

Citri-Clean HD

Version number: GHS 6.0
Replaces version of: 2016-10-25 (GHS 5)

revision: 2019-03-27

SECTION 1: Identification

1.1 Product identifier

Trade name **Citri-Clean HD**

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

Relevant identified uses citrus degreaser

1.3 Details of the supplier of the safety data sheet

B&B Blending, LLC
10963 Leroy Drive
Northglenn
CO 80233 United States

Telephone: 1.800.875.6320, 1.303.289.6320
Telefax e-mail: info@bbblending.com
Website: bbblending.com

Competent person responsible for the SDS

Beth Tirrell
btirrell@bbblending.com

e-mail (competent person)

1.4 Emergency telephone number

Emergency information service **USA 1.800.535.5053, INTL 1.352.323.3500**
24 hour emergency telephone number.

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Annex	Hazard class and category	Hazard statement code(s)	
A.2	skin corrosion/irritation	Cat. 2 (Skin Irrit. 2)	H315
A.3	serious eye damage/eye irritation	Cat. 2 (Eye Irrit. 2)	H319
A.4S	skin sensitization	Cat. 1 (Skin Sens. 1)	H317
A.10	aspiration hazard	Cat. 1 (Asp. Tox. 1)	H304
B.6	flammable liquid	Cat. 3 (Flam. Liq. 3)	H226

Remarks

For full text of H-phrases: see SECTION 16.

Hazards not otherwise classified

Toxic to aquatic life (GHS category 2: aquatic toxicity - acute).

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal word **danger**

Pictograms

GHS02, GHS07,
GHS08





Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

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Hazard statements

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Precautionary statements

Precautionary statements - prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

If swallowed: Immediately call a poison center/doctor.
If on skin: Wash with plenty of water.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
Do NOT induce vomiting.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing before reuse.
In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.

Precautionary statements - storage

Store in a well-ventilated place. Keep cool.
Store locked up.

Precautionary statements - disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous ingredients for labelling

d-limonene

2.3 Other hazards

There is no additional information.

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SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Hazard class and category	Hazard statement	Notes
2-butoxy-1-ethanol	CAS No 111-76-2 EC No 203-905-0	12 - < 20	A.10 Acute Tox. 4 A.1D Acute Tox. 4 A.11 Acute Tox. 4 A.2 Skin Irrit. 2 A.3 Eye Irrit. 2 B.6 Flam. Liq. 4	H302 H312 H332 H315 H319 H227	IOELV
d-limonene	CAS No 5989-27-5 EC No 227-813-5	3 - < 12	A.2 Skin Irrit. 2 A.4S Skin Sens. 1B A.10 Asp. Tox. 1 B.6 Flam. Liq. 3	H315 H317 H304 H226	

Notes

IOELV: Substance with a community indicative occupational exposure limit value.

For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.

SECTION 4: First-aid measures

4.1

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Following eye contact

Irrigate copiously with clean, fresh water, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

Warning

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

• Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

• Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

Incompatible substances or mixtures

Observe compatible storage of chemicals.

Control of the effects

Protect against external exposure, such as

frost

Consideration of other advice

Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

Packaging compatibilities

Only packagings which are approved (e.g. acc. to DOT) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Source
US	2-butoxyethanol	111-76-2		PEL	50	240					29 CFR 1910.1000

Notation

Ceiling-C	Ceiling value is a limit value above which exposure should not occur.
STEL	Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified).
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified).

Relevant DNELs/DMELs/PNECs and other threshold levels

No data available.

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	orange
Odor	characteristic

Other physical and chemical parameters

pH (value)	6.7 – 7.3 (25 °C)
Melting point/freezing point	-74.8 °C at 1 atm
Initial boiling point and boiling range	100 °C
Flash point	54 °C at 1 atm 130 °F at 1 atm (closed cup)
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	not determined
Vapor pressure	31.69 hPa at 25 °C
Density	0.9602 ^g / _{ml}
Relative density	0.96 – 0.99 at 25 °C (water = 1)
Solubility(ies)	
Water solubility	miscible in any proportion
Partition coefficient	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	230 °C (auto-ignition temperature (liquids and gases))
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none
	There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s): risk of ignition

