



JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 24/10/2019

Revision date: 26/11/2019

Supersedes: 21/11/2019

Version: 2.0

ES-5633

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures
Product name : JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX
Product code : ES-5633

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225
Skin Irrit. 2 H315

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11
Xi; R38

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2 H225
Skin Irrit. 2 H315

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Central nervous system, Kidneys.

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) : Danger

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard statements (CLP)	: H225 - Highly flammable liquid and vapor H315 - Causes skin irritation
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting equipment P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - IF ON SKIN: Wash with plenty of water. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

GHS-US labeling

Hazard pictograms (GHS-US)	:  
	GHS02 GHS07

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation

Precautionary statements (GHS-US) : 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 hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - If on skin: Wash with plenty of water
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P321 - Specific treatment (see supplemental first aid instruction on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
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

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
METHYL TERT-BUTYL ETHER UNLABELED	(CAS-No.) 1634-04-4 (EC-No.) 216-653-1 (EC Index-No.) 603-181-00-X (REACH-no) 01-2119452786-27	99.99525	F; R11 Xi; R38
MONO-(2-ETHYL-5-OXOHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE VI)	(CAS-No.) 40321-98-0 (Unlabeled)	0.000272	R42 Xi; R36/37/38 R43
MONOISOBUTYL PHTHALATE UNLABELED	(CAS-No.) 30833-53-5	0.000271	Repr.Cat.1; R60 Repr.Cat.1; R61 N; R50/53
MONO-2-ETHYLHEXYL PHTHALATE UNLABELED 95% CHEMICAL PURITY	(CAS-No.) 4376-20-9	0.000271	R42 Xi; R36/37/38 R43

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Directive 67/548/EEC
MONOMETHYL PHTHALATE UNLABELED	(CAS-No.) 4376-18-5 (EC-No.) 224-476-6	0.00027	Xi; R36/37/38
MONOETHYL PHTHALATE UNLABELED	(CAS-No.) 2306-33-4	0.00027	Xi; R36 Xi; R37 Xi; R38
MONO-N-BUTYL PHTHALATE UNLABELED	(CAS-No.) 131-70-4 (EC-No.) 205-036-2	0.00027	Repr.Cat.1; R60 Repr.Cat.1; R61 T; R23/24/25
MONO-[2-(CARBOXYMETHYL)HEXYL]PHTHALATE UNLABELED (DEHP METABOLITE IV)	(CAS-No.) 82975-93-7 (Unlabeled)	0.00027	Xi; R36/37/38
MONO(3,5,5-TRIMETHYL-1-HEXYL)PHTHALATE UNLABELED	(CAS-No.) 297182-83-3	0.00027	Xn; R22
MONO-2-ETHYLHEXYL TEREPHTHALATE UNLABELED	(CAS-No.) 155603-50-2	0.00027	Xi; R36/37/38
MONO(3-CARBOXYPROPYL)PHTHALATE UNLABELED	(CAS-No.) 66851-46-5 (Unlabeled)	0.00027	Repr.Cat.1; R60 Repr.Cat.1; R61 N; R50
MONOBENZYL PHTHALATE UNLABELED	(CAS-No.) 2528-16-7 (EC-No.) 219-771-1	0.00027	Xn; R22 Xi; R36
MONO-N-PENTYL PHTHALATE UNLABELED	(CAS-No.) 24539-56-8	0.00027	Repr.Cat.1; R60 Repr.Cat.3; R63 Xi; R36 Xi; R38 N; R50/53
MONO-(2-ETHYL-5-HYDROXYHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE IX)	(CAS-No.) 40321-99-1	0.00027	Xi; R36/37/38
MONO-(2-ETHYL-5-CARBOXPENTYL)PHTHALATE (DEHP METABOLITE V) UNLABELED	(CAS-No.) 40809-41-4	0.000269	Xi; R36/37/38
MONO-N-OCTYL PHTHALATE UNLABELED	(CAS-No.) 5393-19-1	0.000269	R42 Xi; R36/37/38 R43
MONOCYCLOHEXYL PHTHALATE UNLABELED	(CAS-No.) 7517-36-4 (EC Index-No.)	0.000267	Xi; R36/37/38
MONO-(4-METHYL-7-HYDROXYOCTYL) PHTHALATE UNLABELED	(CAS-No.) 936021-98-6	0.000027	Xi; R36/37/38 Xn; R22
MONO-(4-METHYL-7-OXO-OCTYL) PHTHALATE UNLABELED	(CAS-No.) 936022-00-3	0.000027	Xi; R36/37/38 Xn; R22
MONO-(4-METHYL-7-CARBOXYHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 936022-02-5 (EC Index-No.)	0.000027	Not classified
MONO-(4-METHYL-7-CARBOXYOCTYL) PHTHALATE UNLABELED	(EC Index-No.)	0.000027	Not classified
MONO-(8-CARBOXYNONYL) PHTHALATE UNLABELED	(EC Index-No.)	0.000027	Xn; R22
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED)	(CAS-No.) 63468-10-0	0.000027	Xn; R22
1,2,4-BENZENETRICARBOXYLIC ACID, 2,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED)	(CAS-No.) 63468-11-1 (EC Index-No.)	0.000027	Xn; R22
MONO-(6-HYDROXY-2-PROPYLHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 1372605-11-2 (EC Index-No.)	0.000027	Not classified
MONO-(6-OXO-2-PROPYLHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 1373125-92-8 (EC Index-No.)	0.000027	Not classified
MONO-(6-CARBOXY-2-PROPYLHEXYL) PHTHALATE UNLABELED	(CAS-No.) 1412411-10-9 (EC Index-No.)	0.000027	Xn; R22
MONO-(7-CARBOXYOCTYL) PHTHALATE UNLABELED	(EC Index-No.)	0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL OCTYL) ESTER (UNLABELED)	(EC Index-No.)	0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO(7-HYDROXY-4-METHYLOCTYL) ESTER (UNLABELED) 95% CP	(CAS-No.) 1637562-52-7 (EC Index-No.)	0.000027	Xi; R36 R43
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL-7-OXOOCTYL) ESTER (UNLABELED) 95% CHEMICAL PURITY	(CAS-No.) 1588520-62-0	0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(7-CARBOXY-4-METHYLHEPTYL) ESTER (UNLABELED)	(CAS-No.) 1637562-51-6	0.000027	Not classified

