

Di-n-hexyl phthalate: sc-278933



The Power to Question

MATERIAL SAFETY DATA SHEET

1 Identification of substance:

Product Name: Di-n-hexyl phthalate
Catalog Number: sc-278933
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800
Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

2 Hazards identification

Classification of the substance or mixture



GHS08 Health hazard

H360 May damage fertility or the unborn child.



GHS09 Environment

H400 Very toxic to aquatic life.

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



T; Toxic

R61: May cause harm to the unborn child.



Xn; Harmful

R62: Possible risk of impaired fertility.



N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

Label elements

Labelling according to EU guidelines:

Code letter and hazard designation of product:

T Toxic

N Dangerous for the environment

Risk phrases:

61 May cause harm to the unborn child

62 Possible risk of impaired fertility

50 Very toxic to aquatic organisms.

Safety phrases:

53 Avoid exposure - obtain special instructions before use.

20 When using do not eat or drink.

23 Do not breathe gas/fumes/vapour/spray.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately.

57 Use appropriate container to avoid environmental contamination.

Hazard description:

WHMIS classification



Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	1
FIRE	1
REACTIVITY	1

Health (acute effects) = 1

Flammability = 1

Reactivity = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

(CAS#) Description:

Di-n-hexyl phthalate (CAS# 84-75-3): 100 %

Identification number(s):

EINECS Number: 201-559-5

4 First aid measures

Description of first aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek immediate medical advice.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires: Keep ignition sources away.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Store at 4 °C.

8 Exposure controls/personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace: Not required.

Additional information: No data

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands:

Check protective gloves prior to each use for their proper condition.

Impervious gloves

Material of gloves

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties	
General Information	
Appearance:	
Form:	Liquid
Formula:	C20H30O4
Weight:	334.45
Odor:	Not determined
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	185-187°C (365-369 °F) (0.5mm Hg)
Sublimation temperature / start:	Not determined
Flash point:	Not determined
Flammability (solid, gaseous)	Not applicable.
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Auto igniting:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not determined
Density at 20°C (68 °F):	1.01 g/cm ³ (8.428 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Segregation coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions No dangerous reactions known

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral	LD50	29600 mg/kg (rat)
Dermal	LD50	>20 mL/kg (rabbit)
Irritation of skin	mild	500 mg/24H (rabbit)

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Other information (about experimental toxicology):

Reproductive effects have been observed on tests with laboratory animals.

Subacute to chronic toxicity:

Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:

Behavioral - food intake (animal).

Liver - fatty liver degeneration.

Liver - changes in liver weight.

Liver - hepatitis (hepatocellular necrosis), zonal

Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol).

Blood - other changes.

Nutritional and Gross Metabolic - weight loss or decreased weight gain.

Kidney, Ureter, Bladder - changes in kidney weight.

Endocrine - evidence of thyroid hyperfunction.

Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - phosphatases.

Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - dehydrogenases.

Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - peptidases.

Biochemical - Metabolism (Intermediary) - lipids including transport.

Reproductive - Paternal Effects - testes, epididymis, sperm duct.

Reproductive - Paternal Effects - spermatogenesis (including genetic material, sperm morphology, motility, and count).

Reproductive - Fertility - mating performance (e.g. # sperm positive females per # females mated; # copulations per # estrus cycles)

Reproductive - Fertility - other measures of fertility.

Reproductive - Effects on Newborn - live birth index (measured after birth)

Reproductive - Fertility - litter size (e.g. # fetuses per litter; measured before birth).

Reproductive - Fertility - male fertility index (e.g. # males impregnating females per # males exposed to fertile nonpregnant females)

Reproductive - Fertility - female fertility index (e.g. # females pregnant per # sperm positive females; # females pregnant per # females mated)

Reproductive - Paternal Effects - prostate, seminal vesicle, Cowper's gland, accessory glands.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Possible risk of impaired fertility.

Possible risk of harm to the unborn child.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Very toxic for aquatic organisms

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Do not allow material to be released to the environment without proper governmental permits.

Very toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

DOT regulations:



Hazard class:

9

Identification number:

UN3082

Packing group:

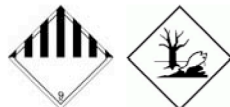
III

Proper shipping name (technical name): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Di-n-hexyl phthalate)

Label

9

Land transport ADR/RID (cross-border)



ADR/RID class:


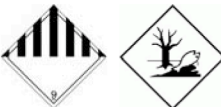
9 (M6) Miscellaneous dangerous substances and articles

Danger code (Kemler):

90

UN-Number:

3082

Packaging group:	III
Special marking:	Symbol (fish and tree)
UN proper shipping name:	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Di-n-hexyl phthalate)
Maritime transport IMDG:	
	
IMDG Class:	9
UN Number:	3082
Label	9
Packaging group:	III
Marine pollutant:	No
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Di-n-hexyl phthalate)
Air transport ICAO-TI and IATA-DGR:	
	
ICAO/IATA Class:	9
UN/ID Number:	3082
Label	9
Special marking:	Symbol (fish and tree)
Packaging group:	III
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Di-n-hexyl phthalate)

UN "Model Regulation": UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
Special precautions for user Warning: Miscellaneous dangerous substances and articles
 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Product related hazard informations:

Hazard symbols:

T Toxic

N Dangerous for the environment

Risk phrases:

61 May cause harm to the unborn child

62 Possible risk of impaired fertility

50 Very toxic to aquatic organisms.

Safety phrases:

53 Avoid exposure - obtain special instructions before use.

20 When using do not eat or drink.

23 Do not breathe gas/fumes/vapour/spray.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately.

57 Use appropriate container to avoid environmental contamination.

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

This product contains a chemical known to the state of California to cause cancer or reproductive toxicity.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

Information about limitation of use: For use only by technically qualified individuals.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.