

# Material Safety Data Sheet



## 1. Chemical product and company identification

**Product name** DM 2,6-NDC (Dimethyl 2,6-naphthalene dicarboxylate)  
**MSDS #** 0000001123  
**Historic MSDS #:** 03265  
**Code** 0000001123  
**Product use** Polymerization.  
**Supplier** BP Amoco Chemical Company  
150 West Warrenville Road  
Naperville, Illinois 60563-8460  
USA  
Tel: 1 (877) 701-2726

**EMERGENCY HEALTH INFORMATION:** 1 (800) 447-8735  
Outside the US: +1 703-527-3887 (CHEMTREC)

**EMERGENCY SPILL INFORMATION:** 1 (800) 424-9300 CHEMTREC (USA)

**OTHER PRODUCT INFORMATION** 1 (866) 4 BP - MSDS  
(866-427-6737 Toll Free - North America)  
email: bpcares@bp.com

## 2. Composition/information on ingredients

Ingredient name	CAS #	% by weight
Dimethyl 2,6-naphthalene dicarboxylate	840-65-3	> 99.9

## 3. Hazards identification

**Physical state** Crystalline solid.

**Color** White.

### Emergency overview

This product has been evaluated and does not require any hazard warning on the label under established regulatory criteria.

**Routes of entry** Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential health effects

**Eyes** No significant health hazards identified.

**Skin** No significant health hazards identified.

**Inhalation** No significant health hazards identified.

**Ingestion** No significant health hazards identified.

**Medical conditions aggravated by over-exposure** None identified.

See toxicological information (section 11)

<b>Product name</b> DM 2,6-NDC (Dimethyl 2,6-naphthalene dicarboxylate)	<b>MSDS #</b> 0000001123	<b>Page:</b> 1/5
<b>Version</b> 3	<b>Date of issue</b> 04/18/2006.	<b>Format</b> US-COMP
		<b>Language</b> ENGLISH. ( ENGLISH )
	Build 4.2.7	

---

## 4. First aid measures

<b>Eye contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Skin contact</b>	Wash with soap and water. Get medical attention if irritation develops.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

---

## 5. Fire-fighting measures

<b>Flammability of the product</b>	May be combustible at high temperature.
<b>Auto-ignition temperature</b>	398 °C (Dust cloud in air); 190 °C (Dust layer in air)
<b>Flash point</b>	232 °C ASTM D-93
<b>Explosion limits</b>	LOWER: 28.8 g/m <sup>3</sup> (Dust in air)
<b>Products of combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide).
<b>Unusual fire/explosion hazards</b>	High dust concentrations have a potential for combustion or explosion.
<b>Fire-fighting media and instructions</b>	In case of fire, use water spray (fog), foam or dry chemicals. Do not use water jet.
<b>Protective clothing (fire)</b>	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

---

## 6. Accidental release measures

<b>Personal precautions</b>	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
<b>Environmental precautions and clean-up methods</b>	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.
<b>Personal protection in case of a large spill</b>	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

---

## 7. Handling and storage

<b>Handling</b>	Avoid creating dusty conditions and prevent wind dispersal. Avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. Wash thoroughly after handling.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

<b>Product name</b> DM 2,6-NDC (Dimethyl 2,6-naphthalene dicarboxylate)	<b>MSDS #</b> 0000001123	<b>Page:</b> 2/5
<b>Version</b> 3	<b>Date of issue</b> 04/18/2006.	<b>Format</b> US-COMP
	<b>Language</b> ENGLISH.	( ENGLISH )
	Build 4.2.7	

---

## 8. Exposure controls/personal protection

### Occupational exposure limits

Ingredient name	Occupational exposure limits
-----------------	------------------------------

Dimethyl 2,6-naphthalene dicarboxylate	None assigned.
--	----------------

<b>Control Measures</b>	Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
-------------------------	---

<b>Hygiene measures</b>	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
-------------------------	--

### Personal protection

<b>Eyes</b>	Chemical/Dust Goggles
-------------	-----------------------

<b>Skin and body</b>	None required; however, use of protective clothing is good industrial practice.
----------------------	---

<b>Respiratory</b>	None required; however, use of adequate ventilation is good industrial practice.
--------------------	--

<b>Hands</b>	None required; however, use of gloves is good industrial practice. (Nitrile gloves.)
--------------	--

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Consult your supervisor or S.O.P. for special handling directions

[Consult local authorities for acceptable exposure limits.](#)

---

## 9. Physical and chemical properties

<b>Physical state</b>	Crystalline solid.
-----------------------	--------------------

<b>Odor</b>	Odorless.
-------------	-----------

<b>Color</b>	White.
--------------	--------

<b>Heat of combustion</b>	Not available.
---------------------------	----------------

<b>Melting point / Range</b>	190°C
------------------------------	-------

<b>Density</b>	0.9 to 0.98 g/cm <sup>3</sup> (Bulk density); 1.4 - 1.5 (intrinsic)
----------------	---

<b>Vapor pressure</b>	10 torr @ 222 °C
-----------------------	------------------

