MATERIAL SAFETY DATA SHEET

(Rev.1-May-2014)

Citronellyl Butyrate

Section 1:IDENTIFICATION OF THE SUBSTANCE AND OF COMPANY

Product Name	Citronellyl Butyrate
Chemical Name	3,7-dimethyloct-6-enyl Butyrate
CAS No.	141-16-2
EINECS No.	205-463-4
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 9825107638Email: info@breezeipl.com
Emergency telephone no.	+91 9825107638, +91 9925031257

Section 2: HAZARDS IDENTIFICATION

Classification as per	Skin irritation (Category 2), H315		
EC No. 1272/2008	Eye irritation (Category 2), H319		
	Specific target organ toxicity - single exposure (Category 3), H335		
Classification as per	Xi-Irritant		
Dir. 67/548/EEC			
OSHA Hazard	Combustible Liquid, Irritant		
Label elements including			
precautionary statement	Pictogram: Sigan Warning		
	\checkmark		
	Hazard statements: -		
	H315: Causes skin irritation.		
	H319: Causes serious eye irritation.		
	H335 May cause respiratory irritation.		
	Precautionary statements: -		
	P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.		
	P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.		
	Remove contact lenses, if present and easy to do. Continue rinsing.		
Risk Phrases	R36/37/38 – Irritating to skin and eyes		
HMIS Classification	Health hazard: 1 Flammability: 1 Physical hazards: 0		
NFPA Rating	Health hazard:1Fire:1Reactivity 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

Concentrationof the constituent	95-100% (%wt/wt)
Chemical name	3,7-dimethyloct-6-enyl Butyrate
Chemical Entity	Non-conjugated and accumulated unsaturated straight-chain and branched- chain aliphatic primary alcohols/aldehyde/acids, acetals and esters with esters containing unsaturated alcohols and acetals containing unsaturated alcohols or aldehydes. No aromatic or heteroaromatic moiety as a component of an ester or acetal.
Molecular Formula	$C_{14}H_{26}O_2$ (M.W.= 226.36 g/mol)
CAS No.	141-16-2
EC/EINECS No.	205-463-4
FEMA	2312

Section 4: FIRST AID MEASURES

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.
5	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,	Handle the product using protective gloves resistant to the the chemicals exposed. Avoid contact with skin andinhalation of its vapours or smoke. Maintain adequate
protective	ventilation in the working area after spilling.
equipment and	
emergency	
procedures	
Environmental	To avoid possible contamination of the environment.
precautions	Do not discharge into any drains, surface waters orgroundwaters
Methods and material for containment and cleaning up	Cover with an inert, inorganic, non-combustible absorbent material (e.g. dry-lime, sand, soda ash). Place incovered 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 ofin accordance with current laws and regulations.
Reference to other	Refer to section 13 Disposal considerations
sections	

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 beforereuse. 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 adequatelyventilated.



Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless liquid
Odor	Fruity, sweet, rosy
Boiling point	243°C @ 760 mmHg
Flash point (closed cup)	>110 °C
Ignition Temperature	No data available
Auto Inflammability	Not Determined
Explosive Property	Not Determined
Oxidizing Property	Not Determined
Vapour Pressure	0.003000 mm/Hg @ 20 °C
Vapour Density	7.8 (Air=1)
Solubility in Water	0.5878 mg/L @ 25 °C (est.)
Solubility in Alcohol	1:6 to 1:9 in 80% alcohol
Specific Gravity	0.873 – 0.882 @ 25 0C
Partition Coefficient(Octanol/Water)	5.224 (est)

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	Oral - rat LD50 >5000 mg/kg
	Skin-rabbit LD50 >5000 mg/kg (Moreno 1972a)
Inhalation Toxicity (LD_{50})	No data available
Skin corrosion/irritation	No data available
Human Experience	5% Solution – no irritation or sensitization
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	<u><i>IARC:</i></u> No component of this product present at levels <u>>0.1%</u> is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity	No data available
single exposure (GHS)	
Specific target organ toxicity	No data available
repeated exposure (GHS)	
Aspiration hazard	No data available
Potential health effects	Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Ingestion: 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: RH3430000 for CAS #141-16-2

Section 12: ECOLOGICAL INFORMATION

General	Prevent contamination of soil, ground and surface waters.			
	Do not discharge product unmonitoredinto the environment.			
Acute aquatic Toxicity	No data available			
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 serviceto 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.	N/A			
Proper Shipping Name	Not subject to ADR.			
Packing Group				
Class				
Tunnel restriction code				
Label				
Air Transport (ICAO/IATA)				
UN No.	Not Regulated			
Proper Shipping Name	Not restricted			
Class				
Packing Group				
Sea Transport (IMDG)				
UN No.	Not Regulated			
Proper Shipping Name	Not restricted			
Class				
Packing Group				
EmS				
Marine Pollutant	No			



Section 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific forthe substance	Substance(s) is(are) either included in EINECS, ELINCS, NPL inventories or exempted
Hazard Symbol	Xi- Irritant
Risk Phrases	R 36/38 - Irritating to skin and eyes.
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 seekmedical advice. S 36 - wear suitable protective clothing
WGK Germany	2
Chemical safety assessment	For this product a chemical safety assessment was not carried out

Section 16: OTHER INFORMATION

Hazardous materials identification system	Fire: 1	Health: 1	Reactivity: 0	Personal Protection: B		
This material should be used for industrial purposes only.						

DISCLAIMER

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