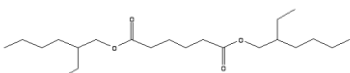
 PLASTAY Kimya San. ve Tic. A.Ş.	Safety Data Sheet (S.D.S.)			SDS NO: GBF-DOA-EN-01
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830			
	Product:	Bis(2-ethylhexyl) adipate		Page:1 / 9
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the Substance/Mixture

Trade Name : Di Octyl Adipate (DOA)
IUPAC Name : Bis(2-ethylhexyl) adipate
EC Number : 203-090-1
CAS Number : 103-23-1
Common Synonyms : DOA; DEHA; Di-(2-ethylhexyl) adipate ; bis (2-ethylhexyl) ester ; Adipic acid

Chemical Formula : 
Molecular Formula : C₂₂H₄₂O₄

Molecular Weight : 370,64
REACH Pre-Registration Number : 05-2116070637-40-0000203-090-1
Chemical Characterization : Mono-constituent substance-organic

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified uses;

Plasticizer ; Generally used with materials like P.V.C in order to **plasticiser**, after being heated to a doughy or plasticised state, to obtain elasticity, brightness for plastic material, generate electrical resistance, to prevent cracking and make surface smooth.

Uses advised against;


None identified

1.3. Details of the Supplier of the Safety Data Sheet

Company Name : PLASTAY KIMYA San. Ve Tic. A.Ş.
Address : Guzeller Organize San. Bolgesi Inonu Mah. Ataturk Bulvarı No:22 (Zip Code:41400) Gebze, KOCAELİ/TURKEY
Telephone : +90 (262)6795300
Fax : +90 (262)6795391
E-mail : info@plastay.com / lab@plastay.com
Web : www.plastay.com

1.4. Emergency Telephone Numbers

European Emergency No : 112 (24 hours)
Emergency Telephone of the Company : +90 (262)6795300 (08.30-17.30 /weekday)

 PLASTAY Kimya San. ve Tic. A.Ş.	Safety Data Sheet (S.D.S.)			SDS NO: GBF-DOA-EN-01
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830			
	Product:	Bis(2-ethylhexyl) adipate		Page:2 / 9
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017

SECTION 2. HAZARD IDENTIFICATION

2.1. Classification of the Substance/Mixture

According to the GHS/CLP guidelines- Regulation (EC) 1272/2008;
 Repr. 1B (Reproductive Toxicity)
 Route of exposure: Oral

2.2. Special Label Elements

The product has not been classified as hazardous according to the legislation in force.

2.1. Classification of the Substance/Mixture

According to the GHS/CLP guidelines- Regulation (EC) 1272/2008, there is no need for any classification or labelling.

2.2. Special Label Elements

There is no special label elements according to Regulation (EC) 1272/2008.

2.3. Other Effects

No other effects. The substance does not meet the criteria for PBT or vPvB substance.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Typical concentration	CAS No	EC No
Bis(2-ethylhexyl) adipate	>99,5 % (w/w)	103-23-1	203-090-1

SECTION 4. FIRST AID MEASURES

4.1. Description of First Aid Measures


General Advice: If exposed or if you feel unwell, call a Poison Center or doctor. Show this safety data sheet to the doctor.

Inhalation: Inhalation of mist can cause nausea and is irritating to the respiratory tract. Remove to fresh air and keep at rest. Monitor respiratory function. If breathing is difficult, give oxygen. If necessary, give artificial respiration. Seek medical attention. Take this SDS.

Skin contact: Remove contaminated clothing and shoes. Wash with plenty of soap and water. Seek medical attention. Take this SDS.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention. Take this SDS.

Ingestion: Rinse mouth of person with plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention. Take this SDS.

 <p>PLASTAY Kimya San. ve Tic. A.Ş.</p>	Safety Data Sheet (S.D.S.)			SDS NO: GBF-DOA-EN-01
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830			
	Product:	Bis(2-ethylhexyl) adipate		Page:3 / 9
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017

4.2. Most Important Symptoms and Effects, both Acute and Delayed

No known chronic or acute health risks.

4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

Avoid contact with this product while helping the person; keep the person warmed. Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Compatible with dry chemical, water spray, carbon dioxide and fog or foam.

Special Hazard Arising from the Chemical: May produce acrid smoke and fumes if burning.

