



HCS-2012 §1910.1200

Issue date Jul 24 2019 Revision date Jul 24 2019

Read the entire SDS for a complete hazard assessment.

Section 1. Product and Company Identification

1.1 Product Identifiers:

Product Names:	Kanatol-8080 /DOTP	
Trade name:-	DOTP	
Synonyms:	Terephthalic acid, bis(2-ethylhexyl) ester	
Chemical Name:	Bis(2-ethylhexyl) terephthalate	
CAS Number	6422-86-2	EINECS Number: 229-176-9
Molecular formula	C24-H38-O4	Molecular Weight: 390.5602

Recommended use: Laboratory and other commercial uses including plasticizer in PVC. **Restrictions on use:** Commercial use only.

1.2 Manufacturer and Supplier/Distributor:

Manufacturer

KLJ PLASTICIZERS LIMITED Sr.no.98/1, Village Silli, Silvassa-396230 (D&NH), INDIA

Phone: +91- 260-6548914,15 Fax: +91 11 25459709 E-mail: silvassa2002@kljindia.com Website: www.Kljindia.com

1.4 Emergency telephone number:

Distributor

R.E. Carroll, Inc. 1570 North Olden Avenue Trenton, NJ 08638-3204 USA Responsible Party John Boruta Quality Assurance / Compliance Manager Phone: 609-695-6211 Fax: 609-695-0102 Email: johnb@recarroll.com Web Site: www.recarroll.com

In the US: For a transport accident or leak, fire or major spill, call CHEMTREC, (800) 424-9300. For International CHEMTREC assistance, call 1-703-527-3887 (collect calls accepted).

Section 2. Hazards Identification

2.1 Globally Harmonized System (GHS) Hazard Classification:

OSHA Classification in accordance with 29 CFR 1910 (OSHA HCS): non-hazardous. This SDS meets the requirements of GHS Revision 3, HCS 2012 (29 CFR 1910.1200). US GHS Classifications: Not classified as Hazardous

2.2 GHS Label elements including precautionary statements:

Hazard pictograms: None

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GHS Signal word: None

Hazard Statement: None.

Precautionary Statements:

Prevention: Do not breathe gas/mist/vapors/spray. Wear protective gloves, eye and skin protection. Avoid release to the environment.

Response:

IF SWALLOWED: DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Gently wipe or rinse the inside of the mouth with water. Sips of water can be given. If symptoms persist, contact a poison control center, emergency room, or physician for treatment information.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If a cough or other respiratory symptoms develop, consult medical personnel.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs, get medical attention.

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

STORAGE: Store in accordance with local/regional/national/international regulation.

DISPOSAL: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. See section 13 of this SDS for disposal instructions.

2.3 Other hazards which are not included in the classification criteria:

At processing temperatures, product can emit fumes that may irritate eyes and throat.

Chemical Name	CAS No	EINECS No.	Weight percent
Di(2-ethylhexyl) terephthalate	6422-86-2	229-176-9	=/< 100 %

Section 4. First-Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Remove contaminated clothing.

4.1 Inhalation:

Move to fresh air. If breathing is difficult, give oxygen and continue to monitor. If not breathing, give artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. Call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt, or waistband.

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4.2 Skin contact:

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Wash skin with plenty of soap and water. Remove contaminated clothing and shoes. If symptoms persist, seek medical attention. Wash contaminated clothing before use.

4.3 Eye contact:

Immediately flush eyes thoroughly with water for several minutes. Remove contact lenses after one to two minutes and continue flushing for several more minutes. If redness, itching or burning sensation develops, seek medical attention.

4.4 Ingestion:

Give nothing by mouth. Call a poison center or physician. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Gently wipe or rinse the inside of the mouth with water. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt, or waistband.

4.5 Most important acute and delayed symptoms/effects:

Eye Contact: Excessive exposure may cause temporary redness and mild irritation to eyes. Skin Contact: May cause redness, defating and cracking of skin. Ingestion: May cause gastric disturbance. Inhalation: May cause mild irritation. Chronic health effects: Chronic exposure may cause respiratory irritation. Relevant routes of exposure: Eye, skin, inhalation.

4.6 Indication of immediate medical attention and notes for physicians:

Persons with pre-existing skin, eye, or respiratory conditions may be at an increased risk from the irritant properties of this material. Attending physician should treat exposed patients symptomatically

Protection of First Aiders: No action should be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Fire-Fighting Measures

5.1 Flammable Properties:

Flash point: 2'12 deg C

Lower explosion limit: No Data

Upper explosion limit: No Data

Auto ignition temperature 387 deg C

Thermal decomposition: When heated, hazardous gases may be released.

