



Safety Data Sheet (SDS)

Revision / Review Date: 1/5/16

1. Chemical Product and Company Identification

Product Name:	DIDP
Distributed By:	HB Chemical 1665 Enterprise Parkway Twinsburg Oh 44087 Phone - 330-920-8023
SDS Prepared By (w Suppliers Input):	HB Chemical
Chemical Name / Family:	Di-isodecyl phthalate
Molecular Formula:	C28H46O4
Molecular Weight via GPC, Mn:	446.67
Product Use:	Plasticizer
OSHA Status:	Non-hazardous
CAS No:	68515-49-1

For emergency health, safety, and environmental information, calls 330-920-8023.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300.

2. Hazard(s) Identification

<u>Emergency overview:</u>	Generally recognized as a low potential industrial hazard. May cause mild eye and skin irritation.
<u>Classification of the chemical:</u>	This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).
<u>Signal Word:</u>	Not required.
<u>Hazard statement(s):</u>	Not required
<u>Precautionary statement(s):</u>	Not required
<u>Signs and Symptoms of Exposure:</u>	Symptoms may include coughing, choking and wheezing. Direct skin contact may cause temporary redness.
<u>Primary Routes of Entry:</u>	Not available.
<u>Medical Conditions Generally Aggravated by Exposure:</u>	Individuals with chronic respiratory disorders may be adversely affected by any fume or airborne particulate matter exposure. Persons with preexisting skin disorders may be more susceptible to the effects of this material. Prolonged overexposure may

cause slight liver and kidney effects, such as increased organ weights. Pre-existing skin, eye and respiratory disorders.

Eye Contact:

Exposure to liquid or mist may produce a mild irritation. Direct eye contact may cause temporary redness.

Skin Contact:

Excessive contact may produce mild irritation, sensitization or allergic dermatitis.

Ingestion:

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Inhalation:

Exposure hazard potential is regarded to be low. However, if product is heated, misted or sprayed, and concentrations exceed the recommended exposure limit, it may become irritating to the mucous membranes of the upper respiratory tract. May cause irritation to the nose, throat and upper respiratory tract.

HMIS Hazard Ratings:

Health- 1, Flammability - 1, Reactivity -0, Personal- C

HMIS limitation statement:

The HMIS hazard ratings numbers are meant to give a quick indication of the relative hazards associated with the product. All of the information contained in the SDS should be consulted to assist with the safe handling of this material.

3. Composition / Information on Ingredients

Weight Percent / Typical	Component Identity	CAS Registry Number
99%	Diisodecyl phthalate	68515-49-1 (26761-40-0)

4. First Aid Measures

Inhalation:

Remove to fresh air; give artificial respiration or oxygen if necessary.

Eyes:

Flush eyes with water for 15 minutes. Call a physician if irritation develops.

Skin:

Wash skin with soap and water. If in contact with hot product, treat as a burn.

Ingestion:

Give 1-2 large glasses of water or milk. Induce vomiting by touching finger to back of throat. Never give anything by mouth to unconscious person. Seek medical attention.

5. Fire-Fighting Measures

Suitable Extinguishing Media:

Use Chemical foam, CO2, Dry Chemical, water fog.

<u>Unsuitable extinguishing media:</u>	Do not use a solid water stream as it may scatter and spread fire.
<u>Fire Fighting Procedures:</u>	Treat as burning oil. Use water spray to cool fire-exposed containers. Keep drums as cool as possible to avoid expansion, explosions, and splattering. A MSHA/NIOSH approved self-contained breathing apparatus should be worn. Full eye protection and protective clothing are required for all indoor/outdoor fires and spills.
<u>Hazardous Combustion Products:</u>	This product will decompose under extreme temperatures forming oxides of carbon.
<u>Unusual fire and explosion hazards:</u>	Solid streams of water directed at burning liquid may cause frothing.

