SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

TWEHA CLEANER+

Version 1.0 Print Date 26.02.2021

Revision date / valid from 26.08.2020

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

1.1. Product identifier

Trade name	:	TWEHA CLEANER+ - DRUM 160KG
Substance name	:	propan-2-ol
Index-No.	:	603-117-00-0
CAS-No.	:	67-63-0
EC-No.	:	200-661-7
EU REACH-Reg. No.	:	01-2119457558-25-xxxx

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

Use of the Substance/Mixture	:	Identified use: See table in front of appendix for a complete overview of identified uses.
Uses advised against	:	At this moment we have not identified any uses advised against
Remarks	:	Before referring to any Exposure Scenario attached to this Safety Data Sheet please check the grade of the product: the Exposure Scenarios presented are not related to all product grade

1.3. Details of the supplier of the safety data sheet

Company	:	TWEHA CCS BV Lepelstraat 1,2.01 BE 3920 Lommel
Telephone	:	+31 (0)88 600 3 600
E-mail address	:	info@tweha.com
Responsible/issuing person	:	Master Data Administration

1.4. Emergency telephone number

Emergency telephone : Belgium: Antipoison Center - Brussels TEL: +32(0)70 245 245

Number : Netherlands: National Poisoning Information Center - Bilthoven TEL: +31(0)30 274 8888 (Only for the purpose of informing medical personnel in cases of acute intoxications)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	**Hazard category**	**Target Organs**	**Hazard statements**
Flammable liquids	Category 2	---	H225
Eye irritation	Category 2	---	H319
Specific target organ toxicity - single exposure	Category 3	Central nervous system	H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

Human Health : See section 11 for toxicological information.

Physical and chemical hazards : See section 9/10 for physicochemical information.

Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard symbols :

Signal word : Danger

Hazard statements :

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

Prevention : P210 Keep away from heat, hot surfaces, sparks,

			open flames and other ignition sources. No smoking.
		P261	Avoid breathing vapours/spray.
		P280	Wear protective gloves/ eye protection/ face protection.
Response	:	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
Storage	:	P403 + P235	Store in a well-ventilated place. Keep cool.

Hazardous components which must be listed on the label:

- propan-2-ol

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
propan-2-ol			
Index-No. : 603-117-00-0 CAS-No. : 67-63-0 EC-No. : 200-661-7 EU REACH-Reg. No. : 01-2119457558-25-xxxx	<= 100	Flam. Liq.2 Eye Irrit.2 STOT SE3	H225 H319 H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Remove from exposure, lie down. Take off all contaminated

clothing immediately.

If inhaled	: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position. Consult a physician after significant exposure.
In case of skin contact	: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a physician immediately.

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

Symptoms	: Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. See Section 11 for more detailed information on health effects and symptoms.
Effects	: See Section 11 for more detailed information on health effects and symptoms.

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

Treatment	: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixtures with air. Flash back possible over considerable distance.
Hazardous combustion products	:	Carbon monoxide, Carbon dioxide (CO_2)

5.3. Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.Wear personal protective equipment.
Further advice	:	Cool closed containers exposed to fire with water spray.Heating will cause a pressure rise - with risk of bursting.Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Keep away from heat and sources of ignition. Use personal protective equipment. Keep away unprotected persons. Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapours or spray mist.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	: Store in original container. Keep in an area equipped with solvent resistant flooring. Unsuitable materials for containers: Aluminium; polystyrene; ethylene propylene diene rubber; butyl-rubber; natural rubber; cast iron
Advice on protection against fire and explosion	: Keep away from sources of ignition - No smoking. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Take measures to prevent the build up of electrostatic charge. Use only in an area containing explosion proof equipment.
Further information on storage conditions	: Keep tightly closed in a dry and cool place. Keep away from direct sunlight. Keep in a well-ventilated place.
Advice on common storage	: Incompatible with oxidizing agents. Do not store together with oxidizing and self-igniting products. Keep away from food, drink and animal feedingstuffs.
Suitable packaging materials	: Stainless steel

7.3. Specific end use(s)

Specific use(s)	: Identified use: See table in front of appendix for a complete overview of identified uses.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component:	propan-2-ol	CAS-No. 67-63-0

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - systemic effects, Skin contact : 888 mg/kg bw/day

DNEL
Workers, Long-term - systemic effects, Inhalation : 500 mg/m3

DNEL
Consumers, Long-term - systemic effects, Skin contact : 319 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 89 mg/m3

DNEL
Consumers, Long-term - systemic effects, Ingestion : 26 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	140,9 mg/l
Marine water	:	140,9 mg/l
Intermittent releases	:	140,9 mg/l
Sewage treatment plant (STP)	:	2251 mg/l
Sediment	:	552 mg/kg d.w.
Soil	:	28 mg/kg
Secondary poisoning	:	160 mg/kg food

Other Occupational Exposure Limit Values

Belgium. OELs. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1, as amended, Time Weighted Average (TWA):
200 ppm, 500 mg/m3

Belgium. OELs. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1, as amended, Short Term Exposure Limit (STEL):
400 ppm, 1.000 mg/m3, (15 minutes)

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice : In case of insufficient ventilation, wear suitable respiratory equipment.
When aerosol or mist is formed use suitable respiratory protection.
Respiratory protection complying with EN 141.
Recommended Filter type:A
Combination filter: A-P2
In case of intensive or longer exposure use self-contained breathing apparatus.