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Fire and Explosion Hazard: Material will burn. Not a fire or explosion hazard.

5.2 Extinguishing media:

Suitable extinguishing media: Combustible material. Use CO2, dry chemical, or foam. Water can be used to cool and protect product.

Unsuitable extinguishing media: Forceful application of fire extinguishing agents or water spray may spread burning material. Material will float on water.

5.3 Special hazards arising from the chemical:

Unusual fire and explosion hazards: None known.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition, which may be toxic and/or irritating.

5.4 Special protective equipment and precautions for firefighters:

Fire Fighting Procedures: Keep personnel away. Isolate fire and deny unnecessary entry. Do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone.

Special Protective Equipment for Firefighters: No special protective equipment required. Wear positive-pressure selfcontained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves) to protect against other burning material. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing mists. Avoid skin and eye contact. Evacuate personnel to safe areas. Spilled material may cause a slipping hazard. Use appropriate safety equipment. See Section 8 for information on personal protection equipment including chemically resistant hand gloves (NITRO BUTADINE RUBBER, Thickness-0.4mm), safety goggles/glasses.

6.2 Environmental precautions and protective procedures:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains, sewers, waterways, and/or groundwater. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

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6.3 Methods and material for containment and cleaning up:

Contain spilled material if possible. Eliminate all ignition sources including smoking, flares, sparks or flames in immediate area. All equipment used when handling the product must be grounded. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

Section 7. Handling and Storage

7.1 Precautions for safe handling:

Avoid breathing process mists. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Do not eat, drink and/or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage (including any incompatibilities):

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Store in accordance with good manufacturing practices. Storage containers should be grounded and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

Section 8. Exposure Controls and Personal Protection

Consult with a Health and Safety Professional for specific selections.

8.1 Control parameter: Occupational exposure limits-none listed.

8.2 Appropriate engineering controls: Use adequate general or local exhaust ventilation to control airborne concentrations.

8.3 Personal protective equipment:

Eye protection: Use safety glasses with side shields.

Body protection: Use protective clothing as needed.

Hand protection: Contact should be minimized. Protective gloves are recommended

Respiratory protection: Concentration in air determines the level of respiratory protection needed. If ventilation is inadequate, a NIOSH-certified respirator should be worn. Consult OSHA regulations for proper respiratory use (29 CFR 1910.134).

Other: Remove contaminated clothing and wash before reuse. For non-fire emergencies, respiratory protection may be necessary and wear appropriate protective clothing to avoid contact with material. Have eyewash station and water supply in work area.

Do not consume or store food in the work area. Wash hands before smoking or eating.

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Section 9. Physical and Chemical Properties

Physical state:	Liquid
Color:	Clear
Odor:	Nearly odorless
Odor threshold:	No Data
pH:	No Data
Freezing Point:	No Data
Boiling Point	400 deg C
Melting Point	No Data
Flash Point (COC):	$> 220^{\circ}$ C
Evaporation rate:	No Data Available
Upper Explosive Limits (% air):	No Data
Lower Explosive Limits (%air):	No data
Flammability (solid, gas):	Not Applicable
Vapor pressure:	0.00006 Pa @20 deg C
Vapor density (air=1):	No Data
Density:	0.973 g/cm3
Specific gravity	0.965 at 20 deg C
Auto-ignition temperature:	405 deg C
Decomposition temperature:	Not Determined
Solubility in water:	Insoluble
Solubility in organic solvents	Do Data
Partition coefficient, n-octanol/water:	No data
Viscosity @ 20°C:	77.6 mm3/s kinematic
Percent Volatile	0.1% max

Section 10. Stability and Reactivity

- 10.1 Chemical stability: Stable under normal temperature conditions and recommended use.
- 10.2 Possibility of hazardous reactions: No hazardous reactions if stored and handled as prescribed.
- **10.3 Conditions to avoid:** Avoid heat, sparks, open flames and other ignition sources.
- 10.4 Incompatible materials: Strong oxidizers

10.5 Hazardous decomposition products:

Decomposition products depend upon temperature, air supply and the presence of other materials. Smoke, carbon monoxide, and other petroleum decomposition products in the case of incomplete combustion. Processing may release fumes and other decomposition products. Fumes can be irritating.