6. Accidental Release Measures	
<u>Steps to be taken in case material is spilled:</u>	Dike and contain the spill with inert material (i.e., sand, earth, sawdust) and transfer liquid and solid diking material to separate containers for recovery or disposal. Wash floor area with hot water solution. Remove contaminated clothing and wash before reuse. Wash affected skin areas with soap and water. Keep spills out of all sewers and bodies of water.
<u>Environmental Disposal Information:</u>	Keep spills out of all sewers and bodies of water.
<u>Waste Disposal:</u>	All containers should be effectively labeled to facilitate the appropriate disposal or reclaim.

7. Handling and Storage	
<u>Precautions to be taken in handling:</u>	Avoid contact with skin. Provide adequate ventilation if fumes or vapors are generated.
<u>Empty Containers:</u>	Not available.
<u>Storage:</u>	Store in sealed containers in dry, ambient temperature conditions. Perform drum and tote filling in well-ventilated area wearing protective eye shields and clothing.

8. Exposure Controls / Personal Protection	
<u>Exposure Controls:</u>	Not available.
<u>Respiratory Protection:</u>	Use a NIOSH approved respirator when exposure to mists or vapors is anticipated.
<u>Engineering Measures:</u>	For normal operation, local exhaust ventilation should suffice. Direct exhaust when exposure is above the OSHA PEL.

<u>Ventilation:</u>	Use only where sufficient ventilation exists to keep exposure levels of fumes and dust below recommended levels.
<u>Hand protective:</u>	Neoprene, natural rubber or nitrile gloves.
<u>Eye Protection:</u>	Safety glasses with side shields.
<u>Skin and Body Protection:</u>	Not available.
<u>Facilities:</u>	There should be a shower facility and eyewash in the building where this product is being stored and handled. Exercise good chemical handling practice.

9. Physical and Chemical Properties

<u>Physical Form:</u>	Oily liquid
<u>Appearance & Odor:</u>	Clear oily liquid/ mild ester odor
<u>Specific Gravity:</u>	@25°C = 0.966
<u>pH:</u>	~7
<u>Melting/Freezing point:</u>	-40°C (-40°F)
<u>Solubility in Water:</u>	<0.1%
<u>Softening Point, R&B:</u>	Not available.
<u>Flash Point, TAG CC F:</u>	232°C (450°F) COC
<u>Percent Volatiles (by weight):</u>	Not available.
<u>Evaporation Rate (Water ~ 1):</u>	< 1 (butyl acetate=1)
<u>Vapor Pressure (mm Hg):</u>	0.06 mm Hg @ 200°C (392°F)
<u>Boiling Point (°F) Initial:</u>	260°C (500°F)
<u>Vapor Density (Air ~ 1):</u>	Not available.
<u>Auto ignition Temperature, °C:</u>	>380°C (716°F)
<u>Flammable Limits, %(V):</u>	Not available.
<u>Viscosity:</u>	130 mPa.s @ 20°C

10. Stability and Reactivity

<u>Stability:</u>	This product is stable under normal conditions.
<u>Incompatibility (Materials to Avoid):</u>	Strong oxidizers (e.g. Chlorine, Peroxides, etc.).
<u>Conditions to Avoid:</u>	Ensure adequate ventilation, especially in confined areas.

Hazardous Polymerization:

Will not occur under normal circumstances.

Hazardous Decomposition Products:

Possibly carbon monoxide, carbon dioxide and organic acids.

11. Toxicological Information

This material is not listed as a carcinogen or potential carcinogen by NTP, IARC, or OSHA.

The dietary administration of DIDP to rats has been demonstrated to produce hepatomegaly, proliferation of hepatic peroxisomes and alteration in serum triglyceride and cholesterol levels (British Industrial Biological Research Assoc. Confidential Report (No. 0495/5/85).

DIDP tested on Bacillus subtilis & E. coli for repair and an E. coli and Salmonella typhimurium for mutation gave negative results (Env. Health Perspective 17:203, 1976).