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Directive 67/548/EEC
1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-BIS(2-ETHYLHEXYL) ESTER (UNL) (CONTAINS 5% 2,4-REGIOISOMER)	(CAS-No.) 63468-09-7	0.000027	Xn; R22
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
METHYL TERT-BUTYL ETHER UNLABELED	(CAS-No.) 1634-04-4 (EC-No.) 216-653-1 (EC Index-No.) 603-181-00-X (REACH-no) 01-2119452786-27	99.99525	Flam. Liq. 2, H225 Skin Irrit. 2, H315
MONO-(2-ETHYL-5-OXOHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE VI)	(CAS-No.) 40321-98-0 (Unlabeled)	0.000272	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
MONOISOBUTYL PHTHALATE UNLABELED	(CAS-No.) 30833-53-5	0.000271	Repr. 1B, H360FD Aquatic Acute 1, H400 Aquatic Chronic 1, H410
MONO-2-ETHYLHEXYL PHTHALATE UNLABELED 95% CHEMICAL PURITY	(CAS-No.) 4376-20-9	0.000271	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335
MONOMETHYL PHTHALATE UNLABELED	(CAS-No.) 4376-18-5 (EC-No.) 224-476-6	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONOETHYL PHTHALATE UNLABELED	(CAS-No.) 2306-33-4	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO-N-BUTYL PHTHALATE UNLABELED	(CAS-No.) 131-70-4 (EC-No.) 205-036-2	0.00027	Repr. 1B, H360
MONO-[2-(CARBOXYMETHYL)HEXYL]PHTHALATE UNLABELED (DEHP METABOLITE IV)	(CAS-No.) 82975-93-7 (Unlabeled)	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336
MONO(3,5,5-TRIMETHYL-1-HEXYL)PHTHALATE UNLABELED	(CAS-No.) 297182-83-3	0.00027	Acute Tox. 4 (Oral), H302
MONO-2-ETHYLHEXYL TEREPHTHALATE UNLABELED	(CAS-No.) 155603-50-2	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO(3-CARBOXYPROPYL)PHTHALATE UNLABELED	(CAS-No.) 66851-46-5 (Unlabeled)	0.00027	Repr. 1B, H360FD Aquatic Acute 1, H400
MONOBENZYL PHTHALATE UNLABELED	(CAS-No.) 2528-16-7 (EC-No.) 219-771-1	0.00027	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
MONO-N-PENTYL PHTHALATE UNLABELED	(CAS-No.) 24539-56-8	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1A, H360Fd Aquatic Acute 1, H400 Aquatic Chronic 1, H410
MONO-(2-ETHYL-5-HYDROXYHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE IX)	(CAS-No.) 40321-99-1	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO-(2-ETHYL-5-CARBOXPENTYL)PHTHALATE (DEHP METABOLITE V) UNLABELED	(CAS-No.) 40809-41-4	0.000269	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO-N-OCTYL PHTHALATE UNLABELED	(CAS-No.) 5393-19-1	0.000269	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335
MONOCYCLOHEXYL PHTHALATE UNLABELED	(CAS-No.) 7517-36-4 (EC Index-No.)	0.000267	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO-(4-METHYL-7-HYDROXYOCTYL) PHTHALATE UNLABELED	(CAS-No.) 936021-98-6	0.000027	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO-(4-METHYL-7-OXO-OCTYL) PHTHALATE UNLABELED	(CAS-No.) 936022-00-3	0.000027	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO-(4-METHYL-7-CARBOXYHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 936022-02-5 (EC Index-No.)	0.000027	Not classified
MONO-(4-METHYL-7-CARBOXYOCTYL) PHTHALATE UNLABELED	(EC Index-No.)	0.000027	Not classified
MONO-(8-CARBOXYNONYL) PHTHALATE UNLABELED	(EC Index-No.)	0.000027	Acute Tox. 4 (Oral), H302