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10.6 Hazardous Polymerization: Will not polymerize.

Section 11. Toxicological Information

11.1 Information on the likely routes of exposure: Inhalation, ingestion, skin and eye contact.

11.2 Information on toxicological effects:

Acute toxicity

Oral LD50:	>5000 mg/kg – rat
Inhalation 6 h LC50:	LC50 > 0.0718 mg/l rat
Eye Irritation	slight rabbit OECD Guidelines 405
Dermal LD50:	> 19680 mg/kg – guinea pig
Irritation/corrosion	Human patch test non -irritant
Skin Sensitization:	Not sensitizing to guinea pigs occlusive.
	Human patch studies produced no evidence of clinical sensitization or irritation was
	observed.

GHS Classification	
Skin corrosion/irritation:	Did not cause skin irritation in human patch tests
	Classification: Not classified as irritant
Serious eye damage/irritation:	Slight or no eye irritation (Rabbit)
	Classification: Not classified as irritant
Inhalation:	May cause mild respiratory tract irritation
	Classification: Not classified
Respiratory sensitization:	Did not cause sensitization in humans and laboratory animals, mouse
	Classification: Does not cause respiratory sensitization
Skin sensitization:	Did not cause sensitization on laboratory animals, guinea pig or humans
Turnetter	Classification: Does not cause skin sensitization
Ingestion	May cause gastric disturbances
Repeated dose toxicity	Classification: Not toxic by ingestion.
1 1	
Inhalation Rat:	No toxicologically significant effects were found.
Mutagenicity:	Tests on bacterial or mammalian cell cultures did not show mutagenic
	effects
Reproductive Toxicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
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Specific target organ toxicity (STOT):	
STOT-single exposure:	Classification: Not classified
STOT-repeated exposure:	Classification: Not classified

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Aspiration Hazard:

Chronic effects:

Classification: Not classified. Prolonged inhalation may be harmful

Symptoms related to the physical, chemical and toxicological characteristics:

Adverse symptoms may include the following: Eye contact: Pain or irritation, watering, redness Inhalation: irritation of respiratory tract, coughing and difficulty breathing. Skin contact: Irritation, redness, defatting of skin

11.3 Carcinogenicity: Not considered a carcinogen by IARC, NTP, OSHA or ACGIH.

Section 12. Ecological Information

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- 12.1 Fish-Acute:-other Flow through.-Salmo gairdneri, syn. 0. Mykiss/LC50 (7 d): > 0.25 mg/I-No toxic effects occur within the range of solubility.
 OECD Guideline 203 static-Pimephales promelas(fathead minnow) LC50 (96 h): > 984 mg/1.
- 12.2 Chronic:-other Flow through., ncorhynchus mykiss (rainbow trout) NOEC (60 d): > 0.28 mg/1.
 -No toxic effects occur within the range of solubility.
- 12.3 Aquatic invertebrates-Acute:-OECD Guideline 202, static-Daphnia magna/EC50 (48 h): > 1.4 ug/L
 -No toxic effects occur within the range of solubility.
 Other, Flow through., mussel/EC50 (96 h): > 624 ug/L.
 Chronic:- OECD Guideline 211 Flow through. Daphnia magna (NOEC) 21 d > 0.76 mg/I
- 12.4 Aquatic plants-Toxicity to aquatic plants:-OECD Guideline 201 static green algae/EC50 (72 h): > 0.86 mg/I Microorganisms-Toxicity to microorganisms:-OECD Guideline 209 aquatic-activated sludge of a predominantly domestic sewage/EC50 (3 h): 10 mg/I-No toxic effects occur within the range of solubility.
- 12.5 Aquatic and terrestrial ecotoxicity: Expected to be low due to low solubility.
- 12.6 Mobility: No Data.

12.7 Persistence and degradability: Result: Readily biodegradable. Biodegradation: 73.05 % Exposure time: 28 d Method: Ready Biodegradability: CO2 Evolution Test

12.8 Bioaccumulative potential: No data.



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Section 13. Disposal Considerations

13.1 Disposal methods:

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Uncontaminated discarded product is not a hazardous waste under RCRA. Do not dump into any sewers, on the ground or into any body of water. All disposal practices must comply with all federal, state, and local laws and regulations. Offer to a licensed disposal company. Contact a licensed professional waste disposal service for disposal.