<b>Solubility</b>	Very slightly soluble in cold water. (<0.1%)
-------------------	--

---

## 10. Stability and reactivity

<b>Stability and reactivity</b>	The product is stable.
---------------------------------	------------------------

<b>Conditions to avoid</b>	Avoid dusting when handling and avoid all possible sources of ignition (spark or flame).
----------------------------	--

<b>Incompatibility with various substances</b>	None identified.
--	------------------

<b>Hazardous decomposition products</b>	Products of combustion: carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide).
---	---

<b>Hazardous polymerization</b>	Will not occur.
---------------------------------	-----------------

<b>Product name</b>	DM 2,6-NDC (Dimethyl 2,6-naphthalene dicarboxylate)
---------------------	---

<b>MSDS #</b>	0000001123
---------------	------------

<b>Page:</b>	3/5
--------------	-----

<b>Version</b>	3
----------------	---

<b>Date of issue</b>	04/18/2006.
----------------------	-------------

<b>Format</b>	US-COMP
---------------	---------

<b>Language</b>	ENGLISH.
-----------------	----------

Build 4.2.7

( ENGLISH )

---

## 11. Toxicological information

### Chronic toxicity

#### Carcinogenic effects

No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).

#### Mutagenic effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

#### Reproductive effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.

#### Teratogenic effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

### Other information

Dimethyl-2,6-naphthalene dicarboxylate (DM-2,6-NDC): Studies have shown that DM-2,6-NDC is nonirritating to the eyes (PEIS: 6.7/110.0), and skin (PDIS: 0.0/8.0). It is not acutely toxic by ingestion (LD50 > 5g/kg, rats), or skin contact (LD50 > 2 g/kg, rabbits). No deaths were observed in an acute inhalation limit study conducted in rats at a respirable concentration of 2,150 mg/m<sup>3</sup>. DM-2,6-NDC is not a skin sensitizer to guinea pigs. A subchronic feeding study (90 day) was conducted and showed no adverse effects. A four-week inhalation study (0,1,5 and 10 mg/3) resulted in no significant adverse effects. DM-2,6-NDC was not mutagenic in a Salmonella/Ames test, or in In Vitro HGPRT assay. NDC was also negative in an In Vitro chromosome aberration assay.

---

## 12. Ecological information

### Ecotoxicity

No testing has been performed by the manufacturer.

### Other ecological information

Ecotoxicity tests have not been conducted on this product. The following evaluation uses inferences from structurally similar chemicals, i.e., quantitative structure activity relationships (QSAR). Consequently, this information must be considered as an estimate.

The QSAR estimates of acute toxicity to aquatic organisms are between 10 and 60 mg/L. The estimated half-life for biodegradation exceeds 100 days because the chemical has at least two aromatic rings. The estimated bioconcentration factor is less than 100, suggesting that the chemical is not expected to bioconcentrate to a significant degree. The estimated Henry's Law constant suggests that this chemical will volatilize slowly from open water.

---

## 13. Disposal considerations

### Waste information

Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.

### Consult your local or regional authorities.

---

## 14. Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

**Product name** DM 2,6-NDC (Dimethyl 2,6-naphthalene dicarboxylate)

**MSDS #** 0000001123

**Page:** 4/5

**Version** 3

**Date of issue** 04/18/2006.

**Format** US-COMP

**Language** ENGLISH.

Build 4.2.7

( ENGLISH )

## 15. Regulatory information

### U.S. Federal regulations

US INVENTORY (TSCA): Listed on inventory.

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

This product does not contain any hazardous ingredients at or above regulated thresholds.

### SARA 313

#### Form R - Reporting requirements

This product does not contain any hazardous ingredients at or above regulated thresholds.

#### Supplier notification

This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: This material is not regulated under CERCLA Sections 103 and 107.

### State regulations

No products were found.

California Prop 65: No products were found

### Inventories

AUSTRALIAN INVENTORY (AICS): Listed on inventory.

CANADA INVENTORY (DSL): Not listed.

CHINA INVENTORY (IECS): Listed on inventory.

EC INVENTORY (EINECS): Listed on inventory.

JAPAN INVENTORY (ENCS): Listed on inventory.

KOREA INVENTORY (ECL): Listed on inventory.

PHILIPPINE INVENTORY (PICCS): Listed on inventory.

## 16. Other information

### Label requirements

This product has been evaluated and does not require any hazard warning on the label under established regulatory criteria.

### HMIS® Rating :

**Health** 0  
**Flammability** 1  
**Physical Hazard** 0  
**Personal protection** X

**National Fire Protection Association (U.S.A.)**



### History

#### Date of issue

04/18/2006.

#### Date of previous issue

No Previous Validation.

#### Prepared by

Product Stewardship

### Notice to reader

*NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.*

**Product name** DM 2,6-NDC (Dimethyl 2,6-naphthalene dicarboxylate)

**MSDS #** 0000001123

**Page:** 5/5

**Version** 3

**Date of issue** 04/18/2006.

**Format** US-COMP

**Language** ENGLISH.

Build 4.2.7

( ENGLISH )