

### SECTION 1: Identification

#### 1.1. Identification

Trade name : DOWCLENE™\* 1601 Cleaning Fluid

#### 1.2. Recommended use and restrictions on use

Recommended use : Industrial Solvent

Restrictions on use : Uses which are not mentioned in the relevant identified uses.

#### 1.3. Supplier

SAFECEM Europe GmbH  
Tersteegenstr. 25  
40474 Düsseldorf  
Germany  
T +49 211 4389300 - F +49 211 4389389  
[service@safechem.com](mailto:service@safechem.com)

#### 1.4. Emergency telephone number

Emergency number : +1 202 464 2554 (NCEC, National Chemical Emergency Centre)  
+1 866 928 0789 (Toll free)

### SECTION 2: Hazard(s) identification

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

##### GHS-US classification

Flammable liquids, Category 4  
Skin corrosion/irritation Category 2  
Serious eye damage/eye irritation Category 2

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : Combustible liquid.  
Causes skin irritation.  
Causes serious eye irritation.

Precautionary statements (GHS-US) : Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Wash hands, forearms and face thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
If on skin: Wash with plenty of water.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If skin irritation occurs: Get medical advice/attention  
If eye irritation persists: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
In case of fire: Use media other than water to extinguish  
Store in a well-ventilated place. Keep cool  
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

Other hazards not contributing to the classification : No information available.

# DOWCLENE™\* 1601 Cleaning Fluid

## Safety Data Sheet

According to HCS-2012 APPENDIX D TO §1910.1200

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

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%
1-Butoxy-2-propanol	(CAS-No.) 5131-66-8	>= 70.00 - < 90.00
Propanol, 2-butoxy-	(CAS-No.) 15821-83-7	< 5.00

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Adhere to personal protective measures when giving first aid. If the patient is likely to become unconscious, place and transport in stable sideways position. In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. .
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Take off contaminated clothing. Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth thoroughly with water. Do not induce vomiting. Call a poison center/doctor/physician if you feel unwell. Never give anything by mouth to an unconscious person.

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

Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.

### 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. Carbon dioxide (CO2).
Unsuitable extinguishing media	: high volume water jet.

### 5.2. Specific hazards arising from the chemical

Fire hazard	: In the event of fire, may decompose : Carbon dioxide (CO2). Carbon monoxide. Combustible liquid.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.

### 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.
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## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Ensure personnel is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Ventilate spillage area. Avoid contact with skin and eyes.
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#### 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".
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### 6.2. Environmental precautions

Avoid release to the environment. Prevent fire-fighting water from entering surface water or groundwater. Do not discharge into drains.

# DOWCLENE™\* 1601 Cleaning Fluid

## Safety Data Sheet

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

- Methods for cleaning up : Absorb remaining liquid with sand or inert absorbent and remove to safe place. Cover spill with non combustible material, e.g.: sand, earth, vermiculite.
- 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 : The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.  
Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Do not eat, drink or smoke during work. Wash hands immediately after handling the product. Keep away from food and drink. Emergency eye wash fountain with clean water.
- Hygiene measures : Wash contaminated clothing before reuse. 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 well-ventilated place. Keep cool. Keep away from heat and direct sunlight. Containers which are opened should be properly resealed and kept upright to prevent leakage.
- Incompatible materials : Aluminum.
- Packaging materials : Carbon steel. Stainless steel.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 1-Butoxy-2-propanol (5131-66-8)

Not applicable

#### Propanol, 2-butoxy- (15821-83-7)

Not applicable

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product . Before use, the protective gloves should be tested in any case for its specific workstation suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material butyl rubber

Appropriate Material chlorinated polyethylene (CPE)

Appropriate Material Polyethylene

Appropriate Material ethyl vinyl alcohol laminate (EVAL)

Appropriate Material In case of short-term contact / splash protection:

Material thickness > 0.35 mm

Breakthrough time > 10 min

Appropriate Material In case of longer-term contact:

Material thickness > 0.35 mm

Breakthrough time > 120 min

#### Eye protection:

Tightly fitting safety glasses (EN 166)

#### Skin and body protection:

# DOWCLENE™\* 1601 Cleaning Fluid

## Safety Data Sheet

According to HCS-2012 APPENDIX D TO §1910.1200

Chemical-resistant work clothes.

### Respiratory protection:

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respirator A

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Color	: Colorless
Odor	: Characteristic
Odor threshold	: No data available
pH	: No data available
pH solution	: No data available
Melting point	: No data available
Freezing point	: -75 °C
Boiling point	: 170 - 175 °C
Critical temperature	: No data available
Critical pressure	: No data available
Flash point	: 63 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 0.11 kPa
Vapor pressure at 50 °C	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 0.88 (25°C)
Relative density of saturated gas/air mixture	: No data available
Specific gravity / density	: No data available
Relative gas density	: No data available
Solubility	: 6.3% in water
Log Pow	: 3-butoxypropan-2-ol: 1.1(20°C)
Auto-ignition temperature	: 242 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: 3.85 mm <sup>2</sup> /s(20°C)
Viscosity, dynamic	: No data available
Explosion limits	: 1.1%-8.4%vol
Explosive properties	: No data available.
Oxidizing properties	: Not oxidizing

### 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

High temperature. Protect from heat and direct sunlight.

# DOWCLENETM\* 1601 Cleaning Fluid

## Safety Data Sheet

According to HCS-2012 APPENDIX D TO §1910.1200

### 10.5. Incompatible materials

Strong acids. Strong oxidizing agent.

### 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 : Not classified

1-Butoxy-2-propanol (5131-66-8)	
LD50 oral rat	1900 mg/kg

Skin corrosion/irritation : Causes skin irritation.  
pH: No data available

Serious eye damage/irritation : Causes serious eye irritation.  
pH: No data available

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

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

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

DOWCLENETM* 1601 Cleaning Fluid	
Persistence and degradability	No information available.

### 12.3. Bioaccumulative potential

DOWCLENETM* 1601 Cleaning Fluid	
Log Pow	No data available
Log Kow	No data available
Bioaccumulative potential	No information available.

### 12.4. Mobility in soil

DOWCLENETM* 1601 Cleaning Fluid	
Ecology - soil	No information available.

### 12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

# DOWCLENE™\* 1601 Cleaning Fluid

## Safety Data Sheet

According to HCS-2012 APPENDIX D TO §1910.1200

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not applicable

#### Transportation of Dangerous Goods

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### 1-Butoxy-2-propanol (5131-66-8)

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

#### 15.2. International regulations

##### CANADA

##### 1-Butoxy-2-propanol (5131-66-8)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

##### 1-Butoxy-2-propanol (5131-66-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

##### National regulations

##### 1-Butoxy-2-propanol (5131-66-8)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on CICR (Turkish Inventory and Control of Chemicals)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)

##### Propanol, 2-butoxy- (15821-83-7)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)

#### 15.3. US State regulations

No additional information available

### SECTION 16: Other information

# DOWCLENE™\* 1601 Cleaning Fluid

## Safety Data Sheet

According to HCS-2012 APPENDIX D TO §1910.1200

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Full text of H-phrases:

H227	Combustible liquid
H315	Causes skin irritation
H319	Causes serious eye irritation

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*

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