13.2 Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue. Puncture or otherwise destroy empty container and dispose of in a facility permitted for nonhazardous waste.

Section 14. Transport Information

US DOT:

- 14.1 UN number: Not regulated
- 14.2 UN proper shipping name: Not regulated
- 14.3 Transport hazard class: Not regulated
- 14.4 Packing group (if applicable): Not regulated
- 14.5 Marine Pollutant (Yes/No): No
- 14.6 Special precaution: No information available

Air (IATA/ICAO) REGULATIONS: Not regulated. European Regulations (ADR/RID): Not regulated.

Harmonized Tariff Code: Not known.

Section 15. Regulatory Information

U.S. Regulations

15.1 USA TSCA: All intentionally added ingredients are listed on the TSCA Inventory or exempt.

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Max

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15.2 SARA Section 311/312 Hazard Categories:

Acute Hazard: No Chronic Hazard: No Fire Hazard: No Reactive Hazard: No Sudden Pressure Release: No

15.3	CERCLA Hazardous Substance SAR <u>Component(s)</u>	A Section 304 Release Report Reportable Quantity	ing:	
. – .	None			
15.4	SARA Section 302 Extremely Hazard	lous Substances:		
	Component(s)/			
	CAS Number	Concentration	Min	Max
	None			
15.5	SARA Section 313 Toxic Chemicals:			
	Component(s)/	Reporting	Concentrati	ion

15.6 California Proposition 65: This product is not known to contain chemical(s) known to the State of California to cause cancer or reproductive harm.

15.7 Pennsylvania Worker and Community Right To Know Act: Hazardous Substances: NONE

Threshold

15.8 New Jersey Worker and Community Right To Know Act: Hazardous Substances: NONE

15.9 International Regulations:

CAS Number

None

Canadian Regulations:

WHMIS Statement: This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the SDS contains all the information required by the *Controlled Products Regulations*. This product is classified as not controlled in accordance with the Canadian Controlled Products Regulations.

This product complies with RoHS (Restriction on Hazardous Substances).

Other requirements: Inventory Listing:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory	LISTED
DSL - Canadian Domestic Substances List	LISTED
NDSL - Non-Domestic Substances List	NOT LISTED
EINECS - European Inventory of Existing Chemical Substances/European	LISTED
ELINCS - List of Notified Chemical Substances	NOT LISTED

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ENCS - Japan Existing and New Chemical Substances	LISTED
KECL - Korean Existing and Evaluated Chemical Substances	LISTED
AICS Australia - Australian Inventory of Chemical Substances	LISTED
IECS China Inventory of Existing Chemical Substances Produced or Impor TCSI Taiwan Chemical Substance Inventory	LISTED
PICCS :Philippine Inventory	LISTED
NZIoC New Zealand	Not known
IECSC China	LISTED
TCSI: Taiwan	Not known

Section 16. Other Information

16.1 NFPA and HMIS Hazard Ratings:

We assigned NFPA and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, the customer must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product SDS. This information is intended solely for the use of individuals trained in the particular hazard rating system.

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

NFPA (National Fire Protection Association) - Classification

Health	0 slight
Flammability	1 slight
Instability or Reactivity	0 minimal

HMIS® [Hazardous Materials Identification System (Paint & Coating)] - Classification

Health	0 slight
Flammability	1 slight
Reactivity	0 minimal

NFPA, HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered. This information is supplied solely for the use of individuals trained in the particular hazard rating system.

16.2 Revision information:

Previous version 11/01/2018 Verson 7 Date of this revision: 07/24/2019 Version 8.0 Revision summary: GHS/OSHA compliant SDS

16.3 Training advice: Provide adequate information, instruction and training for operators.

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16.4 Key or legend to abbreviations and acronyms used in the safety data sheet:

ACGIH	American Conference of Governmental Industrial Hygienists
BEI	Biological Exposure Index
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
NOAEL	No observed adverse effect level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
OECD	Organization for Economic Co-operation and Development
OPPTS	Office of Prevention, Pesticides, and Toxic Substances
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
ppm	parts per million
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average
Action Level	An exposure value set by OSHA that is lower than the PEL that will trigger the need for activities
	such as exposure monitoring and medical surveillance.
DNEL	The derived no-effect level is the level of exposure to a substance above which humans should not be exposed according to REACH

Declare to reader:

The opinions expressed herein are those of qualified experts within R.E. Carroll, Inc. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

END OF SDS

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