

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 04/03/2020 Revision date: 04/03/2020 Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Product name	: Acetates Blend
Product code	: AL0-131011
1.2. Recommended use and restriction	ns on use
No additional information available	
1.3. Supplier	
Phenova 6390 Joyce Dr. Suite 100 Golden, CO 80403 - United States T 1-866-942-2978 - F 1-866-283-0269 info@phenova.com - www.phenova.com	
1.4. Emergency telephone number	
Emergency number	: ChemTel Assistance (US/Canada) 1-800-255-3924 ChemTel Assistance (International) +1 813-248-0585
SECTION 2: Hazard(s) identificatio	n
2.1. Classification of the substance or	
GHS US classification	
Flammable liquids H225	Highly flammable liquid and vapour
Category 2 Serious eye damage/eye H319	Causes serious eye irritation
irritation Category 2 Full text of H statements : see section 16	
T un text of TT statements . see section To	
2.2. GHS Label elements, including pr	ecautionary statements
GHS US labeling	
Hazard pictograms (GHS US)	
Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: H225 - Highly flammable liquid and vapour H319 - Causes serious eye irritation
Precautionary statements (GHS US)	 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337+P313 - If eye irritation persists: Get medical advice/attention. P370+P378 - In case of fire: Use media other than water to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation P308+P313 - If exposed or concerned: Get medical advice/attention.
2.3. Other hazards which do not result	t in classification

2.3. Other nazards which do not result in classi

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/Information on ingredients

3.1. Substar

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.
sec-butyl acetate (Component)	(CAS-No.) 105-46-4	20
tert-butyl acetate (Component)	(CAS-No.) 540-88-5	20
n-butyl acetate (Component)	(CAS-No.) 123-86-4	15.3
isobutyl acetate (Component)	(CAS-No.) 110-19-0	15.3
ethyl acetate (Component)	(CAS-No.) 141-78-6	14.7
propyl acetate (Component)	(CAS-No.) 109-60-4	14.7

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effect	ts (acute and delayed)
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Immediate medical attention and sp	ecial treatment, if necessary
No additional information available	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguish	ing media
Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Specific hazards arising from the ch	nemical
No additional information available	
5.3. Special protective equipment and p	recautions for fire-fighters
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release meas	sures
6.1. Personal precautions, protective eq	uipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
	/ authorities if liquid enters sewers or public waters.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.3. Methods and material for containment and cleaning up			
Methods for cleaning up	: Take up in absorbent material. Collect spillage.		
6.4. Reference to other sections			
See Heading 8. Exposure controls and personal p	See Heading 8. Exposure controls and personal protection.		
SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.		
Hygiene measures	: Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.		
7.2. Conditions for safe storage, including	g any incompatibilities		
Storage conditions	: Keep container closed when not in use. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.		
Incompatible materials	: Direct sunlight.		

SECTION 8: Exposure controls/personal protection

1. Control par		
Acetates Blend		
ACGIH	Local name	sec-Butyl acetate
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	950 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
n-butyl acetate (123	3-86-4)	
ACGIH	Local name	n-Butyl acetate
ACGIH	ACGIH TWA (ppm)	150 ppm (n-Butyl acetate; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	200 ppm (n-Butyl acetate; USA; Short time value; TL\ - Adopted Value)
ACGIH	Remark (ACGIH)	Eye & URT irr
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	710 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	150 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA
sec-butyl acetate (1	05-46-4)	
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	ACGIH STEL (ppm)	150 ppm
tert-butyl acetate (5	i40-88-5)	
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	ACGIH STEL (ppm)	150 ppm
ethyl acetate (141-7	(8-6)	
ACGIH	Local name	Ethyl acetate
ACGIH	ACGIH TWA (ppm)	400 ppm
ACGIH	Remark (ACGIH)	URT & eye irr
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m ³)	1400 mg/m ³

