the face and neck, abnormal taste (dysgeusia), and palpitations.

Ingestion
Harmful if swallowed. Ingestion may cause nausea, vomiting. May cause abdominal pain. May cause loss of appetite. May affect liver . May affect urinary system (kidneys). It may affect the blood (leukocytosis). May affect behavior/central nervous system (somnolence, ataxia, tetany, general anesthetic, muscle weakness). May affect the cardiovascular system (hypertension).

Aspiration hazard
No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity
Prolonged or repeated ingestion may affect metabolism (cause anorexia, weight loss)
Prolonged or repeated ingestion may affect the liver, and kidneys
Prolonged or repeated inhalation may affect the cardiovascular system (degenerative changes in the myocardium)
Prolonged or repeated inhalation may cause central nervous system effects
Prolonged or repeated inhalation may cause loss of appetite
Prolonged or repeated inhalation may affect metabolism (weight loss)
Prolonged or repeated inhalation may affect the brain
Prolonged or repeated inhalation may affect the kidneys
Prolonged or repeated inhalation may affect the liver
Prolonged or repeated skin absorption may affect the liver and kidneys
Prolonged or repeated exposure may affect the autonomic nervous system
Chronic intensive skin contact may cause dermatitis
Prolonged or repeated inhalation or ingestion may affect the blood (decrease in platelets and longer blood coagulation times, leukopenia, lymphocytosis, anemia, polycythemia)

Sensitization:
No information available

Mutagenic Effects:
Mutagenic effects in mammalian somatic cells
Experiments with animal lymphocytes have shown mutagenic effects
Mutations in microorganisms
Experiments with bacteria and/or yeast have shown mutagenic effects
Cytogenic Analysis: human lymphocyte

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Carcinogenic effects: May cause cancer based on animal test data. Not classifiable as a human carcinogen. Not classifiable as to its carcinogenicity to humans.

<table>
<thead>
<tr>
<th>Components</th>
<th>IARC - Carcinogens</th>
<th>ACGIH - Carcinogens</th>
<th>NTP - Carcinogens</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
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</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide-d7</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
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</tbody>
</table>

Reproductive toxicity: May damage fertility or the unborn child

Reproductive Effects: May cause adverse reproductive effects
May impair fertility
Experiments have shown reproductive toxicity effects on laboratory animals

Developmental Effects: May cause harm to the unborn child
May cause adverse developmental effects based on animal data

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure: No information available
STOT - repeated exposure: Causes damage to organs through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products: Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging: Empty containers should be taken for local recycling, recovery or waste disposal

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Product code: D2516
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ATOM PERCENT D
<table>
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<th><strong>DOT</strong></th>
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<td>N,N-Dimethylformamide</td>
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<td>Packing Group:</td>
<td>III</td>
</tr>
<tr>
<td>Description:</td>
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<td>IMDG Page:</td>
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<tr>
<td>Marine Pollutant</td>
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<tr>
<td>EMS:</td>
<td>F-E</td>
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<tr>
<td>MFAG:</td>
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<tr>
<td>Maximum Quantity:</td>
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<table>
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<th><strong>RID</strong></th>
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<tbody>
<tr>
<td>UN-No:</td>
<td>UN2265</td>
</tr>
<tr>
<td>Proper Shipping Name:</td>
<td>N,N-Dimethylformamide</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>3</td>
</tr>
<tr>
<td>Subsidiary Risk:</td>
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<td>Packing Group:</td>
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<tr>
<td>Description:</td>
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<td>UN2265</td>
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<tr>
<td>Proper Shipping Name:</td>
<td>N,N-Dimethylformamide</td>
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</tbody>
</table>

**Product code:** D2516

**Product name:** N,N-DIMETHYLFORMAMIDE-D7, 99.5

ATOM PERCENT D
14. TRANSPORT INFORMATION

Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
Description: No information available

IATA
UN-No: UN2265
Proper Shipping Name: N,N-Dimethylformamide
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
ERG Code: 3L
Description: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide-d7</td>
<td>Not Listed</td>
<td>Not present</td>
<td>Not present</td>
<td>Not present</td>
<td>Present</td>
<td>Not present</td>
<td>Present 224-745-8</td>
</tr>
</tbody>
</table>

U.S. Regulations

N,N-Dimethylformamide-d7

- Massachusetts RTK: Present (For CAS no. 68-12-2 - N,N-Dimethylformamide)
- New Jersey RTK Hazardous Substance List: 0759 (For CAS no. 68-12-2 - N,N-Dimethylformamide)
- New Jersey (EHS) List: 0759 500 lb. TPQ (For CAS no. 68-12-2 - N,N-Dimethylformamide)
- New Jersey - Discharge Prevention - List of Hazardous Substances: Present
- Pennsylvania RTK: Present (For CAS no. 68-12-2 - N,N-Dimethylformamide)
- Minnesota - Hazardous Substance List: Present (For CAS no. 68-12-2 - N,N-Dimethylformamide)
- New York Release Reporting - List of Hazardous Substances: 1 lb. RQ (For CAS no. 68-12-2 - N,N-Dimethylformamide)
- Louisiana Reportable Quantity List for Pollutants: 100 lb./45.4 kg final RQ (For CAS no. 68-12-2 - N,N-Dimethylformamide)
- California Directors List of Hazardous Substances: Present (For CAS no. 68-12-2 - N,N-Dimethylformamide)


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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<tbody>
<tr>
<td>N,N-Dimethylformamide-d7</td>
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<td>Not Listed</td>
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</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide-d7</td>
<td>100 lb./45.4 kg final RQ (For CAS no. 68-12-2 - N,N-Dimethylformamide)</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>1.0% (For CAS no. 68-12-2 - N,N-Dimethylformamide)</td>
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</tbody>
</table>
### U.S. TSCA

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide-d7</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

### Canada

**WHMIS hazard class:**
- B3 Combustible liquid
- D1B Toxic materials
- D2B Toxic materials
- D2A Very toxic materials

**Canada Controlled Products Regulation:**
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

### Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide-d7</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

### EU Classification

**R-phrase(s)**
- R36 - Irritating to eyes.
- R61 - May cause harm to the unborn child.
- R20/21 - Harmful by inhalation and in contact with skin.

**S-phrase(s)**
- S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S53 - Avoid exposure - obtain special instructions before use.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide-d7</td>
<td>No information</td>
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</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**
- Xn - Harmful.
- Xi - Irritant.

---

**Product code:** D2516  
**Product name:** N,N-DIMETHYLFORMAMIDE-D7, 99.5 ATOM PERCENT D
16. OTHER INFORMATION

Preparation Date: 1/18/2016
Revision Date: Not Applicable
Prepared by: Sonia Owen

Disclaimer:
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.

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet