MATERIAL SAFETY DATA SHEET

(Rev.I-July-2017)

Butyl Propionate

Section 1: IDENTIFICATION OF THE SUBSTANCE AND OF COMPANY

Product Name	Butyl Propionate
Chemical Name	Butyl propanoate
CAS No.	590-01-2
EINECS No.	209-669-5
Usage	In flavors and fragrances, an ingredient in the manufacturing of mixtures.
	Not intended for final consumer.
Manufacturer	Breeze Intermediates Pvt. Ltd.
	Z-39, Dahej SEZ, Dahej, Ta. Vagra, Dist. Bharuch (Guj.) India
	Tel.: +91 9825107638
	Email: info@breezeipl.com, qc@breezeipl.com
Emergency telephone no.	+91 9825107638, +91 8155088809

Section 2: HAZARDS IDENTIFICATION

Classification as per	Flammable liquids, Hazard Category 3; H226, H315, H318	
EC No. 1272/2008		
OSHA Hazard	Product not carcinogenic according to OSHA	
Label elements including	Signal Word: Warning Pictogram:	
precautionary statement		
	Hazard statement(s):	
	H226 Flammable liquid and vapor.	
	H303 May be harmful if swallowed.	
	H315 Causes skin irritation.	
	H315 + H320 Causes skin and eye irritation.	
	H319 Causes serious eye irritation.	
	<u>Precautionary statement(s):</u>	
	P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233 Keep container tightly closed.	
	P240 Ground/bond container and receiving equipment.	
	P241 Use explosion-proof electrical/ventilating/lighting equipment.	
	P242 Use only non-sparking tools.	
	P243 Take precautionary measures against static discharge.	
	P264 Wash thoroughly after handling.	
	P280 Wear protective gloves/eye protection/face protection.	
Risk Phrases	May be irritating to the skin and eyes	
HMIS Classification	Health hazard: 2 Flammability: 2 Physical hazards: 0	
NFPA Rating	Health hazard: 2Fire: 2Reactivity Hazard: 0	
Potential Health Effects	Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.	
	Skin: May be harmful if absorbed through skin. Causes skin irritation.	
	Eyes: Causes eye irritation.	
	Ingestion: Harmful if swallowed.	
Other Hazards	The product does not contain substances included in the Substances of Very High	
	Concern list (> 0.1 % w/w).	

Section 3: INFORMATON ON INGREDIENTS

Concentration of the constituent	97-100% (% wt/wt)
Chemical name	Butyl propanoate
Chemical Entity	Straight chain primary aliphatic alcohols/aldehydes/acids/acetals and
	esters with esters containing satirated alcohols and acetals containing
	saturated aldehydes. No aromatic or hetero aromatic moiety as a
	component of an ester or acetal.
Molecular Formula	$C_7H_{14}O_2$ (M.W.= 130.19 g/mol)
CAS No.	590-01-2
EC/EINECS No.	209-669-5
FEMA	2211

Section 4: FIRST AID MEASURES

Concumption	If availaged rings mouth with water (only if the person is appealage)	
Consumption	If swallowed, rinse mouth with water (only if the person is conscious).	
(Ingestion)	Seek medical advice immidiately. Do not induce vomiting.	
Eye Exposure	First rinse with plenty of water for several minutes	
	(remove contact lenses if easily possible), then take to a doctor.	
Inhalation	If inhaled, remove person to fresh air.	
	If not breathing give artificial respiration.	
	If breathing is difficult, give oxygen.	
Skin Exposure	Wash immediately affected area with soap and plenty of water.	
	Seek medical advice if irritation, pain, swelling, lacrimation or photophobia persists.	
Most important	Symptoms on inhalation: Choking, drowsiness, respiratory disruptions.	
symptoms and	Symptoms on eye contact: Irritation, reddening.	
effects, both	Symptoms on skin contact: Irritation, stinging.	
acute and delayed	Symptoms on ingestion: queasiness, stomach aches.	
Immediate	Not applicable.	
medical attention		
special treatment		
Others	Take Risk and Safety Phrases (section 15) into account	

Section 5: FIRE-FIGHTING MEASURES

Extinguishing	Water spray, Alcohol-resistant foam, carbon dioxide, dry chemical powder or
Media	appropriate foam. For safety reasons do not use full water-jet.
Hazards arising	Not applicable.
from the substance	
Combustible Liquid	Keep away from source of heat, flame or spark.
	Cool endengered drums with water.
Advices for	In case of fire on the surrounding, follow the instructions:
firefighters	1-Closed containers may build up pressure at elevated temperatures.
	2-Avoid inhalation of generated fumes or vapors. Use apropriate respiratory equipment.
	3-Do not allow the spillage of the fire extinguishing to sink into a drainage system or water area.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Handle the product using protective gloves resistant to the the chemicals exposed. Avoid contact with skin and inhalation of its vapours or smoke. Maintain adequate ventilation in the working area after spilling.
Environmental precautions	To avoid possible contamination of the environment.
	Do not discharge into any drains, surface waters or groundwaters
Methods and material for	Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-
containment and cleaning up	lime, sand, soda ash). Place in covered containers using non-sparking tools and
	transport outdoors. Avoid open flames or sources of ignition (e.g. pilot lights on
	gas hot water heater). Ventilate area and wash spill site after material pickup is
	complete. Dispose of in accordance with current laws and regulations.
Reference to other sections	Refer to section 13 Disposal considerations

Section 7: HANDLING AND STORAGE

Precautions for safe handling	Keep away from food, drink and animal feedingstuffs. When using do not smoke. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.
Condition for	Should be stored in tightly sealed and preferably full containers in a cool, well-ventilated, dry
Storage	place, out of direct rays of the sun, Away from areas of high fire hazard, & should be
	periodically inspected. Incompatible materials should be isolated from each other.
Specific end	Not available
use(s)	

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters	Declaration of substances is not required.
Exposure controls	Personal protection equipment: Use personal protection equipment according to Directive 89/686/EEC. Eye/Face protection: Chemical safety goggles are recommended. Wash contaminated goggles before reuse. Respiratory Protection: Use personal breathing apparatus whenever deemed necessary. Skin Protection: Avoid contact with skin. Compatible chemical-resistant gloves are recommended. Wash contaminated gloves before reuse. Engineering Controls-Ventilation: The areas where the product is handled and stored should be adequately ventilated.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear Colorless liquid.
Odor	Earthy, sweet odor
pH value	No data available
Boiling point	147 °C @ 760 mm Hg.
Melting point	No data available
Flash point (closed cup)	38.33 °C.
Ignition Temperature	No data available
Auto Inflammability	Not Determined

Explosive Property	Not Determined
Oxidizing Property	Not Determined
Vapour Pressure	4.420000 mm/Hg @ 25 °C
Vapour Density	4.5 (Air=1)
Solubility in Water	1500 mg/L @ 20 °C (est.)
Solubility in Alcohol	Soluble
Specific Gravity	0.868 – 0.885 @ 25 °C.
Partition Coefficient	2.314 (Octanol/Water)

Section 10: STABILITY AND REACTIVITY

Chemical stability	Stable under normal operational condition.
Reactivity	Heat, excessive heat, open flames and other sources of ignition.
	Strong oxidizing agents, strong reducing agents.
Incompatibility	Does not react with water. Avoid contact with strong oxidizing mineral acids,
	strong reducing agents.
Hazardous decomposition	Hazardous combustion or decomposition products:
Products	carbon oxides and other unidentified organic compound.

Section 11: TOXOLOGICAL INFORMATION

Acute toxicity	LD50 Oral - rat - 5,000 mg/kg,
	LD50 Dermal - rabbit - >14000 mg/kg
Inhalation Toxicity (LD ₅₀)	NA
Skin corrosion/irritation	Causes skin irritation
Human Experience	1% solution: No irritation or sensitization
Serious eye damage/eye irritation	Causes serious eye irritation
Respiratory or skin sensitization	Not expected to cause skin sensitization
Germ cell mutagenicity	No data available
Carcinogenicity	<u>IARC:</u> No component of this product present at levels $\geq 0.1\%$ is identified as probable, possible or confirmed human carcinogen by IARC. <u>ACGIH:</u> No component of this product present at levels $\geq 0.1\%$ is identified as a carcinogen or potential carcinogen by ACGIH. <u>NTP:</u> No component of this product present at levels $\geq 0.1\%$ is identified as a known or anticipated carcinogen by NTP. <u>OSHA:</u> No component of this product present at levels $\geq 0.1\%$ is identified as a carcinogen or potential carcinogen by NTP.
Reproductive toxicity	Not expected to cause reproductive or developmental effets
Specific target organ toxicity single exposure (GHS)	Not classified
Specific target organ toxicity repeated exposure (GHS)	Not classified
Aspiration hazard	No data available
Potential health effects	<u>Inhalation</u> : May be harmful if inhaled. Causes respiratory tract irritation. <u>Ingestion</u> : Harmful if swallowed. <u>Skin</u> : May be harmful if absorbed through skin. Causes skin irritation. <u>Eyes</u> : Causes eye irritation.

Signs and Symptoms of Exposure	No data available
Additional Information	RTECS: NA

Section 12: ECOLOGICAL INFORMATION

General	Prevent contamination of soil, ground and surface waters.		
	Do not discharge product unmonitored into the environment.		
Acute aquatic Toxicity	oxicity to daphnia and other aquatic invertebrates:		
	LC50 - Daphnia magna (Water flea) - 230 mg/l - 24 h		
Persistence and degradability	No data available		
Bioaccumulative potential	No data available		
Mobility in soil	No data available		
PBT and vPvB assessment	Not determined. Not listed on EC's PBT substances list.		
Other adverse effects	Do not allow the material to enter streams, sewers or other waterways		

Section 13: DISPOSAL CONSIDERATION

Product Disposal	Dispose of according all federal, state, and local environmental regulations.		
	Contact a licensed professional waste disposal service to dispose of this material.		
Packaging	Don not re-use empty containers. Empty residue into a suitable disposal site.		
	Contaminated packaging should be disposed of as unused product.		

Section 14: TRANSPORT INFORMATION

International Carriage of Dangerous Goods by Road (ADR)					
UN No.	1914				
Proper Shipping Name	BUTYL PROPIONATES				
Packing Group	111				
Class	3				
Tunnel restriction code					
Label	3				
Air Transport (ICAO/IATA)					
UN No.	1914				
Proper Shipping Name	BUTYL PROPIONATES				
Class	3				
Packing Group	111				
Sea Transport (IMDG)					
UN No.	1914				
Proper Shipping Name	BUTYL PROPIONATES				
Class	3				
Packing Group					
EmS	F-E, S-D				
Marine Pollutant	No				
DOT (US)					
Not dangerous goods					

Section 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the	Substance(s) is (are) either included in EINECS, ELINCS, NPL inventories or exempted
substance	
Hazard Symbol	Xi- Irritant
Risk Phrases	R 10 - Flammable.
	R 36/37/38 - Irritating to eyes, respiratory system, and skin.
Safety Phrases	 S 02 - Keep out of the reach of children. S 26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39 - Wear suitable clothing, gloves and eye/face protection.
WGK Germany	1
Chemical safety assessment	Not available

Section 16: OTHER INFORMATION

Hazardous materials identification system	Fire: 2	Health: 2	Reactivity: 0	Personal Protection: B			
This material should be used for industrial purposes only.							

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