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED)	(CAS-No.) 63468-10-0	0.000027	Acute Tox. 4 (Oral), H302
1,2,4-BENZENETRICARBOXYLIC ACID, 2,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED)	(CAS-No.) 63468-11-1 (EC Index-No.)	0.000027	Acute Tox. 4 (Oral), H302
MONO-(6-HYDROXY-2-PROPYLHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 1372605-11-2 (EC Index-No.)	0.000027	Not classified
MONO-(6-OXO-2-PROPYLHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 1373125-92-8 (EC Index-No.)	0.000027	Not classified
MONO-(6-CARBOXY-2-PROPYLHEXYL) PHTHALATE UNLABELED	(CAS-No.) 1412411-10-9 (EC Index-No.)	0.000027	Acute Tox. 4 (Oral), H302
MONO-(7-CARBOXYOCTYL) PHTHALATE UNLABELED	(EC Index-No.)	0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL OCTYL) ESTER (UNLABELED)	(EC Index-No.)	0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO(7-HYDROXY-4-METHYLOCTYL) ESTER (UNLABELED) 95% CP	(CAS-No.) 1637562-52-7 (EC Index-No.)	0.000027	Eye Irrit. 2, H319 Skin Sens. 1, H317
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL-7-OXOOCTYL) ESTER (UNLABELED) 95% CHEMICAL PURITY	(CAS-No.) 1588520-62-0	0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(7-CARBOXY-4-METHYLHEPTYL) ESTER (UNLABELED)	(CAS-No.) 1637562-51-6	0.000027	Not classified
1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-BIS(2-ETHYLHEXYL) ESTER (UNL) (CONTAINS 5% 2,4-REGIOISOMER)	(CAS-No.) 63468-09-7	0.000027	Acute Tox. 4 (Oral), H302

Name	Product identifier	%	GHS-US classification
METHYL TERT-BUTYL ETHER UNLABELED	(CAS-No.) 1634-04-4	99.99525	Flam. Liq. 2, H225 Skin Irrit. 2, H315
MONO-(2-ETHYL-5-OXOHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE VI)	(CAS-No.) 40321-98-0 (Unlabeled)	0.000272	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335
MONOISOBUTYL PHTHALATE UNLABELED	(CAS-No.) 30833-53-5	0.000271	Repr. 1B, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
MONO-2-ETHYLHEXYL PHTHALATE UNLABELED 95% CHEMICAL PURITY	(CAS-No.) 4376-20-9	0.000271	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335
MONOMETHYL PHTHALATE UNLABELED	(CAS-No.) 4376-18-5	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
MONOETHYL PHTHALATE UNLABELED	(CAS-No.) 2306-33-4	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
MONO-N-BUTYL PHTHALATE UNLABELED	(CAS-No.) 131-70-4	0.00027	Repr. 1B, H360 Aquatic Acute 2, H401
MONO-[2-(CARBOXYMETHYL)HEXYL]PHTHALATE UNLABELED (DEHP METABOLITE IV)	(CAS-No.) 82975-93-7 (Unlabeled)	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336
MONO(3,5,5-TRIMETHYL-1-HEXYL)PHTHALATE UNLABELED	(CAS-No.) 297182-83-3	0.00027	Acute Tox. 4 (Oral), H302
MONO-2-ETHYLHEXYL TEREPHTHALATE UNLABELED	(CAS-No.) 155603-50-2	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
MONO(3-CARBOXYPROPYL)PHTHALATE UNLABELED	(CAS-No.) 66851-46-5 (Unlabeled)	0.00027	Repr. 1B, H360 Aquatic Acute 1, H400
MONOBENZYL PHTHALATE UNLABELED	(CAS-No.) 2528-16-7	0.00027	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
MONO-N-PENTYL PHTHALATE UNLABELED	(CAS-No.) 24539-56-8	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 1B, H350 Repr. 1A, H360 Aquatic Chronic 1, H410
MONO-(2-ETHYL-5-HYDROXYHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE IX)	(CAS-No.) 40321-99-1	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
MONO-(2-ETHYL-5-CARBOXPENTYL)PHTHALATE (DEHP METABOLITE V) UNLABELED	(CAS-No.) 40809-41-4	0.000269	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS-US classification
MONO-N-OCTYL PHTHALATE UNLABELED	(CAS-No.) 5393-19-1	0.000269	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335
MONOCYCLOHEXYL PHTHALATE UNLABELED	(CAS-No.) 7517-36-4	0.000267	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
MONO-(4-METHYL-7-HYDROXYOCTYL) PHTHALATE UNLABELED	(CAS-No.) 936021-98-6	0.000027	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO-(4-METHYL-7-OXO-OCTYL) PHTHALATE UNLABELED	(CAS-No.) 936022-00-3	0.000027	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
MONO-(4-METHYL-7-CARBOXYHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 936022-02-5	0.000027	Not classified
MONO-(4-METHYL-7-CARBOXYOCTYL) PHTHALATE UNLABELED		0.000027	Not classified
MONO-(8-CARBOXYNONYL) PHTHALATE UNLABELED		0.000027	Acute Tox. 4 (Oral), H302
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED)	(CAS-No.) 63468-10-0	0.000027	Acute Tox. 4 (Oral), H302
1,2,4-BENZENETRICARBOXYLIC ACID, 2,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED)	(CAS-No.) 63468-11-1	0.000027	Acute Tox. 4 (Oral), H302
MONO-(6-HYDROXY-2-PROPYLHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 1372605-11-2	0.000027	Not classified
MONO-(6-OXO-2-PROPYLHEPTYL) PHTHALATE UNLABELED	(CAS-No.) 1373125-92-8	0.000027	Not classified
MONO-(6-CARBOXY-2-PROPYLHEXYL) PHTHALATE UNLABELED	(CAS-No.) 1412411-10-9	0.000027	Acute Tox. 4 (Oral), H302
MONO-(7-CARBOXYOCTYL) PHTHALATE UNLABELED		0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL OCTYL) ESTER (UNLABELED)		0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO(7-HYDROXY-4-METHYLOCTYL) ESTER (UNLABELED) 95% CP	(CAS-No.) 1637562-52-7	0.000027	Eye Irrit. 2, H319 Skin Sens. 1, H317
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL-7-OXOOCTYL) ESTER (UNLABELED) 95% CHEMICAL PURITY	(CAS-No.) 1588520-62-0	0.000027	Not classified
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(7-CARBOXY-4-METHYLHEPTYL) ESTER (UNLABELED)	(CAS-No.) 1637562-51-6	0.000027	Not classified
1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-BIS(2-ETHYLHEXYL) ESTER (UNL) (CONTAINS 5% 2,4-REGIOISOMER)	(CAS-No.) 63468-09-7	0.000027	Acute Tox. 4 (Oral), H302

Full text of R- and H- phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
Other information : Use water spray to cool exposed surfaces.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment as required. Avoid breathing vapors, mist, gas. Provide adequate ventilation to minimize dust and/or vapor concentrations. Avoid dust formation. Evacuate area. Remove all sources of ignition. Special attention should be given to low areas/pits where flammable vapors can accumulate.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. This material and its container must be disposed of in a safe way, and as per local legislation.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, spray, vapors. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Prevent the build-up of electrostatic charge. Provide adequate ventilation to minimize dust and/or vapor concentrations.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed.
Storage conditions : Store refrigerated (-5 °C to 5 °C). Protect from light.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV) Remarks: Upper Respiratory Tract irritation. Kidney damage. Confirmed animal carcinogen with unknown relevance to humans.
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	144 mg/m ³ Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107).
USA OSHA	OSHA PEL (Ceiling) (ppm)	40 ppm Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107).

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV) Remarks: Upper Respiratory Tract irritation. Kidney damage. Confirmed animal carcinogen with unknown relevance to humans.
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	144 mg/m ³ Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107).
USA OSHA	OSHA PEL (Ceiling) (ppm)	40 ppm Basis: California permissible exposure limits for chemical contaminants. (Title 8, Article 107).
MONO-N-PENTYL PHTHALATE UNLABELED (24539-56-8)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
USA OSHA	OSHA PEL (STEL) (mg/m ³)	5 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state	: Liquid
Appearance	: Liquid
Molecular mass	: 88.15 g/mol
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -108.6 °C (-163.5 °F)
Freezing point	: No data available
Boiling point	: 55 - 56 °C (131 - 133 °F) - lit.
Flash point	: -33 °C (- 27.4 °F) - closed cup
Auto-ignition temperature	: 374 °C (705.2 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 1018.7 hPa (764.1 mmHg) at 55°C (131°F), 279.2 hPa (209.4 mmHg) at 20 °C (68°F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.74 g/ml at 25 °C (77 °F)
Solubility	: Water: 42 g/l at 20 °C (68 °F) - OECD Test Guideline 105
Log Pow	: 1.06
Log Kow	: No data available
Viscosity, kinematic	: 0.464 mm ² /s at 20 °C (68 °F) - 0.409 mm ² /s at 40 °C (104 °F)
Viscosity, dynamic	: No data available
Explosive properties	: No data available

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Oxidizing properties : No data available
Explosion limits : 1.6 - 15.1 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Oxidizing agent. Strong acids.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX	
LD50 oral rat	4000 mg/kg
LC50 inhalation rat (ppm)	23576 ppm/4h
MONO-(4-METHYL-7-HYDROXYOCTYL) PHTHALATE UNLABELED (936021-98-6)	
ATE CLP (oral)	500.000 mg/kg body weight
MONO-(8-CARBOXYNONYL) PHTHALATE UNLABELED	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,4-BENZENETRICARBOXYLIC ACID, 2,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-11-1)	
ATE CLP (oral)	500.000 mg/kg body weight
MONO-(6-CARBOXY-2-PROPYLHEXYL) PHTHALATE UNLABELED (1412411-10-9)	
ATE CLP (oral)	500.000 mg/kg body weight
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
LD50 oral rat	4000 mg/kg
LC50 inhalation rat (ppm)	23576 ppm/4h
MONOBENZYL PHTHALATE UNLABELED (2528-16-7)	
LD50 oral rat	750 mg/kg
ATE CLP (oral)	750.000 mg/kg body weight
MONO-N-PENTYL PHTHALATE UNLABELED (24539-56-8)	
LD50 oral rat	30000 mg/kg
LD50 dermal rabbit	25000 mg/kg
ATE CLP (oral)	30000.000 mg/kg body weight
ATE CLP (dermal)	25000.000 mg/kg body weight
1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-BIS(2-ETHYLHEXYL) ESTER (UNL) (CONTAINS 5% 2,4-REGIOISOMER) (63468-09-7)	
ATE CLP (oral)	500.000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
Skin - Rabbit - Causes skin irritation

Serious eye damage/irritation : Not classified
Eyes - Rabbit - No eye irritation

Respiratory or skin sensitization : Will not occur

Germ cell mutagenicity : Not classified

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. central nervous system. Dizziness. Nausea. Vomiting. IF INHALED: Risk of pneumonia.
IARC group	: 2B
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX	
LC50 fish 1	672 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	472 mg/l Daphnia magna (Water flea) - 48 h
EC50 other aquatic organisms 1	491 mg/l Pseudokirchneriella subcapitata (green algae) - 96 h
LC50 fish 2	> 1000 mg/l other fish - 96 h
MONO-N-BUTYL PHTHALATE UNLABELED (131-70-4)	
EC50 Daphnia 1	2.06 mg/l Daphnia magna (Water flea) - 48 h
MONO-2-ETHYLHEXYL TEREPHTHALATE UNLABELED (155603-50-2)	
Additional information	May cause long lasting harmful effects to aquatic life. 100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
LC50 fish 1	672 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	472 mg/l Daphnia magna (Water flea) - 48 h
EC50 other aquatic organisms 1	491 mg/l Pseudokirchneriella subcapitata (green algae) - 96 h
LC50 fish 2	> 1000 mg/l other fish - 96 h
MONO-N-PENTYL PHTHALATE UNLABELED (24539-56-8)	
LC50 fish 1	0.67 mg/l Pimephales promelas (fathead minnow)
EC50 Daphnia 1	0.16 mg/l daphnia magna (Water flea) -48 h

12.2. Persistence and degradability

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX	
Persistence and degradability	Not readily biodegradable. (OECD 301D method).
Biodegradation	0 %
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
Persistence and degradability	Not readily biodegradable. (OECD 301D method).
Biodegradation	0 %

12.3. Bioaccumulative potential

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX	
Log Pow	1.06
MONO-(4-METHYL-7-OXO-OCTYL) PHTHALATE UNLABELED (936022-00-3)	
Log Pow	3.327
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
Log Pow	1.06
MONOBENZYL PHTHALATE UNLABELED (2528-16-7)	
Log Pow	3.23

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

MONO-N-PENTYL PHTHALATE UNLABELED (24539-56-8)

Bioconcentration factor (BCF REACH)	113
Bioaccumulative potential	Bioaccumulative Potential: Oncorhynchus mykiss (rainbow trout) - 100 d.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.
- Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
- Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

- UN-No.(DOT) : 2398
- DOT NA no. UN2398

14.2. UN proper shipping name

- Proper Shipping Name (DOT) : Methyl tert-butyl ether
- Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
- Hazard labels (DOT) : 3 - Flammable liquid



- Packing group (DOT) : II - Medium Danger
- 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..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the 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.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 150
- DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
- DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

- Emergency Response Guide (ERG) Number : 127
- Other information : No supplementary information available.
- Special transport precautions : Not classified as dangerous in the meaning of transport regulations.

