

# SPIES SOLUTION

## Safety Data Sheet

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

Date of issue: 12/31/2014 Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : SPIES SOLUTION  
Product code : P301

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

Use of the substance/mixture : Cleansing product  
Degreasing agent

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

CleanPak Products LLC.  
5408 N 59th St.  
Tampa, FL 33610  
T 813-740-8611 - F 813-740-8218  
[admin@cleanpakproducts.com](mailto:admin@cleanpakproducts.com) - [www.cleanpakproducts.com](http://www.cleanpakproducts.com)

#### 1.4. Emergency telephone number

Emergency number : 1-800-535-5053  
InfoTrac

### SECTION 2: Hazards identification

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

##### GHS-US classification

Flam. Liq. 4 H227  
Skin Corr. 1A H314  
Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger  
Hazard statements (GHS-US) : H227 - Combustible liquid  
H314 - Causes severe skin burns and eye damage  
Precautionary statements (GHS-US) : P260 - Do not breathe mist  
P264 - Wash hands, forearms and face thoroughly after handling  
P280 - Wear gloves and protective eyewear  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep 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  
P363 - Wash contaminated clothing before reuse  
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

#### 2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

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

Not applicable

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
disodium metasilicate	(CAS No) 6834-92-0	1 - 5	Skin Corr. 1A, H314
2-butoxyethanol	(CAS No) 111-76-2	<= 5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
trisodium orthophosphate	(CAS No) 7601-54-9	<= 4	Skin Corr. 1A, H314
potassium hydroxide	(CAS No) 1310-58-3	1 - 3	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Aquatic Acute 3, H402

Full text of 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.

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

Symptoms/injuries after skin contact : Causes skin irritation.  
Symptoms/injuries after eye contact : Causes serious eye irritation.  
Symptoms/injuries after ingestion : Harmful if swallowed.

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

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

No additional information available

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

Reactivity : No data available.

#### 5.3. Advice for firefighters

No additional information available

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

No additional information available

##### 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

Methods for cleaning up : Clean contaminated surfaces with an excess of water.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing.

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

Incompatible products : Strong acids.  
Maximum storage period : >= 2 year

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Storage temperature :  $\geq 120$  °C

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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ACGIH	Not applicable	
OSHA	Not applicable	
disodium metasilicate (6834-92-0)		
ACGIH	Not applicable	
OSHA	Not applicable	
potassium hydroxide (1310-58-3)		
ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
OSHA	Not applicable	
trisodium orthophosphate (7601-54-9)		
ACGIH	Not applicable	
OSHA	Not applicable	
2-butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (ppm)	20 ppm
OSHA	Not applicable	

### 8.2. Exposure controls

Personal protective equipment : Safety glasses. Gloves.



Hand protection : Gloves.

Eye protection : Safety glasses.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Liquid.
Colour	: PURPLE
Odour	: Characteristic odour
Odour threshold	: No data available
pH	: $\geq 13$
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: $\geq 212$ °C
Flash point	: No data available
Auto-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
Specific gravity	: $\geq 1.04$

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Solubility	: Soluble in water. Water: Solubility in water of component(s) of the mixture : • disodium metasilicate: > 18 g/100ml • potassium hydroxide: 112 g/100ml • trisodium orthophosphate: 8 g/100ml (20 °C) • tetrasodium ethylenediaminetetracetate: 103 g/100ml • 2-butoxyethanol: Complete
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

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

No additional information available

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>disodium metasilicate (6834-92-0)</b>	
LD50 dermal rat	> 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
<b>potassium hydroxide (1310-58-3)</b>	
LD50 oral rat	333 mg/kg (Rat; Equivalent or similar to OECD 425; Experimental value)
ATE US (oral)	333.000 mg/kg bodyweight
<b>trisodium orthophosphate (7601-54-9)</b>	
LD50 oral rat	4800 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value; >2000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
ATE US (oral)	4800.000 mg/kg bodyweight
<b>2-butoxyethanol (111-76-2)</b>	
LD50 oral rat	530 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 1746 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	435 mg/kg bodyweight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity; 435 mg/kg bodyweight; Rabbit; Weight of evidence; Equivalent or similar to OECD 402)
LC50 inhalation rat (mg/l)	2.17 mg/l/4h (Rat; Experimental value; 2.35 mg/l/4h; Rat; Experimental value)
LC50 inhalation rat (ppm)	450-486,Rat; Weight of evidence
ATE US (oral)	530.000 mg/kg bodyweight
ATE US (dermal)	435.000 mg/kg bodyweight
ATE US (vapours)	2.170 mg/l/4h