Special Protective Equipment for Fire-Fighters: Use self-contained breathing apparatus (SCBA) operated in positive pressure mode and complete protective clothing.

Unsuitable Extinguishing Media: Don't use water jet.

5.2. Special Hazards Arising From the Substance or Mixture

Exposure Hazards: As organic substance DEHA is combustible. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Run off from fire control or dilution water may cause pollution. Use water-spray to cool fire exposed containers. Prevent entry into sewers and water courses of the wastes resulted from fire.

Hazardous Combustion Products: Decomposition products may include the following materials: carbon dioxide, carbon monoxide.

5.3. Advice for Fire-fighters


Special Precautions for Fire-Fighters: Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Protection of Fire-Fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Keep unnecessary and unprotected personnel away from entering. Avoid contact with skin, eyes, and clothing – wear suitable protective equipment (see section 8). Do not touch or walk through spilt material. Shut off all ignition sources.

 <p>PLASTAY Kimya San. ve Tic. A.Ş.</p>	Safety Data Sheet (S.D.S.)		SDS NO: GBF-DOA-EN-01		
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830				
	Product:	Bis(2-ethylhexyl) adipate		Page:4 / 9	
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017	

Ventilate area of leak or spill. Personnels performing clean-up work should wear adequate personal protective equipment and a self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Remove all sources of ignition.

6.2. Environmental Precautions

Avoid dispersal of spilt material contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Contain and recover liquid when possible. Keep closed containers and dispose according to all applicable federal, state or local environment regulations.

6.3. Methods and Material for Containment and Cleaning Up

Methods of Cleaning Up: Absorb spills with dry sand, earth or similar non-combustible absorbent material then place into suitable container for later disposal. For large, dike and pump into suitable containers for disposal. Flush area with plenty of water. Waste water will be treated in biological treatment plant.

Special Precautions: Do not use combustible materials, such as saw dust. Do not flush to sewer.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Protective Measures: Protect containers from physical damage. The personel which handling the product must wear protective equipment. Sources of ignition such as smoking and open flames prohibited where DEHA is handled.

Hygiene Measures: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wash hands before eating, drinking, smoking or going to the toilet. Take off all contaminated clothing and wash before reuse.

7.2. Appropriate Technical Measures for Storage, including any Incompatibilities

Conditions for Safe Storage: Keep only in original container, in a cool, dry, well ventilated place. Keep away from food. Store locked up. Keep out of reach of children. Avoid static electricity by grounding.

Incompatible Products: Strong oxidants, acids and alkalis.

Incompatible Materials for Storage: PVC storage containers.

7.3. Specific End Use(S)


Please check the identified uses from Section 1.2.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Exposure Limit Values

The product contains no ingredient with occupational exposure limit.

 PLASTAY Kimya San. ve Tic. A.Ş.	Safety Data Sheet (S.D.S.)		SDS NO: GBF-DOA-EN-01		
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830				
	Product:	Bis(2-ethylhexyl) adipate		Page:5 / 9	
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017	

8.2. Exposure Controls

8.2.1. Appropriate Engineering Controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances; such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc. Local exhaust ventilation is generally preferred because it can control the emission of the contaminant at its sources, preventing dispersions of it into the general work area. It is recommended safety shower and eye bath available near work side.

8.2.2. Individual Protection Measures

Eye/face Protection: It must be good industrial hygiene practice minimize eye contact. Use chemical safety goggles and/or full face shield where splashing is possible. Maintain eye wash and quick-drench facilities in work area.

Skin/Body Protection: Protective gloves of rubber, nitrilic rubber, or neoprene and protective clothing.

Respiratory Protection: For emergencies or instances where the exposure level are not known, there must be half face respirator for organic vapors. In cases of high potential of exposure use a supplied-air respirator, full facepiece, operated in positive-pressure mode. **Respirator Type:** Air purifying respirator with an appropriate government approved (where applicable), air-purifying filter, cartridge or canister.

Hygiene Measures: Do not eat, drink or smoke while using this product. Wash hands before eating, drinking, smoking or going to the toilet. Take off all contaminated clothing and wash before reuse.


Thermal Hazards: The substance does not represent a thermal hazard, thus special consideration is not required.