Overland transport

- Hazard identification number (Kemler No.) : 33
- Orange plates :



- Tunnel restriction code (ADR) : D/E
- Limited quantities (ADR) : 11

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

EAC : •3YE
Excepted quantities (ADR) : E2

Transport by sea

DOT Vessel Stowage Location : E - 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, but is prohibited from carriage on passenger vessels in which the limiting number of passengers is exceeded.

MFAG-No : 127

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

Special transport precautions : Not classified as dangerous in the meaning of transport regulations.

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
MONO-(4-METHYL-7-HYDROXYOCTYL) PHTHALATE UNLABELED (936021-98-6)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
MONO-(4-METHYL-7-OXO-OCTYL) PHTHALATE UNLABELED (936022-00-3)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO-(4-METHYL-7-CARBOXYHEPTYL) PHTHALATE UNLABELED (936022-02-5)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
MONO-(4-METHYL-7-CARBOXYOCTYL) PHTHALATE UNLABELED	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
MONO-(8-CARBOXYNONYL) PHTHALATE UNLABELED	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
1,2,4-BENZENETRICARBOXYLIC ACID, 2,4-BIS(2-ETHYL HEXYL) ESTER (UNLABELED) (63468-11-1)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
MONO-(6-HYDROXY-2-PROPYLHEPTYL) PHTHALATE UNLABELED (1372605-11-2)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
MONO-(6-OXO-2-PROPYLHEPTYL) PHTHALATE UNLABELED (1373125-92-8)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
MONO-(6-CARBOXY-2-PROPYLHEXYL) PHTHALATE UNLABELED (1412411-10-9)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
MONOMETHYL PHTHALATE UNLABELED (4376-18-5)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONOETHYL PHTHALATE UNLABELED (2306-33-4)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO-N-BUTYL PHTHALATE UNLABELED (131-70-4)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONOISOBUTYL PHTHALATE UNLABELED (30833-53-5)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO-(2-ETHYL-5-CARBOXPENTYL)PHTHALATE (DEHP METABOLITE V) UNLABELED (40809-41-4)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
MONO-[2-(CARBOXYMETHYL)HEXYL]PHTHALATE UNLABELED (DEHP METABOLITE IV) (82975-93-7 (Unlabeled))	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO-N-OCTYL PHTHALATE UNLABELED (5393-19-1)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO(3,5,5-TRIMETHYL-1-HEXYL)PHTHALATE UNLABELED (297182-83-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

MONO-2-ETHYLHEXYL TEREPHTHALATE UNLABELED (155603-50-2)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
MONO(3-CARBOXYPROPYL)PHTHALATE UNLABELED (66851-46-5 (Unlabeled))	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
MONOBENZYL PHTHALATE UNLABELED (2528-16-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO-N-PENTYL PHTHALATE UNLABELED (24539-56-8)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Subject to reporting requirements of United States SARA Section 302
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
MONOCYCLOHEXYL PHTHALATE UNLABELED (7517-36-4)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
MONO-(2-ETHYL-5-HYDROXYHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE IX) (40321-99-1)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO-(2-ETHYL-5-OXOHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE VI) (40321-98-0 (Unlabeled))	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO-2-ETHYLHEXYL PHTHALATE UNLABELED 95% CHEMICAL PURITY (4376-20-9)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
MONO-(7-CARBOXYOCTYL) PHTHALATE UNLABELED	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL OCTYL) ESTER (UNLABELED)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO(7-HYDROXY-4-METHYLOCTYL) ESTER (UNLABELED) 95% CP (1637562-52-7)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL-7-OXOOCTYL) ESTER (UNLABELED) 95% CHEMICAL PURITY (1588520-62-0)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(7-CARBOXY-4-METHYLHEPTYL) ESTER (UNLABELED) (1637562-51-6)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-BIS(2-ETHYLHEXYL) ESTER (UNL) (CONTAINS 5% 2,4-REGIOISOMER) (63468-09-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

15.2. International regulations

CANADA

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX	
Listed on the Canadian DSL (Domestic Substances List)	
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)	
Listed on the Canadian DSL (Domestic Substances List)	
MONO(3,5,5-TRIMETHYL-1-HEXYL)PHTHALATE UNLABELED (297182-83-3)	
Listed on the Canadian DSL (Domestic Substances List)	
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)	
Listed on the Canadian DSL (Domestic Substances List)	
MONOBENZYL PHTHALATE UNLABELED (2528-16-7)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-BIS(2-ETHYLHEXYL) ESTER (UNL) (CONTAINS 5% 2,4-REGIOISOMER) (63468-09-7)	
Listed on the Canadian DSL (Domestic Substances List)	

