DOWCLENE™* 1621 Cleaning Fluid

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

Date of issue: 09/26/2019 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : DOWCLENE™* 1621 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

SAFECHEM Europe GmbH

Tersteegenstr. 25

40474 Düsseldorf

Germany

Telephone 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

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 3 H226
Aspiration hazard, Category 1 H304

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger

Hazard statements (GHS US) : Flammable liquid and vapour.
May be fatal if swallowed and enters airways.

Precautionary statements (GHS US) : Keep out of reach of children.

Do not breathe dust/fume/gas/mist/vapours/spray.

Do not get in eyes, on skin, or on clothing.
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.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Do NOT induce vomiting.

In case of fire: Use media other than water to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

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.

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	%
Naphtha, petroleum, hydrotreated heavy	(CAS-No.) 64742-48-9	>= 70.00 - < 90.00
1-Butoxy-2-propanol	(CAS-No.) 5131-66-8	>= 10.00 - < 25.00

Full text of hazard classes and H-statements : see section 16

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 affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. If breathing is irregular or stopped, administer artificial respiration. When giving mouth-to-mouth resuscitation first aider should take precautions to protect himself using a mask. Take medical treatment.

First-aid measures after skin contact : Wash immediately with plenty of soap and water.

First-aid measures after eye contact : IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice / attention. Seek medical attention immediately.

First-aid measures after ingestion : Rinse mouth thoroughly with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician immediately.

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

Symptoms/effects : May be fatal if swallowed and enters airways.

Symptoms/effects after ingestion : In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

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 : Carbon dioxide (CO2). Water spray. Dry powder. Foam.

Unsuitable extinguishing media : high volume water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Thermal decomposition may produce : Carbon monoxide. Carbon dioxide (CO2). Flammable liquid and vapour.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not inhale vapour. Keep away from ignition sources.

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".

6.2. Environmental precautions

Avoid release to the environment. Do not discharge into drains or rivers. Do not discharge into the subsoil/soil. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Notify authorities if product enters sewers or public waters.

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 : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly.

Hygiene measures : Keep away from food and drink. Always wash hands after handling the product. Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Do not inhale vapour. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Remove all sources of ignition. Protect from light. Containers which are opened should be properly resealed and kept upright to prevent leakage.

Incompatible materials : Aluminium.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DOWCLENE™* 1621 Cleaning Fluid
No additional information available

Naphtha, petroleum, hydrotreated heavy (64742-48-9)
No additional information available

1-Butoxy-2-propanol (5131-66-8)
No additional information available

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 chlorinated polyethylene (CPE)

Appropriate Material neoprene

Appropriate Material nitrile (NBR)

Appropriate Material Polyethylene

Appropriate Material ethyl vinyl alcohol laminate (EVAL)

Appropriate Material viton

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 goggles

Skin and body protection:

Chemical resistant apron

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
Appearance	:	Colourless liquid
Colour	:	Colourless
Odour	:	Weak
Odour threshold	:	No data available
pH	:	8 - 9
pH solution	:	No data available
Melting point	:	< 0 °C
Freezing point	:	< -20 °C
Boiling point	:	175 - 200 °C Method: ASTM D 1078
Critical temperature	:	No data available
Critical pressure	:	No data available
Flash point	:	59 °C Method: ASTM D3278
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Flammability (solid, gas)	:	No data available

Vapour pressure	:	< 1 mbar Reference temperature: 20 °C
Vapour pressure at 50 °C	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	0.78 Reference temperature: 20 °C
Relative density of saturated gas/air mixture	:	No data available
Density	:	0.78 g/cm³ Reference temperature: 20 °C Method: ISO 12185
Relative gas density	:	No data available
Solubility	:	Water : 5 %
Log Pow	:	CAS no.5131 -66-8: 1.1 Reference temperature: 20 °C with reference to pH: 7
Auto-ignition temperature	:	257 °C Method: DIN 51794
Decomposition temperature	:	No data available
Viscosity, kinematic	:	1.6 mPa*s Reference temperature: 20 °C
Viscosity, dynamic	:	No data available
Explosive limits	:	No data available
Explosive properties	:	No data available.
Oxidising properties	:	No data available.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Protect from sunlight. Do not distill to dryness.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Aldehydes. ketones. Organic acids.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Naphtha, petroleum, hydrotreated heavy (64742-48-9)	
LD50 oral rat	> 6000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat (mg/l)	> 8500 mg/m³ (Exposure time: 4 h)

