

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : MULAN CITRO USA
Product code : 1455

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Booster
Recommended use : Laundry
Restrictions on use : For professional use only

1.3. Supplier

UNX-Christeyns, LLC
707 E Arlington Blvd.
Greenville, NC 27858
USA
T 252-756-8616 / 800.869.6171
www.unxchristeyns.com - info@unxchristeyns.com

1.4. Emergency telephone number

Emergency number : VELOCITY EHS (800) 255-3924 (24 HOURS)
(For use only in the event of emergencies involving a spill, leak, fire, exposure, or accident involving chemicals)

SECTION 2: Hazard(s) identification


2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Full text of H statements : see section 16		

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) : 

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage

Precautionary statements (GHS US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.

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P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
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 which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Alcohols, C10-16, Ethoxylated	CAS-No.: 68002-97-1	30 – 60
Alcohols (c12-15 Ln. Saturated) Ethoxylate	CAS-No.: 68131-39-5	10 – 30
(2-Methoxymethylethoxy)propanol	CAS-No.: 34590-94-8	< 30
d-Limonene	CAS-No.: 5989-27-5	< 10
Isopropyl Alcohol	CAS-No.: 67-63-0	< 10

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 after inhalation : If you feel unwell, seek medical advice. Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth with water, do not induce vomiting, call a doctor.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after eye contact : Serious damage to eyes.

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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with skin and eyes.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

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. Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store in a closed container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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(2-Methoxymethylethoxy)propanol (34590-94-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Dipropylene glycol methyl ether (DPGME)
ACGIH OEL TWA	100 ppm
ACGIH OEL STEL	150 ppm
Remark (ACGIH)	TLV® Basis: Liver & CNS eff
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Dipropylene glycol methyl ether
OSHA PEL TWA	600 mg/m ³
	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	600 mg/m ³
	100 ppm
NIOSH REL (STEL)	900 mg/m ³
	150 ppm
Isopropyl Alcohol (67-63-0)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	200 ppm
ACGIH OEL STEL	400 ppm
Remark (ACGIH)	Eye & URT irr; CNS impair
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	980 mg/m ³
	400 ppm

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Eye protection:

Safety glasses

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Clear
Odor	: characteristic
Odor threshold	: No data available

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pH	: 8 – 9
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
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
Density	: 0.96 g/ml
Solubility	: No data available
Log Pow	: No data available
Autoignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
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

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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ATE US (oral)	500 mg/kg body weight
Alcohols, C10-16, Ethoxylated (68002-97-1)	
LD50 dermal rabbit	> 2 g/kg
ATE US (oral)	500 mg/kg body weight
Alcohols (c12-15 Ln. Saturated) Ethoxylate (68131-39-5)	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rabbit	2000 mg/kg
(2-Methoxymethylethoxy)propanol (34590-94-8)	
LD50 oral rat	5.35 g/kg
LD50 dermal rabbit	9.5 g/kg
ATE US (oral)	5350 mg/kg body weight
ATE US (dermal)	9500 mg/kg body weight
d-Limonene (5989-27-5)	
LD50 oral rat	5000 mg/kg Source: National Library of Medicine/Hazardous Substances Data Bank
LD50 dermal rabbit	> 5000 mg/kg Source: National Library of Medicine
ATE US (oral)	5000 mg/kg body weight
Skin corrosion/irritation	: Causes skin irritation. pH: 8 – 9
Serious eye damage/irritation	: Causes serious eye damage. pH: 8 – 9
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
d-Limonene (5989-27-5)	
IARC group	3 - Not classifiable
Isopropyl Alcohol (67-63-0)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
d-Limonene (5989-27-5)	
NOAEL (animal/female, F0/P)	600 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:
STOT-single exposure	: Not classified
Isopropyl Alcohol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Alcohols (c12-15 Ln. Saturated) Ethoxylate (68131-39-5)	
NOAEL (oral,rat,90 days)	≥ 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Aspiration hazard	: Not classified

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Viscosity, kinematic : Not applicable
Symptoms/injuries after eye contact : Serious damage to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Alcohols, C10-16, Ethoxylated (68002-97-1)	
LC50 - Fish [1]	1 – 10 mg/l 96 Hours
EC50 - Crustacea [1]	1 – 10 mg/l 48 Hours
ErC50 algae	1 – 10 mg/l 72 hours
Alcohols (c12-15 Ln. Saturated) Ethoxylate (68131-39-5)	
LC50 - Fish [1]	3.3 mg/l Source: ECOTOX
EC50 - Crustacea [1]	1.2 mg/l Test organisms (species): Daphnia magna
LC50 - Fish [2]	1.2 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [2]	1.4 mg/l Test organisms (species): Daphnia magna
d-Limonene (5989-27-5)	
LC50 - Fish [1]	0.7 mg/l Source: The ECOTOXicology database
EC50 - Crustacea [1]	0.307 mg/l Source: ECHA Registered substances
LC50 - Fish [2]	702 µg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [2]	0.51 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.32 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.214 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

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Persistence and degradability	No data available.
Alcohols, C10-16, Ethoxylated (68002-97-1)	
Persistence and degradability	Readily biodegradable.
Alcohols (c12-15 Ln. Saturated) Ethoxylate (68131-39-5)	
Persistence and degradability	Not rapidly degradable
(2-Methoxymethylethoxy)propanol (34590-94-8)	
Persistence and degradability	Not rapidly degradable
d-Limonene (5989-27-5)	
Persistence and degradability	Not rapidly degradable
Isopropyl Alcohol (67-63-0)	
Persistence and degradability	Not rapidly degradable

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Isopropyl Alcohol (67-63-0)	
Biochemical oxygen demand (BOD)	1.19 g O ₂ /g substance
Chemical oxygen demand (COD)	2.23 g O ₂ /g substance
ThOD	2.4 g O ₂ /g substance
BOD (% of ThOD)	0.49 % ThOD

12.3. Bioaccumulative potential

Alcohols, C10-16, Ethoxylated (68002-97-1)	
Bioaccumulative potential	No data available.

d-Limonene (5989-27-5)	
Log Pow	4.38 Source: ECHA Registered substances

Isopropyl Alcohol (67-63-0)	
Log Pow	0.05 Experimental value

12.4. Mobility in soil

Isopropyl Alcohol (67-63-0)	
Surface tension	0.021 N/m

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

- Regional legislation (waste) : Do not allow the product to contaminate any body of water. Refer to Section 8 for personal protection equipment.
- Waste treatment methods : Avoid unauthorized disposal. Do not dump into any body of water. Comply with federal, state/provincial and local laws/regulations. Do not reuse empty containers.

SECTION 14: Transport information

In accordance with DOT

DOT	
14.1. UN number	
Not regulated for transport	
14.2. Proper Shipping Name	
Not regulated	
14.3. Transport hazard class(es)	
Not regulated	
14.4. Packing group	
Not regulated	

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DOT

14.5. Environmental hazards

Not regulated

No supplementary information available

14.6. Special precautions for user

DOT

Not regulated

14.7. 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

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Alcohols, C10-16, Ethoxylated	68002-97-1	Present	Active	XU
Alcohols (c12-15 Ln. Saturated) Ethoxylate	68131-39-5	Present	Active	XU
(2-Methoxymethylethoxy)propanol	34590-94-8	Present	Active	
d-Limonene	5989-27-5	Present	Active	
Isopropyl Alcohol	67-63-0	Present	Active	

Isopropyl Alcohol (67-63-0)

Subject to reporting requirements of United States SARA Section 313

15.2. International regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

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Revision date : 7/24/2024

Full text of H-phrases

H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage

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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.