Hand protection

Advice : Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.
Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Protective gloves should be replaced at first signs of wear.

Material	:	Nitrile rubber
Break through time	:	>= 8 h
Glove thickness	:	0,35 mm

Material	:	Fluorinated rubber
Break through time	:	>= 8 h
Glove thickness	:	0,4 mm

Material	:	butyl-rubber
Break through time	:	>= 8 h
Glove thickness	:	0,5 mm

Eye protection

Advice	:	Safety goggles

Skin and body protection

Advice	:	Solvent resistant protective clothing

Environmental exposure controls

General advice	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	:	liquid
Colour	:	colourless clear
Odour	:	alcohol-like
Odour Threshold	:	no data available
pH	:	no data available
Melting point/range	:	-89 °C
Boiling point/boiling range	:	82 °C (ASTM D1078)
Flash point	:	12 °C (Method: ASTM D 56)
Evaporation rate	:	3,9 (Butyl Acetate = 1)
Flammability (solid, gas)	:	Not applicable

Upper explosion limit	:	13 %(V)
Lower explosion limit	:	2 %(V)
Vapour pressure	:	43 hPa (20 °C)
Relative vapour density	:	> 1 (Air = 1.0)
Relative density	:	0,786 (20 °C)
Water solubility	:	completely soluble
Partition coefficient: n-octanol/water	:	log Kow 0,05
Auto-ignition temperature	:	> 350 °C
Thermal decomposition	:	no data available
Viscosity, dynamic	:	2,5 mPa.s (20 °C)
Viscosity, kinematic	:	2,66 mm2/s (25 °C) (ASTM D 7042)
Explosivity	:	Product is not explosive.Formation of explosive air/vapour mixtures is possible.
Oxidizing properties	:	not oxidising

9.2. Other information

Molecular weight	:	60,10 g/mol

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Possible formation of peroxide.
Note : Formation of explosive air/vapour mixtures is possible.

10.4. Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5. Incompatible materials

Materials to avoid : Strong oxidizing agents, Amines, Aldehydes, alkanolamines, alkalis, Strong acids

10.6. Hazardous decomposition products

Hazardous decomposition : Under fire conditions: Carbon oxides products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Component:		propan-2-ol	CAS-No. 67-63-0
Acute toxicity			
Oral			
LD50	:	5840 mg/kg (Rat) (OECD Test Guideline 401)	
Inhalation			
LC50	:	> 25 mg/l (Rat; 6 h; vapour) (OECD Test Guideline 403)	
Dermal			
LD50	:	13900 mg/kg (Rabbit) (OECD Test Guideline 402)	
Irritation			
Skin			
Result	:	No skin irritation (OECD Test Guideline 404)Degreases the skin which may cause dry and rough. Prolonged or repeated skin contact may result in dermatitis.	
Eyes			
Result	:	Eye irritation (OECD - Guideline 405)Splashes in eyes may cause strong pain. Vapour acts irritant.	
Sensitisation			
Result	:	not sensitizing (Buehler Test; Dermal; Guinea pig) (OECD Test Guideline 406)	
CMR effects			
Carcinogenicity			
NOEL	:	5.000 ppm (negative, Mouse, male and female)(Inhalation; 0, 500, 2500, 5000	

ppm; 78 weeks; Frequency of treatment: 5 days/week)(OECD Test Guideline 451)

CMR Properties

Carcinogenicity	:	Based on available data, the classification criteria are not met.
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Teratogenicity	:	No effects on or via lactation
Reproductive toxicity	:	Based on available data, the classification criteria are not met.

Genotoxicity in vitro

Result	:	negative (Bacterial Reverse Mutation Test; Salmonella typhimurium; with and without metabolic activation) (OECD Test Guideline 471) negative (In vitro gene mutation study in mammalian cells; CHO (Chinese Hamster Ovary) cells; with and without metabolic activation) (OECD Test Guideline 476)

Genotoxicity in vivo

Result	:	negative (In vivo micronucleus test; Mouse, male and female) (intraperitoneal;) (OECD Test Guideline 474)

Teratogenicity

NOAEL Maternal	:	400 mg/kg bw/day
NOAEL Develop.	:	400 mg/kg bw/day (Rat, Sprague-Dawley)(Oral)(OECD Test Guideline 414)No adverse effects

Reproductive toxicity

NOAEL Parent	:	853 mg/kg bw/day (One-Generation Reproduction Toxicity Study; Rat, wistar, male and female)(Oral)(OECD Test Guideline 415)No negative effects.
NOAEL Parent	:	500 mg/kg bw/day (Two-generation reproductive toxicity; Rat, Sprague-Dawley, male and female)(Oral)(OECD Test Guideline 416)No negative effects.

Specific Target Organ Toxicity

Single exposure

Inhalation	:	Target Organs: Central nervous systemMay cause drowsiness or

dizziness.