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ethyl acetate (141-78-6)			
OSHA	OSHA PEL (TWA) (ppm)	400 ppm	
OSHA	Regulatory reference (US-OSHA)	OSHA	
isobutyl acetate (110-19-0)	isobutyl acetate (110-19-0)		
ACGIH	ACGIH TWA (ppm)	150 ppm	
propyl acetate (109-60-4)			
ACGIH	Local name	Propyl acetate isomers	
ACGIH	ACGIH TWA (ppm)	200 ppm (n-Propyl acetate; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)	
ACGIH	ACGIH STEL (ppm)	250 ppm (n-Propyl acetate; USA; Short time value; TLV - Adopted Value)	
ACGIH	Remark (ACGIH)	Eye & URT irr; CNS impair	
ACGIH	Regulatory reference	ACGIH 2018	
OSHA	OSHA PEL (TWA) (mg/m ³)	840 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	200 ppm	
OSHA	Regulatory reference (US-OSHA)	OSHA	

8.2. Appropriate engineering controls

Appropriate engineering controls

: Either local exhaust or general room ventilation is usually required.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.

Hand protection:

Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration

Eye protection:

Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact

Respiratory protection:

Wear appropriate mask

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties		
9.1. Information on basic phys	ical and chemical properties	
Physical state	: Liquid	
	: Colorless	
	: characteristic	
Odor threshold	: No data available	
pH	: No data available	
Melting point	: No data available	
04/03/2020	EN (English US)	4/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity	
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Not established.	
10.3. Possibility of hazardous reactions	
Not established.	
10.4. Conditions to avoid	
Direct sunlight. Extremely high or low temperatur	'es.
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
No additional information available	
SECTION 11: Toxicological informat	ion
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
n-butyl acetate (123-86-4)	
LD50 oral rat	10770 mg/kg (Rat; Equivalent or similar to OECD 423; Experimental value; 12789 mg/kg; Rat; Equivalent or similar to OECD 423; Experimental value; 10760 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 17600 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; >14112 mg/kg bodyweight; Rabbit)
ATE US (oral)	10770 mg/kg body weight
tert-butyl acetate (540-88-5)	
LD50 oral rat	4500 mg/kg body weight (EPA OTS 798.1175, Rat, Male / female, Experimental value, Oral, 014 day(s))
LD50 dermal rabbit	> 2000 mg/kg body weight (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (ppm)	4211 ppm (6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	4500 mg/kg body weight

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ethyl acetate (141-78-6)	
LD50 oral rat	10200 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral)
LD50 dermal rabbit	> 20000 mg/kg body weight (24 hour cuff method, 24 h, Rabbit, Male, Experimental value, Dermal)
ATE US (oral)	10200 mg/kg body weight
isobutyl acetate (110-19-0)	
LD50 oral rat	13413 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 014 day(s))
LD50 dermal rabbit	> 17400 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	> 30 mg/l (EPA OTS 798.6050, 6 h, Rat, Male / female, Read-across, Inhalation (vapours), 14 day(s))
ATE US (oral)	13413 mg/kg body weight
propyl acetate (109-60-4)	
LD50 oral rat	9370 mg/kg (Rat)
LD50 dermal rabbit	> 17700 mg/kg (Rabbit)
ATE US (oral)	9370 mg/kg body weight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
	Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