Other Precautions: Maintain shower, eye wash fountain and quick-drench facilities in work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical And Chemical Properties

PROPERTIES	UNIT	METHOD	RESULTS
Physical State	---	---	Liquid
Appearance	---	---	Clear
Density (20 °C)	g/cm ³	ASTM D 1045	0.924-0.928
Colour	Hazen	ASTM D 1209	Max.30
Phthalate Content	ppm	GC-Home Method	< 1000
Acid Index	mg KOH/g	ASTM D 1045	Max.0,07
Refractive Index (20 °C)	----	ASTM D 1045	1.4440-1.4480
Viscosity (20 °C)	cP	ASTM D 1045	12 - 20
Odour	---	---	Typical
Flash point(open cup)	°C	ASTM D 1310	Min.200
Water Content	%	ASTM D 1364-02	Max.0,10

 <p>PLASTAY Kimya San. ve Tic. A.Ş.</p>	Safety Data Sheet (S.D.S.)		SDS NO: GBF-DOA-EN-01		
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830				
	Product:	Bis(2-ethylhexyl) adipate		Page:6 / 9	
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017	

Boiling Point	°C	---	415 °C
Melting Point	°C	---	-76 °C
Molecule weight	g/ mol	---	370,58
Water Solubility (20 °C)	%	---	<0,1 g/l

9.2. Other Information

No additional information available.

SECTION 10. STABILITY and REACTIVITY

10.1 Reactivity: There is no specific test for this product. No hazardous polymerization will occur .

10.2 Chemical Stability: This product is stable under ordinary conditions of use and storage.

10.3. Possibility of Hazardous Reactions: Strong oxidizers, strong bases.

10.4. Conditions to Avoid: Heat, flame, sources of ignition and incompatibles.

10.5. Incompatible Materials: Strong oxidizing agents.

10.6. Hazardous Decomposition Products: Carbon monoxide and dioxide may form and produce irritating fume when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity, Oral

LD50 (rat – male and female) > 20.000 mg/kg bw

Acute Toxicity, Dermal

LD50 (Rabbit) : 15000 mg/kg

Acute Toxicity, Inhalation

LC50 (Rat, 4 h): > 5.7 mg/l (highest concentration tested)

Repeated Dose Toxicity, oral

NOAEL(rat, male/female): 200 mg/kg

Skin Corrosion/Irritation

(Rabbit, 24 h): None. Not classified as irritant.

Serious Eye Damage/Eye Irritation

(Rabbit): None. Not classified as irritant.


According to the skin and eye irritation assays, DEHA is not corrosive.

Skin Sensitization

Skin Sensitization (Guinea Pig): non-sensitizing

Carcinogenicity

Not classified as carcinogen.

 <p>PLASTAY Kimya San. ve Tic. A.Ş.</p>	Safety Data Sheet (S.D.S.)			SDS NO: GBF-DOA-EN-01
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830			
	Product:	Bis(2-ethylhexyl) adipate		Page:7 / 9
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017

Toxicity for Reproduction

DEHA is not toxic (T) based on results from chronic aquatic toxicity studies that show no effects at levels equal to or even exceeding its maximum water solubility and mammalian toxicity studies that support not classifying DEHA as carcinogenic, mutagenic, or toxic for reproduction.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

All of the aquatic toxicity results indicate that there is no toxicity at the limit of water solubility. The data for DEHA show that it is not toxic at its maximally attainable water solubility level, which varies dependent on the conditions of study.

12.1.1 Short-term toxicity to fish

Method: *Lepomis macrochirus*; freshwater; static; based on EPA (1977) methods

Results: LC50 (96 h): > 0,78 mg/L

Results of short-term studies show DEHA has no acute effect on fish at concentrations far exceeding its water solubility.

12.1.2 Long-term toxicity to fish

No data available.

12.1.3 Short-term toxicity to aquatic invertebrates

Method: *Daphnia magna*; freshwater; static; equivalent or similar to OECD Guideline 202 (*Daphnia* sp. Acute Immobilisation Test)

Results: EC50 (48 h): > 1,6 mg/L

Results of short-term studies show that DEHA has no acute effect on aquatic invertebrates at concentrations far exceeding its water solubility.

12.1.4. Long-term toxicity to aquatic invertebrates

Results of long-term studies show that DEHA will not produce chronic toxicity to invertebrates at or below its maximum attainable water solubility.

12.1.5 Algae and aquatic plants

Results from algal toxicity studies show that DEHA does not cause toxicity to algae at or below its maximum attainable water solubility.