1-Butoxy-2-propanol (5131-66-8)	
LD50 oral rat	1900 mg/kg
LD50 oral rat	3300 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight

Skin corrosion/irritation	:	Not classified pH: 8 - 9
Serious eye damage/irritation	:	Not classified pH: 8 - 9
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	May be fatal if swallowed and enters airways.
Viscosity, kinematic	:	No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Naphtha, petroleum, hydrotreated heavy (64742-48-9)	
LC50 fish 1	2200 mg/l (96 h - Pimephales promelas)
1-Butoxy-2-propanol(5131-66-8)	
LC50 fish 1	560 - 1000 mg/l(96 h-Poecilia reticulate)
EC50 Daphnia 1	> 1000 mg/l(48 h-Daphnia magna)

12.2. Persistence and degradability

DOWCLENE™* 1621 Cleaning Fluid	
Persistence and degradability	No information available.
1-Butoxy-2-propanol(5131-66-8)	
Log Pow	90 % Duration: 28 day(s) Method: OECD 301 E

12.3. Bioaccumulative potential

DOWCLENE™* 1621 Cleaning Fluid	
Log Pow	No data available
Log Kow	No data available
Bioaccumulative potential	No information available.

1-Butoxy-2-propanol(5131-66-8)	
Log Pow	1.1 Reference temperature 20 °C with reference to pH 7

12.4. Mobility in soil

DOWCLENE™* 1621 Cleaning Fluid	
Ecology - soil	No information available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3295 Hydrocarbons, liquid, n.o.s., 3, III

UN-No.(DOT) : UN3295

Proper Shipping Name (DOT) : Hydrocarbons, liquid, n.o.s.

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 3 - Flammable liquid

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Special Provisions (49 CFR 172.102) : 144 - If transported as a residue in an underground storage tank (UST), as defined in 40 CFR 280.12, that has been cleaned and purged or rendered inert according to the American Petroleum Institute (API) Standard 1604 (IBR, see 171.7 of this subchapter), then the tank and this material are not subject to any other requirements of this subchapter. However, sediments remaining in the tank that meet the definition for a hazardous material are subject to the applicable regulations of this subchapter.
B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L

DOT Vessel Stowage Location : A - The material may be stowed ''on deck'' or ''under deck'' on a cargo vessel and on a passenger vessel.

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

Transportation of Dangerous Goods

Not regulated

Transport by sea

Transport document description (IMDG)	:	UN 3295 HYDROCARBONS, LIQUID, N.O.S., 3, III
UN-No. (IMDG)	:	3295
Proper Shipping Name (IMDG)	:	HYDROCARBONS, LIQUID, N.O.S.
Class (IMDG)	:	3 - Flammable liquids
Packing group (IMDG)	:	III - substances presenting low danger

Air transport

Transport document description (IATA)	:	UN 3295 Hydrocarbons, liquid, n.o.s., 3, III
UN-No. (IATA)	:	3295
Proper Shipping Name (IATA)	:	Hydrocarbons, liquid, n.o.s.
Class (IATA)	:	3 - Flammable Liquids
Packing group (IATA)	:	III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Naphtha, petroleum, hydrotreated heavy (64742-48-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

1-Butoxy-2-propanol (5131-66-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Naphtha, petroleum, hydrotreated heavy (64742-48-9)
Listed on the Canadian DSL (Domestic Substances List)

1-Butoxy-2-propanol (5131-66-8)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Naphtha, petroleum, hydrotreated heavy (64742-48-9)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

1-Butoxy-2-propanol (5131-66-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Naphtha, petroleum, hydrotreated heavy (64742-48-9)
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 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 the TCSI (Taiwan Chemical Substance Inventory)

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 the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

No information available.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations (According to HCS-2012 APPENDIX D TO §1910.1200)

Data sources	:	LOLI.
Training advice	:	Normal use of this product shall imply use in accordance with the instructions on the packaging.

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.