• if heated

risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Physical stresses which might result in a hazardous situation and have to be avoided

strong shocks

10.5 Incompatible materials

oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	ATE
2-butoxy-1-ethanol	111-76-2	oral	1,746 mg/kg
2-butoxy-1-ethanol	111-76-2	dermal	1,100 mg/kg
2-butoxy-1-ethanol	111-76-2	inhalation: vapor	11 mg/l/4h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Carcinogenicity

- National Toxicology Program (United States): none of the ingredients are listed

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• IARC Monographs

Name of substance	Name acc. to inventory	CAS No	wt%	Classification	Remarks	Number
2-butoxy-1-ethanol	2-butoxyethanol	111-76-2	17.99	3		
d-limonene	D-limonene	5989-27-5	11.78	3		

Legend

3 Not classifiable as to carcinogenicity in humans.

• OSHA Carcinogens (United States) none of the ingredients are listed

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life.

Aquatic toxicity (acute)

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-butoxy-1-ethanol	111-76-2	LC50	1,474 mg/l	fish	96 h
2-butoxy-1-ethanol	111-76-2	EC50	1,550 mg/l	aquatic invertebrates	48 h
2-butoxy-1-ethanol	111-76-2	ErC50	1,840 mg/l	algae	72 h
d-limonene	5989-27-5	LC50	720 µg/l	fish	96 h
d-limonene	5989-27-5	EC50	688 µg/l	fish	96 h

Aquatic toxicity (chronic)

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-butoxy-1-ethanol	111-76-2	EC50	297 mg/l	aquatic invertebrates	21 d
d-limonene	5989-27-5	EC50	0.85 mg/l	aquatic invertebrates	24 h

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12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
2-butoxy-1-ethanol	111-76-2	carbon dioxide generation	18.3 %	3 d

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
2-butoxy-1-ethanol	111-76-2		0.81 (pH value: 7, 25 °C)	
d-limonene	5989-27-5		4.38 (pH value: 7.2, 37 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number	1993
14.2 UN proper shipping name	Combustible liquid, n.o.s.
14.3 Transport hazard class(es) Class	3 (flammable liquids)
14.4 Packing group	III (substance presenting low danger)
14.5 Environmental hazards	none (non-environmentally hazardous acc. to the dangerous goods regulations)

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14.6 Special precautions for user
 There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
 The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

• Transport of dangerous goods by road or rail (49 CFR US DOT)

Index number	1993
Proper shipping name	Combustible liquid, n.o.s.
Class	3
Packing group	III
Danger label(s)	



Special provisions (SP)	IB3, T1, T4, TP1
-------------------------	------------------

• International Maritime Dangerous Goods Code (IMDG)

UN number	1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Class	3
Packing group	III
Danger label(s)	3



Special provisions (SP)	223, 274, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, <u>S-E</u>
Stowage category	A

• International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	1993
Proper shipping name	Flammable liquid, n.o.s.
Class	3
Packing group	III
Danger label(s)	3

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Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA)

all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

Drug precursors, Controlled Substances Act (21 U.S.C. § 802)

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System (American Coatings Association)

Category	Rating	Description
Chronic	/	None.
Health	2	Temporary or minor injury may occur.
Flammability	2	Material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
Physical hazard	0	Material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive.
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States)



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Category	Degree of hazard	Description
Flammability	2	Material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
Health	2	Material that, under emergency conditions, can cause temporary incapacitation or residual injury.
Instability	0	Material that is normally stable, even under fire conditions.
Special hazard		

New Jersey Worker and Community Right to Know Act

Name of substance	CAS No	Remarks	Classifications
2-butoxy-1-ethanol	111-76-2		CA F2

Legend

CA Carcinogenic.
F2 Flammable - Second Degree.