Laboratory animal studies have shown that DIDP may cause adverse reproductive effects at high doses (Environ. Res. 9:1, 1975).

Mutagenicity:

Not expected to be mutagenic in humans.

Reproductive effects & Teratogenicity:

This product is not expected to cause reproductive or developmental effects.

Sensitization to material:

Not expected to be a skin or respiratory sensitizer.

Specific target organ effects:

The substance or mixture is not classified as specific target organ toxicant, single exposure. The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

<u>Chemical name</u>	<u>LC₅₀(4hr)</u>	<u>LD₅₀</u>	
	<u>inh, rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Diisodecyl phthalate	>12.54 mg/L	61825 mg/kg	>9660 mg/kg

12. Ecological Information

This product does not contain any ozone depleting compounds (ODC's).

EC or LC50: >0.02 mg/L, (mortality) 48 hr. static, Daphnia magna >1.0 mg/L, (mortality) 96hr flow-thru, P. promelas

Ecotoxicity:

Not expected to be harmful to aquatic organisms. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

Persistence and degradability:

Readily biodegradable.

Bioaccumulation potential:

No data is available on the product itself.

<u>Components</u>	<u>Partition coefficient n-octanol/ater (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Diisodecyl phthalate (CAS 26761-40-0)	8.8	

Mobility in soil: No data is available on the product itself.

Ecotoxicity data:

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Fish</u>		
		<u>LC50 / 96h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Diisodecyl phthalate	26761-40-0	>=0.66mg/L Fathead minnow (No effects)	N/Av	None.

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Daphnia</u>		
		<u>EC50 / 48h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Diisodecyl phthalate	26761-40-0	>=0.18mg/L (Water flea) (No effects)	N/Av	None.

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Algae</u>		
		<u>EC50 / 96h or 72h</u>	<u>NOEC / 96h or 72h</u>	<u>M Factor</u>
Diisodecyl phthalate	26761-40-0	>=1.3mg/L (Green algae) (No effects)	N/Av	None.

13. Disposal Considerations

Reclaim or Dispose of material in accordance with all applicable local, state, and federal regulations.

14. Transport Information

D.O.T. Shipping Name: Not classified as hazardous.

Air - ICAO (International Civil Aviation Organization): Not regulated.

Sea - IMDG (International Maritime Dangerous Goods): Not regulated.

TDG: Not regulated.

15. Regulatory Information

All components of this material are on the TSCA Inventory.

All components of this material are on the Canadian DSL, AICS, IECSC, and EINECS.

SARA Section 311/312: Hazard: Acute health

New Jersey RTK Label Information: Diisodecyl phthalate, CAS No. 68515-49-1

<u>Pennsylvania RTK Label Information:</u>	Diisodecyl phthalate, CAS No. 68515-49-1							
<u>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</u>	None.							
<u>California Proposition 65:</u>	This product does not contain any substances known to the State of California to cause cancer, birth defects, or other reproductive harm per the Safe Drinking Water and Toxic Enforcement Act of 1986.							
<u>Canadian Environmental Protection Act (CEPA) information:</u>	All ingredients listed appear on the Domestic Substances List (DSL).							
<u>WHMIS information:</u>	Refer to Section 2 for a WHMIS Classification for this product.							
<u>Canadian Information:</u>	This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR							
<u>International Information:</u>								
Components listed below are present on the following International Inventory list:								
<u>Ingredients</u>	<u>CAS #</u>	<u>European EINECs</u>	<u>Australia AICS</u>	<u>Philippines PICCS</u>	<u>Japan ENCS</u>	<u>Korea KECI/KECL</u>	<u>China IECSC</u>	<u>NewZealand IOC</u>
Diisodecyl phthalate	26761-40-0	247-977-1	Present	Present	(3)-1307	KE-02224	Present	Not listed

16. Other Information

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the users responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.