

Safety Data Sheet Diethyl phthalate

Version 1.1

Revision Date: 11/09/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Diethyl phthalate

Recommended use of the chemical and restrictions on use

Recommended use : Manufacture of plasticizers.
Plasticizer in the manufacture of PVC resins.

Manufacturer or supplier's details

Company : Nexeo Solutions, LLC.
Address : 3 Waterway Square Place Suite 1000
The Woodlands, TX. 77380
United States of America

Emergency telephone number:

Health North America: 1-855-NEXEO4U (1-855-639-3648)
Health International: 1-855-NEXEO4U (1-855-639-3648)
Transport North America: CHEMTREC (1-800-424-9300)

Additional Information: : Responsible Party: Product Safety Group
E-Mail: msds@nexeosolutions.com
SDS Requests: 1-855-429-2661
SDS Requests Fax: 1-281-500-2370
Website: www.nexeosolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Carcinogenicity : Category 2

Reproductive toxicity : Category 1B

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous components

CAS-No.	Chemical Name	Weight %
117-81-7	Diocetyl phthalate	90 - 100

Any Concentration shown as a range is due to batch variation.

Synonyms : bis(2-ethylhexyl)1,2-benzenedicarboxylic acid,

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not induce vomiting without medical advice.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Notes to physician : Treat symptomatically

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SECTION 5. FIREFIGHTING MEASURES

- | | |
|---|---|
| Suitable extinguishing media | : Water spray
Dry chemical
Carbon dioxide (CO ₂)
Foam |
| Unsuitable extinguishing media | : High volume water jet |
| Specific hazards during fire-fighting | : Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion products | : Carbon oxides |
| Specific extinguishing methods | : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Further information | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for firefighting if necessary.
Use personal protective equipment. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|---|
| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment. |
| Environmental precautions | : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

- | | |
|---|---|
| Advice on protection against fire and explosion | : Normal measures for preventive fire protection. |
| Advice on safe handling | : Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area. |

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Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
117-81-7	Diocetyl phthalate	TWA	5 mg/m ³	ACGIH
		TWA	5 mg/m ³	NIOSH REL
		ST	10 mg/m ³	NIOSH REL
		TWA	5 mg/m ³	OSHA Z-1
		TWA	5 mg/m ³	OSHA P0
		STEL	10 mg/m ³	OSHA P0

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
In the case of vapour formation use a respirator with an approved filter.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

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Colour	: colourless
Odour	: slight, mild
Odour Threshold	: No data available
pH	: No data available
Freezing Point (Freezing Point)	: -50 °C (-58 °F)
Boiling Point (Boiling point/boiling range)	: 384 °C (723 °F)
Flash point	: 201 °C (394 °F) Method: closed cup
Evaporation rate	: not determined
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: > 1.2 mmHg @ 20 °C (68 °F)
Relative vapour density	: 13.5 @ 20 - 25 °C (68 - 77 °F) (Air = 1.0)
Relative density	: 0.985 @ 20 °C (68 °F) Reference substance: (water = 1)
Density	: 0.9622 g/cm ³
Solubility(ies)	
Water solubility	: 0.1 - 0.285 g/l soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: Pow: 75,858 log Pow: 4.88 - 7.6
Auto-ignition temperature	: 370 - 382 °C
Thermal decomposition	: > 393 °C
Viscosity	
Viscosity, dynamic	: 56.6 mPa.s @ 25 °C (77 °F)
Viscosity, kinematic	: 57.46 mm ² /s @ 25 °C (77 °F)

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No hazards to be specially mentioned.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: carbon dioxide and carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Carcinogenicity

Product:

Carcinogenicity - Assessment : Suspected human carcinogens

IARC

Group 2B: Possibly carcinogenic to humans

117-81-7

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OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

Reasonably anticipated to be a human carcinogen

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ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

Components:

117-81-7:

Effects on fertility : Test Type: multigeneration study
Species: Rat, male and female
Application Route: Oral
Dose: 1.5 - 10,000 ppm
General Toxicity - Parent: NOAEL: 300 ppm

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	<p>General Toxicity F1: NOAEL: 300 ppm Fertility: NOAEL: 1,000 ppm Early Embryonic Development: NOAEL: 100 ppm Symptoms: Reduced fertility Testicular effects Result: Embryotoxic effects and adverse effects on the off-spring were detected.</p>
Effects on foetal development	<p>: Species: Rat Application Route: Oral Dose: 0, 357, 666, 586, 1055 mg/kg Duration of Single Treatment: 21 d General Toxicity Maternal: NOAEL: 357 mg/kg body weight Teratogenicity: NOAEL: >= 1,055 mg/kg body weight Developmental Toxicity: NOAEL: 357 mg/kg body weight Symptoms: Maternal toxicity, Reduced number of viable fetuses, Preimplantation loss Result: Embryotoxic effects and adverse effects on the off-spring were detected.</p>
Reproductive toxicity - Assessment	<p>Clear evidence of adverse effects on sexual function and fertility, based on animal experiments.</p>
Teratogenicity - Assessment	<p>: Clear evidence of adverse effects on development, based on animal experiments.</p>

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-

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tection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group at 800-637-7922.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

UN3082, Environmentally hazardous substances, liquid, n.o.s., (BIS(2-ETHYLHEXYL) PHTHALATE), 9, III

IATA (International Air Transport Association): Not regulated as a dangerous good

IMDG-Code: Not regulated as a dangerous good

Special Notes: : This material is shipped as a Class 9, Packing Group III when each package meets or exceeds the reportable quantity, otherwise it may be shipped as not regulated.

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : D2A: Very Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Diocetyl phthalate	117-81-7	100	100

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SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Chronic (Delayed) Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

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Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

117-81-7 Diethyl phthalate

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

117-81-7 Diethyl phthalate 90 - 100 %

Pennsylvania Right To Know

117-81-7 Diethyl phthalate 90 - 100 %

New Jersey Right To Know

117-81-7 Diethyl phthalate 90 - 100 %

California Prop 65

117-81-7 WARNING! This product contains a chemical known to the State of California to cause cancer.
Diethyl phthalate
117-81-7 WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Diethyl phthalate

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

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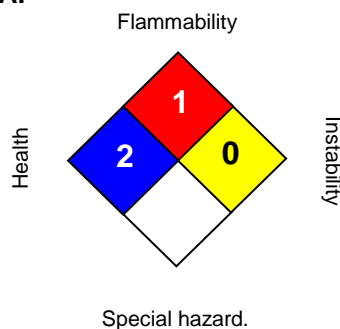
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NZIoC	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by NEXEO™ Solutions EHS Product Safety Department (1-855-429-2661) MSDS@nexeosolutions.com.

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Legacy SDS: : R0000784

Material number:

16114352, 16041615, 16040040, 16010403, 641124, 554178, 127695, 104226, 16062074, 16020449, 546066, 546065, 546064, 87234, 69100, 85487, 71468, 103619, 52729, 53999, 87235, 52719, 53996, 88281, 53993, 104227, 20180, 20179, 20178, 20177

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances	NFPA	National Fire Protection Agency

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	List		
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50			Lethal Concentration 50%