12.1. Toxicity

n-butyl acetate (123-86-4)		
LC50 fish 1	18 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow- through system; Fresh water; Experimental value)	
EC50 Daphnia 1	44 mg/l (48 h, Daphnia sp., Static system, Fresh water, Experimental value)	
sec-butyl acetate (105-46-4)		
LC50 fish 1	71 - 141 mg/l (Leuciscus idus)	
EC50 Daphnia 1	44 mg/l (Daphnia magna, Nocivity test)	
tert-butyl acetate (540-88-5)		
LC50 fish 1	240 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)	
EC50 Daphnia 1	350 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)	
ErC50 (algae)	16 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ethyl acetate (141-78-6)	
LC50 fish 1	230 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	154 mg/l (48 h, Daphnia magna, Literature)
isobutyl acetate (110-19-0)	
LC50 fish 1	16.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	24.6 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi- static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	397 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
propyl acetate (109-60-4)	
LC50 fish 1	56 - 64 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	318 mg/l (EC50; 24 h)
Threshold limit algae 2	26 mg/l (EC0; 168 h)
2.2. Persistence and degradability	
Acetates Blend	
Persistence and degradability	Not established.
n-butyl acetate (123-86-4)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.15 - 0.5 g O₂/g substance
Chemical oxygen demand (COD)	2.32 g O₂/g substance
ThOD	2.21 g O₂/g substance
BOD (% of ThOD)	0.46
sec-butyl acetate (105-46-4)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.15 - 0.5 g O₂/g substance
ThOD	2.2 g O ₂ /g substance
BOD (% of ThOD)	0.554 - 0.83 (20 day(s), Literature study)
tert-butyl acetate (540-88-5) Persistence and degradability	Not readily biodegradable in water.
ethyl acetate (141-78-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.293 g O ₂ /g substance
Chemical oxygen demand (COD)	
	1.69 g O₂/g substance
ThOD	1.82 g O₂/g substance
isobutyl acetate (110-19-0)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
ThOD	2.2 g O₂/g substance
BOD (% of ThOD)	0.6
propyl acetate (109-60-4)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.04 g O₂/g substance
BOD (% of ThOD)	0.62
2.3. Bioaccumulative potential	
Acetates Blend	
Bioaccumulative potential	Not established.
n-butyl acetate (123-86-4)	
BCF fish 1	14 (BCF)
4/03/2020	EN (English US) 7/11

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

n-butyl acetate (123-86-4)		
Log Pow	2.3 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
sec-butyl acetate (105-46-4)		
Log Pow	1.51 - 1.72	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
tert-butyl acetate (540-88-5)		
BCF fish 1	6.734 l/kg (BCFBAF v3.01, Estimated value, Fresh weight)	
Log Pow	1.64 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 21.7 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
ethyl acetate (141-78-6)		
BCF fish 1	30 (3 day(s), Leuciscus idus, Static system, Experimental value)	
Log Pow	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
isobutyl acetate (110-19-0)		
Log Pow	2.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
propyl acetate (109-60-4)	- -	
BCF fish 1	2.4 - 5.1 (BCF)	
Log Pow	1.23 - 1.60	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
2.4. Mobility in soil		
n-butyl acetate (123-86-4)		
Surface tension	0.0613 N/m (20 °C; 1 g/l)	
Log Koc	log Koc,SRC PCKOCWIN v2.0; 1.268 - 1.844; QSAR	
-		
Ecology - soil	Low potential for adsorption in soil.	
	Low potential for adsorption in soil.	
Ecology - soll sec-butyl acetate (105-46-4) Surface tension	Low potential for adsorption in soil. 0.023 N/m	
sec-butyl acetate (105-46-4) Surface tension		
sec-butyl acetate (105-46-4)	0.023 N/m	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension Log Koc	0.023 N/m	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension Log Koc Ecology - soil	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.084 - 1.833 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.084 - 1.833 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Highly mobile in soil.	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension Log Koc Ecology - soil ethyl acetate (141-78-6) Surface tension	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.084 - 1.833 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension Log Koc Ecology - soil ethyl acetate (141-78-6) Surface tension Ecology - soil	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.084 - 1.833 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Highly mobile in soil. 0.024 N/m (20 °C)	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension Log Koc Ecology - soil ethyl acetate (141-78-6) Surface tension	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.084 - 1.833 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Highly mobile in soil. 0.024 N/m (20 °C) Low potential for adsorption in soil.	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension Log Koc Ecology - soil ethyl acetate (141-78-6) Surface tension Ecology - soil isobutyl acetate (110-19-0) Surface tension	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.084 - 1.833 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Highly mobile in soil. 0.024 N/m (20 °C)	
Surface tension tert-butyl acetate (540-88-5) Surface tension Log Koc Ecology - soil ethyl acetate (141-78-6) Surface tension Ecology - soil isobutyl acetate (110-19-0)	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.084 - 1.833 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Highly mobile in soil. 0.024 N/m (20 °C) Low potential for adsorption in soil. 62.5 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)	
sec-butyl acetate (105-46-4) Surface tension tert-butyl acetate (540-88-5) Surface tension Log Koc Ecology - soil ethyl acetate (141-78-6) Surface tension Ecology - soil isobutyl acetate (110-19-0) Surface tension Log Koc	0.023 N/m 64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.084 - 1.833 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Highly mobile in soil. 0.024 N/m (20 °C) Low potential for adsorption in soil. 62.5 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions) 1.193 - 1.844 (log Koc, SRC PCKOCWIN v2.0, QSAR)	