12.1.6 Toxicity to soil macro-organisms

DEHA showed no acute toxicity to earthworm at the limit concentration of 1000 mg/kg (dw) This NOEC cannot be normalised since the organic contents of the test soil was not reported.


12.1.7. Toxicity to terrestrial plants

No data available.

12.2. Persistence and degradability

DEHA is not persistent (P) or very persistent (vP) based on standard test guideline results.

The substance is rated as readily biodegradable.

 <p>PLASTAY Kimya San. ve Tic. A.Ş.</p>	Safety Data Sheet (S.D.S.)		SDS NO: GBF-DOA-EN-01		
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830				
	Product:	Bis(2-ethylhexyl) adipate		Page:8 / 9	
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017	

12.3. Bioaccumulative potential

DEHA does not significantly accumulate in organisms.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6. Other Adverse Effects: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste Disposal : Dispose of waste and residues in accordance with local authority requirements. Avoid dispersal of spilt material and contact with soil, waterways, drains .

13.2. Contaminated Packaging : The empty containers, tank cars and tank trucks are treated with steam and rinsed with plenty of hot water. The resulted effluent are treated in the same way as waste. The empty and clean containers are to be reused in conformity with regulations. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues.

SECTION 14. TRANSPORT INFORMATION

The product is not regulated under UN ADR/RID, ADNR, IMDG, IATA, ICAO lists. Also it is not applicable for DOT list. This product isn not dangerous good.

14.1. UN Number : Not Relevant

14.2. UN Proper Shipping Name : Not Relevant

14.3. Transport Hazard Class(es) : Not Relevant

14.4. Packing Group : Not Relevant

14.5. Environmental Hazards : Not Relevant

14.6. Special Measures for Users: Not Relevant

14.7. Transport in Bulk According to Annex II Of Marpol 73/78 And the IBC Code: Not Relevant

SECTION 15. REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Regulation (EC) No 1907/2006 (REACH)

Regulation (EC) No 1272/2008 (CLP)


Commission Regulation (EU) No 2015/830 amending Regulation (EC) No 1907/2006

Commission Directive 2006/15/EC

Commission Directive 2000/39/EC

15.2. Restrictions of use: No data available.

15.3. Chemical safety assessment: No data available.

 PLASTAY Kimya San. ve Tic. A.Ş.	Safety Data Sheet (S.D.S.)			SDS NO: GBF-DOA-EN-01
	Prepared in accordance with the REACH Regulation (EC)1907/2006, CLP Regulation (EC) 1272/2008 and Regulation (EU) 2015/830			
	Product:	Bis(2-ethylhexyl) adipate		Page:9 / 9
	Revision No:9	R.Date: 10.06.2013	Update No: 2	Up.Date: 18.01.2017

SECTION 16. OTHER INFORMATION

16.1. Abbreviations and Acronyms

REACH: Registration, Evaluation, Authorisation and Restriction of Chemical substances
 PBT: Persistent, bioaccumulative and toxic.
 vPvB: Very persistent and very bioaccumulative
 ES: Exposure Scenario
 DNEL: Derived No Effect Level
 PNEC: Predicted No-Effect Concentration
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 RID: International Carriage of Dangerous Goods by Road
 IMDG: Code International Maritime Dangerous Goods Code
 ICAO/IATA: International Civil Aviation Organization/ International Air Transport Association.
 LD50 : "Lethal Dose, 50%" or median lethal dose
 NOAEL: No observable adverse effect level
 NOEC: No Observed Effect Concentration
 Cat: Category
 N.D.A: no data available
 EU: The European Union
 CSA: Chemical Safety Assessment

16.2. SDS Information

Key literature references and sources for data: This SDS has been arranged according to the information received from our raw material suppliers.

Revision No: 9.Revision

Revision Date: 18.01.2017

SDS No: GBF-DOA-EN-01

Prepared by: Emre BİR

Proficiency Certificate Date and No: 30.12.2015 / GBF-2181

Disclaimer:

PLASTAY provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality.

The information may not be applicable to combinations of the product with other substances or to particular applications. The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. Users should make their own tests to determine the applicability of such information or suitability of any products for specific use. In case of any unclarity we advise consulting the supplier or an expert.

PLASTAY will not be held liable for any damages or injury arising from the abnormal use of the material or use for any other purpose, not applying the advices or the inherent hazards of the material.