Safety Data Sheet (SDS)

Revision / Review Date: 1/21/15

1. Chemical Product and Company Identification

Product Name:	Synplast mixed phthalate
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:	Mixed phthalate ester/ aromatic esters including DEHP, DINP
Molecular Formula:	$C_{24}H_{38}O_4$
Molecular Weight via GPC, Mn:	390.56 g/mol
Product Use:	Plasticizer
OSHA Status:	Hazardous
CAS No:	117-81-7
EC No:	204-211-0

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

Warning:

Signs and Symptoms of Exposure:	Not available.
Primary Routes of Entry:	Inhalation, Skin contact, Ingestion.
Medical Conditions Generally Aggravated by Exposure:	None known.
Eye Contact:	Irritating to eyes.
Skin Contact:	Irritating to skin.
Ingestion:	May be harmful if swallowed.
Inhalation:	Can cause irritation to the respiratory tract.
NFPA Rating:	Health-0, Fire-1, Reactivity- 0
HMIS Hazard Ratings:	Health- 1, Flammability - 1, Reactivity -0, Personal - B

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
30-60 %	Di(2-ethylhexyl)phthalate/bis(2-Ethylhexyl) phthalate I	117-81-7

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 irritation persists seek medical attention.
Ingestion:	Do not induce vomiting. Never give anything by mouth to unconscious person. Seek medical attention.

5. Fire-Fighting Measures

Suitable Extinguishing Media:	Water fog, Dry Chemical, Carbon Dioxide, Foam.
Special Fire Fighting Procedures:	Treat as burning oil. Keep drums as cool as possible to avoid expansion, explosions, and splattering. Full eye protection and protective clothing are required for all indoor/outdoor fires and spills. Use self-contained breathing apparatus.
Hazardous Combustion Products:	This product will decompose under extreme temperatures forming oxides of carbon.
Unusual fire and explosion hazards:	Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous material and smoke are all possible.

6. Accidental Release Measures

Steps to be taken in case material is spilled:	Wear appropriate protective clothing, gloves and equipment. Contain spill with inert absorbent or earth. Transfer to secure containers, dispose of according to local, and state regulations. Though should always be given to collecting the material in such a manner that it could be recycled. Clean/scrub affected area with detergent.

Environmental Disposal Information:	Prevent run-off into sewers or natural waterways.
Waste Disposal:	All containers should be effectively labeled to facilitate the appropriate disposal or reclaim.

7. Handling and Storage

Empty Containers:	Empty containers can be rinsed with a suitable solvent/surfactant and steamed to remove residual product and fumes before disposal or reuse in accordance with applicable regulations.
Precautions to be taken in handling:	Perform drum and tote filling in well- ventilated area wearing protective eye shields and clothing. Heat only in area with appropriate exhaust ventilation.
Storage:	Store in sealed containers in dry, cool, ambient temperature conditions.

8. Exposure Controls / Personal Protection

Exposure Controls:	Not available.
Respiratory Protection:	Respirators should be selected when TWA exceeded. Avoid hot vapors when mixing or packaging.
Ventilation:	Use only where sufficient ventilation exists to keep exposure levels of fumes and dust below recommended levels. Provide appropriate exhaust ventational at machinery.
Hand protection:	Wear gloves.
Eye Protection:	Safety glasses with side shields.
Skin and Body Protection:	Wear impervious clothing, boots and apron as appropriate.
Other Precautions:	Exercise good chemical handling practice. Wash with soap and water before eating, drinking or using toilet facilities. Launder contaminated clothing before reuse. Prevent discharge into the environment. Heat only in areas with appropriate exhaust ventilation.
Decontamination Facilities:	There should be a shower facility and eyewash in the building where this product is being stored and handled.

9. Physical and Chemical Properties

Physical Form:	Oily liquid

Appearance & Odor:	Clear / Very faint
Specific Gravity:	@25°C = 0.99
Solubility in Water:	<0.1%
Solubility in Water:	Not available.
Flash Point, TAG CC F:	215 °C
Percent Volatiles (by weight):	Not available.
Evaporation Rate (Water ~ I):	< 1 (butyl acetate=1)
Vapor Pressure (mm Hg):	<0.001 mm Hg @ 38°C
Vapor Density (Air ~ I):	>16 (vs air)
Boiling Point (^{o}F) Initial:	252°C (485°F)
Auto ignition Temperature, ^{o}C:	385°C
Flammable Limits, %(V):	Lower explosion limit: 0.28% (V)
Melting point/range:	-47°C (-53°F) Pour point

10. Stability and Reactivity

Stability:	This product is stable under normal conditions.
Incompatibility (Materials to Avoid):	Material reacts with strong oxidizing agents and bases.
Conditions to Avoid:	Avoid extreme heat. This product decomposes under high temperature and hydrolyses in humid conditions.
Hazardous Polymerization:	Hazardous polymerization will not occur.
Hazardous decomposition products:	Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous material and smoke are all possible.

11. Toxicological Information

Skin:	Rabbit, Result: Mild skin irritation - 24 h
Eyes:	Rabbit, Result: Mild eye irritation - 24 h
Carcinogenicity:	This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.
IARC:	2B - Group 2B: Possibly carcinogenic to humans (bis(2 Ethylhexyl) phthalate).

NTP:	Reasonably anticipated to be a human carcinogen (bis(2 Ethylhexyl) phthalate).
OSHA:	No component of this product present at levels.
Reproductive toxicity:	May cause congenital malformation in the fetus. Presumed human reproductive toxicant May cause reproductive disorders.
Additional Health Hazard Information:	Di (2-ethylhexyl) phthalate 117-81-7: There is sufficient evidence for the carcinogenicity of di (2-ethylhexyl) phthalate in experimental animals. Administered in the feed this chemical caused an increase incidence of liver cancer in male and female rats and mice. The relevance of this finding to humans is uncertain.

12. Ecological Information

Persistence and degradability:	Readily biodegradable.
Bioaccumulation potential:	Does not bioaccumulate.
Toxicity to fish:	LC50-Pimephales promelas (fathead minnow) -> 0.67 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - > 0.32 mg/l - 96 h LC50-Cyprinodon variegatus (sheepshead minnow)-> 0.17 mg/l - 96 h LC50 - Lepomis macrochirus (Bluegill) - > 0.20 mg/l - 96 h NOEC - other fish - > 0.3 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates:	Immobilization EC50-Daphnia magna(Waterflea)->0.16mg/l-48h
Biodegradability:	Result: Readily biodegradable. (OECD Test Guideline 301)
Bioaccumulation:	Oncorhynchus mykiss (rainbow trout) - 100 d - 0.014 mg/l

13. Disposal Considerations

Incineration by a permitted hazardous waste facility in accordance with all regulatory requirements is the preferred method of disposal. Empty containers can be rinsed with a suitable solvent/surfactant and steamed to remove residual product and fumes before disposal or reuse in accordance with applicable regulations.

14. Transport Information

D.O.T. Shipping Name:	Environmentally hazardous substances, liquid, n.o.s.
Air - ICAO (international Civil Aviation Organization):	Not dangerous goods.
Sea - IMDG (International Maritime Dangerous Goods):	Not dangerous goods.

15. Regulatory Information

All components of this material are on the TSCA Inventory.

All components of this material are on the Canadian DSL.

California Proposition 65:	This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.
Australia AICS:	Listed.
China IECS:	Listed.
Europe EINECS:	Listed.
Japan ENCS:	Listed.
Korea KECI:	Listed.
Philippines PICCS:	Listed.
SARA 302 Components:	No chemicals in this material are subject to report.
SARA 313 Components:	The following components are subject to reporting levels established by SARA Title III, Section 313: bis(2-Ethylhexyl) phthalate, CAS-No. 117-81-7
SARA 311/312 Hazards:	Chronic Health Hazard
Massachusetts Right To Know Components:	bis(2-Ethylhexyl) phthalate, CAS-No. 117-81-7
Pennsylvania Right To Know Components:	bis(2-Ethylhexyl) phthalate, CAS-No. 117-81-7
New Jersey Right To Know Components:	bis(2-Ethylhexyl) phthalate, CAS-No. 117-81-7

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.