15.2.1. National regulations

15.3. US State regulations

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX()				
U.S. - California - Proposition 65 - Carcinogens List	No			
U.S. - California - Proposition 65 - Developmental Toxicity	No			
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No			
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No			
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List			
MONO-(4-METHYL-7-HYDROXYOCTYL) PHTHALATE UNLABELED (936021-98-6)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(4-METHYL-7-OXO-OCTYL) PHTHALATE UNLABELED (936022-00-3)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity -	U.S. - California - Proposition 65 - Reproductive Toxicity -	No significant risk level (NSRL)

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

MONO-(4-METHYL-7-OXO-OCTYL) PHTHALATE UNLABELED (936022-00-3)				
		Female	Male	
No	No	No	No	
MONO-(4-METHYL-7-CARBOXYHEPTYL) PHTHALATE UNLABELED (936022-02-5)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(4-METHYL-7-CARBOXYOCTYL) PHTHALATE UNLABELED				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(8-CARBOXYNONYL) PHTHALATE UNLABELED				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
1,2,4-BENZENETRICARBOXYLIC ACID, 2,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-11-1)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(6-HYDROXY-2-PROPYLHEPTYL) PHTHALATE UNLABELED (1372605-11-2)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(6-OXO-2-PROPYLHEPTYL) PHTHALATE UNLABELED (1373125-92-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(6-CARBOXY-2-PROPYLHEXYL) PHTHALATE UNLABELED (1412411-10-9)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONOMETHYL PHTHALATE UNLABELED (4376-18-5)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

MONOMETHYL PHTHALATE UNLABELED (4376-18-5)				
No	No	No	No	
MONOETHYL PHTHALATE UNLABELED (2306-33-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-N-BUTYL PHTHALATE UNLABELED (131-70-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONOISOBUTYL PHTHALATE UNLABELED (30833-53-5)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(2-ETHYL-5-CARBOXYPENTYL)PHTHALATE (DEHP METABOLITE V) UNLABELED (40809-41-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-[2-(CARBOXYMETHYL)HEXYL]PHTHALATE UNLABELED (DEHP METABOLITE IV) (82975-93-7 (Unlabeled))				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-N-OCTYL PHTHALATE UNLABELED (5393-19-1)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO(3,5,5-TRIMETHYL-1-HEXYL)PHTHALATE UNLABELED (297182-83-3)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-2-ETHYLHEXYL TEREPHTHALATE UNLABELED (155603-50-2)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO(3-CARBOXYPROPYL)PHTHALATE UNLABELED (66851-46-5 (Unlabeled))				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	Yes	Yes	

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONOBENZYL PHTHALATE UNLABELED (2528-16-7)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-N-PENTYL PHTHALATE UNLABELED (24539-56-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	No	No	
MONOCYCLOHEXYL PHTHALATE UNLABELED (7517-36-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(2-ETHYL-5-HYDROXYHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE IX) (40321-99-1)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(2-ETHYL-5-OXOHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE VI) (40321-98-0 (Unlabeled))				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-2-ETHYLHEXYL PHTHALATE UNLABELED 95% CHEMICAL PURITY (4376-20-9)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(7-CARBOXYOCTYL) PHTHALATE UNLABELED				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL OCTYL) ESTER (UNLABELED)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO(7-HYDROXY-4-METHYLOCTYL) ESTER (UNLABELED) 95% CP (1637562-52-7)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO(7-HYDROXY-4-METHYLOCTYL) ESTER (UNLABELED) 95% CP (1637562-52-7)				
		Female	Male	
No	No	No	No	
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL-7-OXOOCTYL) ESTER (UNLABELED) 95% CHEMICAL PURITY (1588520-62-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(7-CARBOXY-4-METHYLHEPTYL) ESTER (UNLABELED) (1637562-51-6)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-BIS(2-ETHYLHEXYL) ESTER (UNL) (CONTAINS 5% 2,4-REGIOISOMER) (63468-09-7)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
MONO-(4-METHYL-7-HYDROXYOCTYL) PHTHALATE UNLABELED (936021-98-6)				
State or local regulations				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List				
MONO-(4-METHYL-7-OXO-OCTYL) PHTHALATE UNLABELED (936022-00-3)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
MONO-(4-METHYL-7-CARBOXYHEPTYL) PHTHALATE UNLABELED (936022-02-5)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
MONO-(4-METHYL-7-CARBOXYOCTYL) PHTHALATE UNLABELED				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
MONO-(8-CARBOXYNONYL) PHTHALATE UNLABELED				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
1,2,4-BENZENETRICARBOXYLIC ACID, 1,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-10-0)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
1,2,4-BENZENETRICARBOXYLIC ACID, 2,4-BIS(2-ETHYLHEXYL) ESTER (UNLABELED) (63468-11-1)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

