

Trade name: DOWCLENTM* 1601 Cleaning Fluid**Current version :** 1.0.1, issued: 12.10.2017**Replaced version:** 1.0.0, issued: 29.06.2017**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****DOWCLENTM* 1601 Cleaning Fluid****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

Industrial Solvent

Uses advised against

Uses which are not mentioned in the relevant identified uses.

1.3 Details of the supplier of the safety data sheet**Address**SAFECEM Europe GmbH
Tersteegenstr. 25
40474 Düsseldorf
GermanyTelephone no. +49 211 4389300
Fax no. +49 211 4389389
e-mail service@safechem.com**Advice on Safety Data Sheet**

sds@safechem.com

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

In case of transport incidents and other emergencies:

+44 (0) 1235 239 670 (NCEC, National Chemical Emergency Centre)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Eye Irrit. 2; H319

Skin Irrit. 2; H315

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS07

Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation.

H319

Causes serious eye irritation.

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Precautionary statement(s)

P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/eye protection/face protection.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.

2.3 Other hazards

PBT assessment
 No data available.

vPvB assessment
 No data available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable. The product is not a substance.

3.2 Mixtures**Hazardous ingredients**

| No | Substance name | Additional information | |
|----|--|---|----------------------------|
| | CAS / EC / Index / REACH no | Classification (EC) 1272/2008 (CLP) | Concentration % |
| 1 | 3-butoxypropan-2-ol | | |
| | 5131-66-8 225-878-4 603-052-00-8 01-2119475527-28 | Eye Irrit. 2; H319 Skin Irrit. 2; H315 | >= 70.00 - < 90.00 % -b.w. |
| 2 | Butoxy-1-propanol | | |
| | 15821-83-7 605-138-0 - - | Eye Irrit. 2; H319 Skin Irrit. 2; H315 | < 5.00 % -b.w. |

Full Text for all H-phrases and EUH-phrases: pls. see section 16

| No | Note | Specific concentration limits | M-factor (acute) | M-factor (chronic) |
|----|------|---|------------------|--------------------|
| 1 | - | Eye Irrit. 2; H319: C >= 20% Skin Irrit. 2; H315: C >= 20% | - | - |

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

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.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with copious amounts of water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Rinse mouth thoroughly with water. Do not induce vomiting without medical advice. Call a doctor immediately. Never give anything by mouth to an unconscious person.

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No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water spray jet; Carbon dioxide; Alcohol-resistant foam; Dry chemical extinguisher

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixtureIn the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO)**5.3 Advice for firefighters**

Use self-contained breathing apparatus. Wear protective clothing. Product floats on the water surface and may reignite.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Only engage trained and adequately protected personnel. Refer to protective measures listed in sections 7 and 8. Do not inhale vapours. Keep away sources of ignition.

For emergency responders

Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Prevent spread over a wide area (by containment with sand or earth). Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see chapter 7. Information regarding personal protective measures, see chapter 8. Information regarding waste disposal, see chapter 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far as possible by the state of the art. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

General protective and hygiene measures

Do not inhale vapours. Do not eat, drink or smoke during work time. After worktime and during work intervals the affected skin areas must be thoroughly cleaned. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Provide eye wash fountain in work area.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed in a cool, well-ventilated place. Protect from heat and direct sunlight.

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Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage.

Appropriate Material carbon steel; stainless steel

Inappropriate material aluminium

Advice on storage assembly

Substances to be avoided, pls. See chapter 10.

7.3 Specific end use(s)**Industry solution**

For further information contact supplier.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****DNEL, DMEL and PNEC values****DNEL values (worker)**

| No | Substance name | | | CAS / EC no | |
|----|---------------------|---------------------|----------|------------------------|-------------------|
| | Route of exposure | Exposure time | Effect | Value | |
| 1 | 3-butoxypropan-2-ol | | | 5131-66-8 225-878-4 | |
| | dermal | Long term (chronic) | systemic | 44.00 | mg/kg/day |
| | inhalative | Long term (chronic) | systemic | 270.50 | mg/m ³ |

DNEL value (consumer)

| No | Substance name | | | CAS / EC no | |
|----|---------------------|---------------------|----------|------------------------|-------------------|
| | Route of exposure | Exposure time | Effect | Value | |
| 1 | 3-butoxypropan-2-ol | | | 5131-66-8 225-878-4 | |
| | oral | Long term (chronic) | systemic | 8.75 | mg/kg/day |
| | dermal | Long term (chronic) | systemic | 16.00 | mg/kg/day |
| | inhalative | Long term (chronic) | systemic | 33.80 | mg/m ³ |

PNEC values

| No | Substance name | | CAS / EC no | |
|----|-------------------------------|-----------------------|------------------------|-------|
| | ecological compartment | Type | Value | |
| 1 | 3-butoxypropan-2-ol | | 5131-66-8 225-878-4 | |
| | water | fresh water | 0.525 | mg/l |
| | water | marine water | 0.0525 | mg/l |
| | water | Aqua intermittent | 5.25 | mg/l |
| | water | fresh water sediment | 2.36 | mg/kg |
| | with reference to: dry weight | | | |
| | water | marine water sediment | 0.236 | mg/kg |
| | with reference to: dry weight | | | |
| | soil | - | 0.16 | mg/kg |
| | with reference to: dry weight | | | |
| | sewage treatment plant | - | 10.00 | mg/l |

8.2 Exposure controls**Appropriate engineering controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment**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

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Tightly fitting safety glasses (EN 166).

