

# Citri Force

## Safety Data Sheet

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

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Citri Force  
Product code : 20111

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

#### 1.3. Details of the supplier of the safety data sheet

Advantage Chemical Inc.  
Temecula, 92590  
T 1-855-238-CHEM

#### 1.4. Emergency telephone number

Emergency number : 1-800-424-9300  
ChemTrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Liq. Not classified  
Skin Corr. 1A H314

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger  
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage  
Precautionary statements (GHS-US) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
P264 - Wash ... thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing  
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/physician  
P321 - Specific treatment (see ... on this label)  
P363 - Wash contaminated clothing before reuse  
P405 - Store locked up  
P501 - Dispose of contents/container to ...

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

Full text of H-phrases: see section 16

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### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
2-butoxyethanol	(CAS No)111-76-2	1 - 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311
disodium metasilicate	(CAS No)6834-92-0	1 - 10	Skin Corr. 1A, H314
sodium hydroxide, conc=50%, aqueous solution	(CAS No)1310-73-2	1 - 10	Skin Corr. 1A, H314 Aquatic Acute 3, H402

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries	: Causes severe skin burns and eye damage.
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### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Combustible liquid.
Explosion hazard	: May form flammable/explosive vapour-air mixture.
Reactivity	: Thermal decomposition generates : Corrosive vapours.

### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
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#### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No naked lights. No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.
- Hygiene measures : Wash ... thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep in fireproof place.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

2-butoxyethanol (111-76-2)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA ACGIH	ACGIH STEL (ppm)	20 ppm

  

sodium hydroxide, conc=50%, aqueous solution (1310-73-2)		
USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>

### 8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or face shield.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear appropriate mask.
- Other information : Do not eat, drink or smoke during use.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Orange-yellow.
Odour	: characteristic.
Odour threshold	: No data available
pH	: $\geq 12.3$ (12 - 13)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: $\leq 0$ °C
Boiling point	: $\geq 100$ °C
Flash point	: None
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: $\geq 1.043$ (1.033 - 1.053) g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

VOC content	: $\leq 20.9$ g/l
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

#### 10.2. Chemical stability

Not established. Combustible liquid. May form flammable/explosive vapour-air mixture.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases. Thermal decomposition generates : Corrosive vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

2-butoxyethanol (111-76-2)	
LD50 oral rat	530 mg/kg (1746 mg/kg bodyweight; Rat; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value,Rat; Experimental value)

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<b>2-butoxyethanol (111-76-2)</b>	
LD50 dermal rabbit	435 mg/kg bodyweight (435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value,435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	2.17 mg/l/4h (2.35 mg/l/4h; Rat; Rat; Experimental value; Experimental value,2.35 mg/l/4h; Rat; Rat; Experimental value; Experimental value)
LC50 inhalation rat (ppm)	450-486,Rat

<b>disodium metasilicate (6834-92-0)</b>	
LD50 dermal rat	> 5000 mg/kg bodyweight (Rat)

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: >= 12.3 (12 - 13)
Serious eye damage/irritation	: Not classified pH: >= 12.3 (12 - 13)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

<b>2-butoxyethanol (111-76-2)</b>	
IARC group	3 - Not classifiable

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	: Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>2-butoxyethanol (111-76-2)</b>	
LC50 fishes 1	116 ppm (96 h; Cyprinodon variegatus; Nominal concentration)
EC50 Daphnia 1	1700 mg/l (48 h; Daphnia sp.; Nominal concentration)
LC50 fish 2	1341 ppm (96 h; Lepomis macrochirus)
EC50 Daphnia 2	1720 mg/l (24 h; Daphnia magna)
TLM fish 1	100 - 1000,96 h; Pisces
TLM other aquatic organisms 1	100 - 1000,96 h
Threshold limit algae 1	900 mg/l (168 h; Scenedesmus quadricauda)
Threshold limit algae 2	35 mg/l (192 h; Microcystis aeruginosa)

<b>disodium metasilicate (6834-92-0)</b>	
LC50 fishes 1	210 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 1	216 mg/l (96 h; Daphnia magna; Static system)
LC50 fish 2	2320 mg/l (96 h; Gambusia affinis)
EC50 Daphnia 2	632 mg/l (96 h; Lymnaea sp.; Static system)
Threshold limit algae 1	207 mg/l (72 h; Scenedesmus subspicatus; GLP)

<b>sodium hydroxide, conc=50%, aqueous solution (1310-73-2)</b>	
LC50 fishes 1	45.4 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
LC50 other aquatic organisms 1	100 mg/l (48 h; Daphnia magna; Pure substance)
LC50 fish 2	189 mg/l (48 h; Leuciscus idus)
TLM fish 1	125 ppm (96 h; Gambusia affinis; Pure substance)
TLM fish 2	99 mg/l (48 h; Lepomis macrochirus; Pure substance)
Threshold limit other aquatic organisms 1	100 mg/l (48 h; Daphnia magna; Pure substance)

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### 12.2. Persistence and degradability

<b>Citri Force</b>	
Persistence and degradability	Not established.
<b>2-butoxyethanol (111-76-2)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.71 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.20 g O <sub>2</sub> /g substance
ThOD	2.305 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.31 % ThOD
<b>disodium metasilicate (6834-92-0)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>sodium hydroxide, conc=50%, aqueous solution (1310-73-2)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components of the mixture available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

<b>Citri Force</b>	
Bioaccumulative potential	Not established.
<b>2-butoxyethanol (111-76-2)</b>	
Log Pow	0.81 (Experimental value; 25 °C, Experimental value; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>disodium metasilicate (6834-92-0)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>sodium hydroxide, conc=50%, aqueous solution (1310-73-2)</b>	
Log Pow	-3.88 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

<b>2-butoxyethanol (111-76-2)</b>	
Surface tension	0.027 N/m (25 °C)

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to ...

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT  
No dangerous good in sense of transport regulations

### Additional information

Other information : No supplementary information available.

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### ADR

Transport document description :

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

### EU-Regulations

No additional information available

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

### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

#### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 3	Hazardous to the aquatic environment — AcuteHazard, Category 3
Flam. Liq. 4	Flammable liquids, Category 4
Flam. Liq. Not classified	Flammable liquids Not classified
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H402	Harmful to aquatic life

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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*