MONO-(6-HYDROXY-2-PROPYLHEPTYL) PHTHALATE UNLABELED (1372605-11-2)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-(6-OXO-2-PROPYLHEPTYL) PHTHALATE UNLABELED (1373125-92-8)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-(6-CARBOXY-2-PROPYLHEXYL) PHTHALATE UNLABELED (1412411-10-9)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONOMETHYL PHTHALATE UNLABELED (4376-18-5)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONOETHYL PHTHALATE UNLABELED (2306-33-4)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-N-BUTYL PHTHALATE UNLABELED (131-70-4)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONOISOBUTYL PHTHALATE UNLABELED (30833-53-5)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-(2-ETHYL-5-CARBOXPENTYL)PHTHALATE (DEHP METABOLITE V) UNLABELED (40809-41-4)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-[2-(CARBOXYMETHYL)HEXYL]PHTHALATE UNLABELED (DEHP METABOLITE IV) (82975-93-7 (Unlabeled))
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-N-OCTYL PHTHALATE UNLABELED (5393-19-1)
State or local regulations
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
MONO(3,5,5-TRIMETHYL-1-HEXYL)PHTHALATE UNLABELED (297182-83-3)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-2-ETHYLHEXYL TEREPHTHALATE UNLABELED (155603-50-2)
State or local regulations
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
MONO(3-CARBOXYPROPYL)PHTHALATE UNLABELED (66851-46-5 (Unlabeled))
State or local regulations
U.S. - New Jersey - Right to Know Hazardous Substance List

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

MONO(3-CARBOXYPROPYL)PHTHALATE UNLABELED (66851-46-5 (Unlabeled))
U.S. - Pennsylvania - RTK (Right to Know) List
METHYL TERT-BUTYL ETHER UNLABELED (1634-04-4)
State or local regulations
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
MONOBENZYL PHTHALATE UNLABELED (2528-16-7)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-N-PENTYL PHTHALATE UNLABELED (24539-56-8)
State or local regulations
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONOCYCLOHEXYL PHTHALATE UNLABELED (7517-36-4)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-(2-ETHYL-5-HYDROXYHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE IX) (40321-99-1)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-(2-ETHYL-5-OXOHEXYL)PHTHALATE UNLABELED (DEHP METABOLITE VI) (40321-98-0 (Unlabeled))
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-2-ETHYLHEXYL PHTHALATE UNLABELED 95% CHEMICAL PURITY (4376-20-9)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
MONO-(7-CARBOXYOCTYL) PHTHALATE UNLABELED
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL OCTYL) ESTER (UNLABELED)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO(7-HYDROXY-4-METHYLOCTYL) ESTER (UNLABELED) 95% CP (1637562-52-7)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(4-METHYL-7-OXOOCTYL) ESTER (UNLABELED) 95% CHEMICAL PURITY (1588520-62-0)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(7-CARBOXY-4-METHYLHEPTYL) ESTER (UNLABELED) (1637562-51-6)
State or local regulations
U.S. - Pennsylvania - RTK (Right to Know) List

JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

CYCLOHEXANE-1,2-DICARBOXYLIC ACID, MONO-(7-CARBOXY-4-METHYLHEPTYL) ESTER (UNLABELED) (1637562-51-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

1,2,4-BENZENETRICARBOXYLIC ACID, 1,2-BIS(2-ETHYLHEXYL) ESTER (UNL) (CONTAINS 5% 2,4-REGIOISOMER) (63468-09-7)

State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Repr. 1A	Reproductive toxicity Category 1A
Repr. 1B	Reproductive toxicity Category 1B
Repr. 1B	Reproductive toxicity Category 1B
Resp. Sens. 1	Respiratory sensitization, Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H360	May damage fertility or the unborn child
H360FD	May damage fertility. May damage the unborn child.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R22	Harmful if swallowed
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R37	Irritating to respiratory system
R38	Irritating to skin
R42	May cause sensitization by inhalation
R43	May cause sensitization by skin contact
R50	Very toxic to aquatic organisms
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R60	May impair fertility
R61	May cause harm to the unborn child
R63	Possible risk of harm to the unborn child
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

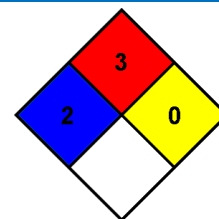
JECS PHTHALATE/PHTHALATE REPLACEMENT METABOLITES NATIVE MIX

ES-5633

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 3 Serious Hazard
Physical	: 0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product