12.5. Other adverse effects

Acetates Blend		
n-butyl acetate (123-86-4)		
sec-butyl acetate (105-46-4)		

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

tert-butyl acetate (540-88-5)		
ethyl acetate (141-78-6)		
isobutyl acetate (110-19-0)		
propyl acetate (109-60-4)		

Other information

: Avoid release to the environment.

Other mormation	
SECTION 13: Disposal consideration	าร
13.1. Disposal methods	
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information	
Department of Transportation (DOT)	
In accordance with DOT	
Transport document description	: UN1993 Flammable liquids, n.o.s., 3, II
UN-No.(DOT)	: UN1993
Proper Shipping Name (DOT)	: Flammable liquids, n.o.s.
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	: II - Medium Danger
Hazard labels (DOT)	: 3 - Flammable liquid
	PLANMABLE LEQUID 3
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Symbols	: G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	 IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal

		following: Degree of filling = $97/1 + a$ (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F). TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	60 L
DOT Vessel Stowage Location	:	B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

Emergency Response Guide (ERG) Number Other information

tion	,	· No supplementary information sysilable
tion		: No supplementary information available.

: 128

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transportation of Dangerous Goods

Not applicable

Transport by sea

Transport document description (IMDG)	: UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II
UN-No. (IMDG)	: 1993
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, N.O.S.
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger
Limited quantities (IMDG)	: 1L
A :	
Class (IMDG) Packing group (IMDG)	: 3 - Flammable liquids : II - substances presenting medium danger

Air transport

UN 1993 Flammable liquid, n.o.s., 3, II
1993
Flammable liquid, n.o.s.
3 - Flammable Liquids
II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

n-butyl acetate (123-86-4)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313			
CERCLA RQ 5000 lb			
sec-butyl acetate (105-46-4)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313			
CERCLA RQ	5000 lb		
tert-butyl acetate (540-88-5)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313			
CERCLA RQ	5000 lb		
ethyl acetate (141-78-6)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313			
CERCLA RQ	5000 lb		
isobutyl acetate (110-19-0)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313			
CERCLA RQ	5000 lb		
propyl acetate (109-60-4)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			

15.2. International regulations

CANADA

n-butyl acetate (123-86-4) Listed on the Canadian DSL (Domestic Substances List)

sec-butyl acetate (105-46-4)

Listed on the Canadian DSL (Domestic Substances List)

tert-butyl acetate (540-88-5)

Listed on the Canadian DSL (Domestic Substances List)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ethyl acetate (141-78-6)	
Listed on the Canadian DSL (Domestic Substances List)	
isobutyl acetate (110-19-0)	
Listed on the Canadian DSL (Domestic Substances List)	
propyl acetate (109-60-4)	
Listed on the Canadian DSL (Domestic Substances List)	

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information		
Rev	ision date	: 04/03/2020
Data	a sources	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Othe	er information	: None.
Full text of H-phrases:		
	H225	Highly flammable liquid and vapour
	H319	Causes serious eye irritation

Phenova US SDS REV

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