Elekeiroz

SDS
In compliance with REACH
Regulation (EC) No 1907/2006

SAFETY DATA SHEET

Product: DIISOBUTYL PHTHALATE

Revision: 00 | Date: 08/10/2009 | Pages: 1 /10

1- IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance:	
Product name:	**DIISOBUTYL PHTHALATE**
Use of the substance:	Plasticizer. PVA based white glue; PVC compounds (footwear, plastisol and others).
Supplier identification	
Company	ELEKEIROZ S.A
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2- HAZARDS IDENTIFICATION

Most important hazards:	May damage fertility. May damage the unborn child. Very toxic to aquatic life.
Product effects	
Adverse human health effects:	May damage reproduction. May cause irritation to eye, skin and respiratory irritation.
Environmental effects:	Very toxic to aquatic life.
Physical and chemical hazards:	May produce acrid smoke and fumes if burning.

Specific hazards:	Not applicable.
Main symptoms:	May cause difficult to breathing, burning sensation, lacrimation, photophobia, conjunctivitis, edema and keratitis to eyes.
Classification of the chemical product:	
Classification system adopted:	European Chemical Bureau – European Comunity: Directive 67/548/EEC (substances).
Hazard Class and Category:	Reproductive toxicity - Category 2 e 3. Hazardous to the aquatic environment - Acute and Chronic.
Risk Phrases:	R61: May cause harm to the unborn child. R62: Possible risk of impaired fertility. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Classification system adopted:	REGULATION (EC) No 1272/2008 of the European Parliament and of the Council, of 16 December 2008.
Hazard Class and Category:	Reproductive toxicity - Category 1B. Hazardous to the aquatic environment - Acute category 1.
Hazard statements:	H360fd: May damage fertility. May damage the unborn child. H410: Very toxic to aquatic life with long lasting effects. H400: Very toxic to aquatic life.

3- COMPOSITION/INFORMATION ON INGREDIENTS

Substance name:	**DIISOBUTYL PHTHALATE**
Chemical formula:	$C_{16}H_{22}O_4$
Synonym:	DIBP, Dis (2 Methyl Propyl) Ester, Phtalic Acid Diisobutyl Ester
Chemical nature:	Phthalic Ester
CAS Number:	84-69-5
EINECS number:	201-553-2

Classification:	**Directive 67/548/EEC** Repr. Cat. 2; R61 - Repr. Cat. 3; R62 - N; R50/R53 **REGULATION (EC) No 1272/2008** Repr. Cat. 1B; H360fd - Aquatic acute 1; H410; H400.

4- FIRST-AID MEASURES

Exposure routes	
Inhalation:	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 victim with plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention. Take this SDS.
Protection of first-aiders and/or special notes to a physician:	Avoid contact with this product while helping the victim; keep the victim warmed. Symptomatic treatment should include, above all, measured of support as correction of hydro electrolytic and metabolic disturbances.

5- FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Combustible if heated. Compatible with dry chemical, water spray, carbon dioxide and polyvalent 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.

6- ACCIDENTAL RELEASE MEASURES

Personal precautions:	Remove ignition sources. Do not touch damage containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin and eyes. Use protective gloves, safety goggles and protective clothing.
Environmental precautions:	Product very toxic to aquatic life. Prevent from entering into watercourses, sewerage and confined areas.
Cleaning up methods:	
Appropriate containment techniques:	Collect product and place in appropriate seal containers. In case of significant spill contain it with earth dikes, sand, vermiculite or other inert material.
Appropriate clean up procedures:	Discard any product, waste, container or wrapper available in an appropriate manner as not to harm the environment, according to federal regulations, state and local.
Inappropriate containment or clean up techniques:	Not discard directly in the environment or the sewage network.

7- HANDLING AND STORAGE

Appropriate technical measures for handling	
Precautions for safe handling:	Avoid inhalation, contact with skin and eyes. Do not handle near incompatible materials. Use proper personal protective equipment as indicated in Section 8.
Hygiene measures:	Wash hands thoroughly after handling. Do no 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.
Appropriate technical measures for storage	
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.

Packaging compatibilities	
Recommended use:	Metal drum, stainless steel, aluminum or polyester reinforced resin.

8- EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values:

Substance	ACGIH	MAK
Diisobutyl phthalate	Not established	Not established

Exposure controls:	
Engineering controls measures:	The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. It is recommended safety shower and eye bath available near work side. Engineering controls are the most effective way of reducing product exposure.
Personal protective equipment:	
Eye/face protection:	Protective safety goggles.
Skin/body protection:	Protective gloves of nitrilic rubber or neoprene and protective clothing.
Respiratory protection:	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.
Special precautions:	Avoid wear contact lenses while using this product.
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.

9- PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Physical state:	Liquid
Form:	Viscous
Odour:	Weak and Characteristic

Important health, safety and environmental information:	
pH:	Not applicable.
Melting point:	-64ºC (-83.2ºF)
Boiling point:	327ºC at 760 mmHg
Flash point:	185ºC (open cup)
Ignition point:	423ºC
Explosive properties:	Lower = 0.4 % v/v (245ºC) Upper = not available
Vapor pressure:	0.01hPa at 20°C
Relative density (20°C):	(25/4ºC) 1.030 to 1.036. (H_2O = 1)
Solubility in water:	Practically insoluble. (0.02 g/l) at 20°C
Viscosity:	36.4cP (25ºC)
Vapor density:	9.6 (Air = 1)
Evaporation rate:	Very low

10- STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and handling. Polymerization will not occur.
Incompatible materials:	Strong oxidants.
Hazardous decomposition products:	When heated to decomposition it emits acrid smoke and fumes.

11- TOXICOLOGICAL INFORMATION

Acute toxicity:	LD_{50} (oral, rats): 10400mg/Kg LD_{50} (dermic, guinea pig): 10000mg/Kg In case of high amount ingestion may cause nauseas, abdominal colic and diarrhea. May cause respiratory irritation, with difficult to breathing.

Skin corrosion/irritation:	May cause skin irritation, with burning sensation.
Serious eye damage/irritation:	May cause eye irritation, with burning sensation, lacrimation, photophobia, conjunctivitis, edema and keratitis.
Respiratory or skin sensitization:	May cause contact dermatitis.
Germ cell mutagenicity:	Studies done on *Salmonella tiphymurium* cultures have shown mildly positive mutagenic responses.
Carcinogenicity:	Not listed as carcinogenic to humans (IARC).
Reproductive toxicity:	May damage fertility. May damage the unborn child. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

12- ECOLOGICAL INFORMATION

Ecotoxicity:	Very toxic to aquatic life. LC_{50} (*P. promelas*, 96h) = 0.9 mg/L EC_{50} (*Scenedesmus subspicatus*, 72h) (Green algae) = 1 mg/L
Mobility in soil:	Low mobility.
Persistence/degradability:	It is expected that this product present rapid degradability.
Bioaccumulative potential:	It is expected bioaccumulation in aquatic organisms. BCF: 290

13- DISPOSAL CONSIDERATION

Recommended methods for safe and environmentally preferred disposal	
Disposal methods:	Prior to implementing land disposal of waste residue (including waste sludge), consult local legislation for adequate disposal methods. Empty containers can retain product residues and shall be disposed in accordance with the provisions proposed for the product.

14- TRANSPORT IMFORMATION

International regulations	
Land:	UN - "United Nations" Recommendations on the TRANSPORT OF DANGEROUS GOODS. Model Regulations, 15th Edition, 2007.
Sea:	IMO - "International Maritime Organization" International Maritime Dangerous Goods Code (IMDG Code) - Incorporating Amendment 34-08; 2008 Edition.
Air:	IATA - "International Air Transport Association" Dangerous Goods Regulation (DGR) - 50th Edition, 2009.
UN classification number:	3082
Proper Shipping Name / Description:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisobutyl Phthalate)
Class or Division:	9
Packing Group:	III

15- REGULATORY INFORMATION

Regulatory:	REGULATION (EC) No 1907/2006 of the European Parliament and of the Council, of 18 December 2006.
Labelling: health, safety and environmental information	
Hazard Classes:	Reproductive toxicity, hazard category 1B Hazardous to the aquatic environment, Acute hazard category 1
Hazard Pictograms:	 GHS08

GHS09

Signal word:	DANGER.
Hazard statements:	H360fd: May damage fertility. May damage the unborn child. H410: Very toxic to aquatic life with long lasting effects. H400: Very toxic to aquatic life.
Precautionary statements:	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P273: Avoid release to the environment. P281: Use personal protective equipment as required. P308+P313: IF exposed or concerned: Get medical advice/attention. P391: Collect spillage. P405: Store locked up. P501: Dispose of contents/container in accordance with local legislation.

16- OTHER INFORMATION

This information had been based on the current knowledge of the product and intended to describe safety, health and environmental hazards.

Warns that the manuscript of any chemical substance requires the previous knowledge of its hazards for the user. It is contained in the using company of the product promotes training of its employees about possible risks come upon of the product.

SDS elaborated by InterTox: August, 2009 – http://www.intertox.com.br

Abbreviations:

ACGIH – American Conference of Governmental Industrial Hygienists

BCF – Bioconcentration Factor

CAS – Chemical Abstracts Service

EINECS – European Inventory of Existing Commercial chemical Substances

IARC – International Agency for Research on Cancer

LC_{50} – Lethal Concentration 50

LD_{50} – Lethal Dose 50

MAK (*Maximale Arbeitsplatzkonzentrationen*) – Maximum Allowable Concentrations

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