Repeated exposure		
Remarks	:	Oral and inhalation repeated exposure studies demonstrated target organ effects in male rats (kidney) and male and female mice (thyroid) by mechanisms of action that are not relevant to humans

Other toxic properties
Aspiration hazard
Aspiration hazard if swallowed - can enter lungs and cause damage. Aspiration may cause pulmonary oedema and pneumonitis. Based on available data, the classification criteria are not met.,

SECTION 12: Ecological information

12.1. Toxicity

Component:	propan-2-ol	CAS-No. 67-63-0

Acute toxicity		
Fish		
LC50	:	9.640 mg/l (Pimephales promelas; 96 h) (flow-through test; OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates		
LC50	:	9.714 mg/l (Daphnia magna; 24 h) (static test; OECD Test Guideline 202)
algae		
EC50	:	> 100 mg/l (Scenedesmus subspicatus; 72 h)
LOEC		1000 mg/l (algae; 8 d)
Bacteria		
EC50	:	> 100 mg/l (Bacteria) no harming action

12.2. Persistence and degradability

Component:	propan-2-ol	CAS-No. 67-63-0

Persistence and degradability

Persistence

Result : Transformation due to hydrolysis not expected to be significant.
Transformation due to photolysis not expected to be significant.

Biodegradability

Result : 53 % (aerobic; domestic sewage; Related to: O2 consumption; Exposure Time: 5 d)(Directive 67/548/EEC, Annex V, C.5)Readily biodegradable.

12.3. Bioaccumulative potential

Component:	propan-2-ol	CAS-No. 67-63-0

Bioaccumulation

Result : log Kow 0,05
: Bioaccumulation is not expected.

12.4. Mobility in soil

Component:	propan-2-ol	CAS-No. 67-63-0

Mobility

Water : The product is water soluble.
Soil : Mobile in soils

12.5. Results of PBT and vPvB assessment

Component:	propan-2-ol	CAS-No. 67-63-0

Results of PBT and vPvB assessment

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6. Other adverse effects

Data for the product

Additional ecological information

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.
Contaminated packaging	:	Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations. Do not burn, or use a cutting torch on, the empty drum. Risk of explosion.
European Waste Catalogue Number	:	No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

14.1. UN number

1219

14.2. UN proper shipping name

ADR : TWEHA CLEANER+
RID : TWEHA CLEANER+
IMDG : TWEHA CLEANER+

14.3. Transport hazard class(es)

ADR-Class	: 3
(Labels; Classification Code; Hazard Identification Number; Tunnel restriction code)	3; F1; 33; (D/E)
RID-Class	: 3
(Labels; Classification Code; Hazard Identification Number)	3; F1; 33
IMDG-Class	: 3
(Labels; EmS)	3; F-E, S-D

14.4. Packaging group

ADR : II
RID : II
IMDG : II

14.5. Environmental hazards

Environmentally hazardous according to ADR	:	no
Environmentally hazardous according to RID	:	no
Marine Pollutant according to IMDG-Code	:	no

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Component:		propan-2-ol	CAS-No. 67-63-0
EU. Regulation EU No. 649/2012 concerning the export and import of dangerous chemicals	:	; The substance/mixture does not fall under this legislation.	
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 3; Listed Point Nos.: , 40; Listed	
EU. Regulation No 1451/2007 [Biocides], Annex I, OJ (L 325)	:	EC Number: , 200-661-7; Listed	
EU. Directive 2012/18/EU (SEVESO III) Annex I	:	Lower-tier requirements: 5.000 tonnes; Part 1: Categories of dangerous substances; P5c: Flammable liquids, Categories 2 or 3 not covered by P5a and P5b, The information given is valid if the product is stored below the boiling point and at a pressure of 1013 hPa. Upper-tier requirements: 50.000 tonnes; Part 1: Categories of dangerous substances; P5c: Flammable liquids, Categories 2 or 3 not covered by P5a and P5b, The information given is valid if the product is stored below the boiling point and at a pressure of 1013 hPa.	

Notification status
propan-2-ol:

Regulatory List	Notification	Notification number
AICS	YES	
DSL	YES	
EINECS	YES	200-661-7
ENCS (JP)	YES	(2)-207
IECSC	YES	
ISHL (JP)	YES	2-(8)-319
ISHL (JP)	YES	(2)-207
JEX (JP)	YES	(2)-207
KECI (KR)	YES	KE-29363
NZIOC	YES	HSR001180
PICCS (PH)	YES	
TSCA	YES	

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Abbreviations and Acronyms

UVCB

substance of unknown or variable composition, complex reaction products or biological materials	vPvB
very persistent and very bioaccumulative	
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
EINECS	European Inventory of Existing Commercial Chemical Substances

ELINCS	European List of Notified Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
PBT	persistent, bioaccumulative and toxic
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
PNEC	predicted no-effect concentration
STOT	specific target organ toxicity
SVHC	substance of very high concern

Further information

Key literature references and sources for data	:	Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.
Methods used for product classification	:	The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings	:	The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.
Other information	:	The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

|| Indicates updated section.