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 work-station 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 |

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

| | |
|--|--------------|
| Form/Colour | |
| liquid | |
| colourless | |
| Odour | |
| characteristic | |
| Odour threshold | |
| No data available | |
| pH value | |
| No data available | |
| Boiling point / boiling range | |
| Value | 170 - 175 °C |
| Source | Supplier |
| Melting point / melting range | |
| No data available | |
| Setting point / solidification range | |
| Value | -75 °C |
| Source | Supplier |
| Decomposition point / decomposition range | |
| No data available | |
| Flash point | |
| Value | 63 °C |
| Method | ASTM D 93 |
| Source | Supplier |
| Auto-ignition temperature | |
| Value | 242 °C |
| Source | Supplier |

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| | | | |
|---|---------------------|--------------------|-----------|
| Oxidising properties | | | |
| not oxidizing | | | |
| Explosive properties | | | |
| Product does not present an explosion hazard. | | | |
| Flammability (solid, gas) | | | |
| No data available | | | |
| Lower flammability or explosive limits | | | |
| Value | 1.1 | % vol | |
| Source | Supplier | | |
| Upper flammability or explosive limits | | | |
| Value | 8.4 | % vol | |
| Source | Supplier | | |
| Vapour pressure | | | |
| Value | 0.11 | kPa | |
| Source | Supplier | | |
| Vapour density | | | |
| No data available | | | |
| Evaporation rate | | | |
| No data available | | | |
| Relative density | | | |
| Value | 0.88 | | |
| Reference temperature | 25 | °C | |
| Source | Supplier | | |
| Density | | | |
| No data available | | | |
| Solubility in water | | | |
| Value | 6.3 | % | |
| Source | Supplier | | |
| Solubility(ies) | | | |
| No data available | | | |
| Partition coefficient: n-octanol/water | | | |
| No | Substance name | CAS no. | EC no. |
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| log Pow | | 1.1 | |
| Reference temperature | | 20 | °C |
| with reference to | pH 7 | | |
| Source | ECHA | | |
| Viscosity | | | |
| Value | 3.85 | mm ² /s | |
| Reference temperature | 20 | °C | |
| Type | kinematic | | |
| Source | Supplier | | |

9.2 Other information

| | | | |
|--------------------------|--|--|--|
| Other information | | | |
| No data available. | | | |

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SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

Hazard of decomposition at higher temperatures. Protect from heat and direct sunlight.

10.5 Incompatible materials

strong acids; strong oxidizing agents

10.6 Hazardous decomposition products

None, if handled according to intended use.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

| Acute oral toxicity | | | |
|---------------------|---------------------|-----------|------------------|
| No | Substance name | CAS no. | EC no. |
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| LD50 | | 3300 | mg/kg bodyweight |
| Species | | rat | |
| Method | | OECD 401 | |
| Source | | ECHA | |

| Acute dermal toxicity | | | |
|-----------------------|---------------------|-----------|------------------|
| No | Substance name | CAS no. | EC no. |
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| LD50 | | > 2000 | mg/kg bodyweight |
| Species | | rat | |
| Source | | ECHA | |

| Acute inhalational toxicity | | | |
|-----------------------------|--|--|--|
| No data available | | | |

| Skin corrosion/irritation | | | |
|---------------------------|---------------------|-----------|-----------|
| No | Substance name | CAS no. | EC no. |
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| Species | | rabbit | |
| Method | | OECD 404 | |
| Source | | ECHA | |
| Evaluation | | irritant | |

| Serious eye damage/irritation | | | |
|-------------------------------|--|--|--|
| No data available | | | |

| Respiratory or skin sensitisation | | | |
|-----------------------------------|---------------------|-----------------|-----------|
| No | Substance name | CAS no. | EC no. |
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| Route of exposure | | Skin | |
| Species | | guinea pig | |
| Method | | OECD 406 | |
| Source | | ECHA | |
| Evaluation | | non-sensitizing | |

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Germ cell mutagenicity

No data available

Reproduction toxicity

No data available

Carcinogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information**12.1 Toxicity****Toxicity to fish (acute)**

| No | Substance name | CAS no. | EC no. |
|----------------------|---------------------|-----------|-----------|
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| LC50 | 560 | - 1000 | mg/l |
| Duration of exposure | | 96 | h |
| Species | Poecilia reticulata | | |
| Method | OECD 203 | | |
| Source | ECHA | | |

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

| No | Substance name | CAS no. | EC no. |
|----------------------|---------------------|-----------|-----------|
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| EC50 | > | 1000 | mg/l |
| Duration of exposure | | 48 | h |
| Species | Daphnia magna | | |
| Method | OECD 202 | | |
| Source | ECHA | | |

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability**Biodegradability**

| No | Substance name | CAS no. | EC no. |
|------------|-----------------------|-----------|-----------|
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| Value | | 90 | % |
| Duration | | 28 | day(s) |
| Method | OECD 301 E | | |
| Source | ECHA | | |
| Evaluation | readily biodegradable | | |

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12.3 Bioaccumulative potential

| Partition coefficient: n-octanol/water | | | |
|--|---------------------|-----------|-----------|
| No | Substance name | CAS no. | EC no. |
| 1 | 3-butoxypropan-2-ol | 5131-66-8 | 225-878-4 |
| log Pow | | 1.1 | |
| Reference temperature | | 20 | °C |
| with reference to | | pH 7 | |
| Source | | ECHA | |

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

| Results of PBT and vPvB assessment | |
|------------------------------------|--------------------|
| PBT assessment | No data available. |
| vPvB assessment | No data available. |

12.6 Other adverse effects

No data available.

12.7 Other information

| Other information |
|--|
| Do not discharge product unmonitored into the environment. |

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Dispose of according to all applicable regulations upon consultation of the local competent authorities and the disposer in a suitable and authorised disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

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According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.

No 3

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information**Further information**

TM*Trademark of The Dow Chemical Company

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Department issuing safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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