Proposition 65 List of chemicals

none of the ingredients are listed

Relevant European Union (EU) safety, health and environmental provisions

Classification according to GHS (1272/2008/EC, CLP)

Hazard class

flammable liquid
skin corrosion/irritation
serious eye damage/eye irritation
skin sensitization
aspiration hazard
hazardous to the aquatic environment - chronic hazard

Category Hazard class and category

3 (Flam. Liq. 3)
2 (Skin Irrit. 2)
2 (Eye Irrit. 2)
1 (Skin Sens. 1)
1 (Asp. Tox. 1)
2 (Aquatic Chronic 2)

National inventories

Country	Inventory	Status
CA	DSL	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
US	TSCA	all ingredients are listed

Legend

DSL Domestic Substances List (DSL).
REACH Reg. REACH registered substances.
TSCA Toxic Substance Control Act.

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SECTION 16: Other information, including date of preparation or last revision

16.1 Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.3	Competent person responsible for the SDS: Robert Blahnik	Competent person responsible for the SDS: Beth Tirrell	yes
1.3	e-mail (competent person): bblahnik@bbblending.com	e-mail (competent person): btirrell@bbblending.com	yes
2.1		Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200): change in the listing (table)	yes
2.1		Hazards not otherwise classified: change in the listing (table)	yes
2.2		Precautionary statements - prevention: change in the listing (table)	yes
2.2		Precautionary statements - response: change in the listing (table)	yes
3.2		Description of the mixture: change in the listing (table)	yes
6.4	Reference to other sections: Hazardous combustion products: see section 5. Personal precautions: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.	Reference to other sections: Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
9.1	Melting point/freezing point: not determined	Melting point/freezing point: -74.8 °C at 1 atm	yes
9.1	Vapor pressure: 200 Pa at 298 K	Vapor pressure: 31.69 hPa at 25 °C	yes
9.1	Density: not determined	Density: 0.9602 g/ml	yes
9.1	Auto-ignition temperature: 230 °C	Auto-ignition temperature: 230 °C (auto-ignition temperature (liquids and gases))	yes
9.1	Oxidizing properties: none	Oxidizing properties: none There is no additional information.	yes
10.5	Incompatible materials: There is no additional information.	Incompatible materials: oxidizers	yes
11.1		Acute toxicity of components of the mixture: change in the listing (table)	yes
11.1		• IARC Monographs: change in the listing (table)	yes
11.1		• OSHA Carcinogens (United States): none of the ingredients are listed	yes
12.1	Toxicity: Toxic to aquatic life with long lasting effects.	Toxicity: Toxic to aquatic life.	yes
12.1		Aquatic toxicity (acute) of components of the mixture: change in the listing (table)	yes



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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
12.1		Aquatic toxicity (chronic) of components of the mixture: change in the listing (table)	yes
12.2	Persistence and degradability: Data are not available.	Persistence and degradability	yes
12.2		Degradability of components of the mixture: change in the listing (table)	yes
12.3		Bioaccumulative potential of components of the mixture: change in the listing (table)	yes
14.2	Technical name (hazardous constituents): d-limonene		yes
14.7	EmS: F-E, S-E	EmS: F-E, <u>S-E</u>	yes
14.7	Special provisions (SP): A3, 274	Special provisions (SP): A3	yes
15.1		Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	yes
15.1		List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4): none of the ingredients are listed	yes
15.1		Clean Air Act: none of the ingredients are listed	yes
15.1		Drug precursors, Controlled Substances Act (21 U.S.C. § 802): none of the ingredients are listed	yes
15.1		NPCA-HMIS® III: change in the listing (table)	yes
15.1		New Jersey Worker and Community Right to Know Act: change in the listing (table)	yes
15.1		Classification according to GHS (1272/2008/EC, CLP): change in the listing (table)	yes
15.1		National inventories	yes
15.1		National inventories: change in the listing (table)	yes
16.2		Abbreviations and acronyms: change in the listing (table)	yes

16.2 Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR § 40 U.S. Department of Transportation
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor

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Abbr.	Descriptions of used abbreviations
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC Monographs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NFPA® 704	National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States)
NLP	No-Longer Polymer
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Skin Corr.	Corrosive to skin

Citri-Clean HD

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Abbr.	Descriptions of used abbreviations
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

16.3 Key literature references and sources for data

- OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200
- 49 CFR § 172.101 Hazardous Materials Table (DOT)

16.4 Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards/Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

16.5

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H226	Flammable liquid and vapor.
H227	Combustible liquid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

16.7

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.