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<b>disodium metasilicate (6834-92-0)</b>	
ATE US (dust,mist)	2.170 mg/l/4h
Skin corrosion/irritation	: Causes severe skin burns and eye damage. (Based on available data, the classification criteria are not met) pH: >= 13
Serious eye damage/irritation	: Not classified (Inconclusive data) pH: >= 13
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Lack of data)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)

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IARC group	4 - Probably not carcinogenic to humans

<b>2-butoxyethanol (111-76-2)</b>	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : No known adverse effects on the functioning of water treatment plants under normal use conditions as recommended.

<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; GLP)
LC50 fish 2	2320 mg/l (96 h; Gambusia affinis)
EC50 Daphnia 2	632 mg/l (96 h; Lymnaea sp.)
Threshold limit algae 1	207 mg/l (72 h; Scenedesmus subspicatus; GLP)
<b>potassium hydroxide (1310-58-3)</b>	
LC50 fishes 1	> 28.6 mg/l (96 h; Pisces; Lethal)
LC50 fish 2	80 mg/l (Gambusia affinis)
TLM fish 1	80 ppm (24 h; Gambusia affinis)
<b>trisodium orthophosphate (7601-54-9)</b>	
LC50 fishes 1	2400 mg/l (48 h; Leuciscus idus)
LC50 fish 2	220 mg/l (96 h; Lepomis macrochirus)
<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

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<b>disodium metasilicate (6834-92-0)</b>	
Threshold limit algae 1	900 mg/l (168 h; Scenedesmus quadricauda)
Threshold limit algae 2	35 mg/l (192 h; Microcystis aeruginosa)

### 12.2. Persistence and degradability

<b>SPIES SOLUTION</b>	
Persistence and degradability	Inherently biodegradable.

<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>potassium hydroxide (1310-58-3)</b>	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

<b>trisodium orthophosphate (7601-54-9)</b>	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: 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>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

### 12.3. Bioaccumulative potential

<b>disodium metasilicate (6834-92-0)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

<b>potassium hydroxide (1310-58-3)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

<b>trisodium orthophosphate (7601-54-9)</b>	
Bioaccumulative potential	No bioaccumulation data available.

<b>2-butoxyethanol (111-76-2)</b>	
Log Pow	0.81 (Experimental value; BASF test; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 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

Effect on ozone layer :  
Effect on the global warming : No known ecological damage caused by this product.

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

No additional information available

### SECTION 14: Transport information

In accordance with DOT

Transport document description : NA1760 Compounds, cleaning liquid, 8, III  
UN-No.(DOT) : NA1760  
Proper Shipping Name (DOT) : Compounds, cleaning liquid  
Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136  
Hazard labels (DOT) : 8 - Corrosive



DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN requiring a technical name  
Packing group (DOT) : III - Minor Danger  
DOT Packaging Exceptions (49 CFR 173.xxx) : Limited Quantity

#### Additional information

Other information : No supplementary information available.

#### ADR

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### 2-butoxyethanol (111-76-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

##### CANADA

##### EU-Regulations

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

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

Not classified

##### 15.2.2. National regulations

No additional information available

#### 15.3. US State regulations

##### 2-butoxyethanol (111-76-2)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

### SECTION 16: Other information

Other information : None.

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### Full text of H-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 4	Flammable liquids, Category 4
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H402	Harmful to aquatic life

### NFPA health hazard

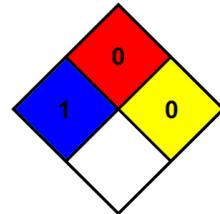
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

### NFPA fire hazard

: 0 - Materials that will not burn.

### NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Personal Protection : B

### SDS US (GHS HazCom 2012)

*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*