according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019

Page 1 of 10

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

1.1. Product identifier

LogiLink Schaumreiniger TFT/LCD RP0012

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

Use of the substance/mixture

Aerosol - Washing and cleaning products SURFACE CLEANERS (liquid, powder, gel neat, spray neat) for consumer use

1.3. Details of the supplier of the safety data sheet

Company name:	2direct GmbH	
Street:	Langenstück 5 / Industriegebiet Golsberg	
Place:	D-58579 Schalksmühle	
Telephone:	+49 2351 66887-0	Telefax:+49 2351 66887-29
e-mail:	info@2direct.de	
1.4. Emergency telephone	+49 2351 66887-0	
number:	Only available during office hours.	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Aerosol: Aerosol 1 Hazard Statements: Extremely flammable aerosol. Pressurised container: May burst if heated.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word:

Pictograms:



Danger

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

Precautionary statements

cautionaly states	
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019

Page 2 of 10

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification	•			
106-97-8	Butane			5 - < 10 %	
	203-448-7		01-2119474691-32		
	Flam. Gas 1, Liquefied gas; H220	H280			
74-98-6	Propane		2.5 - < 5 %		
	200-827-9		01-2119486944-21		
	Flam. Gas 1, Liquefied gas; H220	H280			
1336-21-6	ammonia 25 %			< 0.1 %	
	215-647-6		01-2119488876-14		
	Skin Corr. 1B, STOT SE 3, Aquatic H411	Acute 1 (M-Factor = 1), Aquatic Chr	ronic 2; H314 H335 H400		

Full text of H and EUH statements: see section 16.

Labelling for contents according to Regulation (EC) No 648/2004

5 % - < 15 % aliphatic hydrocarbons, < 5 % anionic surfactants, perfumes.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove casualty to fresh air and keep warm and at rest. If medical advice is needed, have product container or label at hand.

After inhalation

Provide fresh air. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Vapours can form explosive mixtures with air.

LogiLink

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019

Page 3 of 10

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not pierce or burn, even after use.

Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Further information on handling

Heating causes rise in pressure with risk of bursting.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Keep away from food, drink and animal feedingstuffs. Protect against: Frost

7.3. Specific end use(s)

Aerosol - Washing and cleaning products

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019

Page 4 of 10

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

DNEL/DMEL values

DNEL type 1336-21-6 ar Worker DNEL, act Worker DNEL, Ion	mmonia 25 %	Exposure route	Effect	Value
Worker DNEL, acu	mmonia 25 %			Value
,				
Worker DNEL, Ion	ute	dermal	systemic	6,8 mg/kg bw/day
	ng-term	dermal	systemic	6,8 mg/kg bw/day
Worker DNEL, acu	ute	inhalation	systemic	47,6 mg/m³
Worker DNEL, acu	ute	inhalation	local	36 mg/m³
Worker DNEL, Ion	ng-term	inhalation	systemic	47,6 mg/m³
Worker DNEL, Ion	ng-term	inhalation	local	14 mg/m ³
Consumer DNEL,	, acute	dermal	systemic	68 mg/kg bw/day
Consumer DNEL,	, long-term	dermal	systemic	68 mg/kg bw/day
Consumer DNEL,	, acute	inhalation	systemic	23,8 mg/m³
Consumer DNEL,	, acute	inhalation	local	7,2 mg/m³
Consumer DNEL,	, long-term	inhalation	systemic	23,8 mg/m³
Consumer DNEL,	, long-term	inhalation	local	2,8 mg/m³
Consumer DNEL,	, acute	oral	systemic	6,8 mg/kg bw/day
Consumer DNEL,	, long-term	oral	systemic	6,8 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental	compartment	Value
1336-21-6	ammonia 25 %	
Freshwater		0,0011 mg/l
Marine water		0,0011 mg/l

8.2. Exposure controls

Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Wear eye protection/face protection. Suitable eye protection: goggles. DIN EN 166

Hand protection

Wash hands thoroughly after handling. Apply skin care products after work.

Skin protection

No special measures are necessary.

Respiratory protection

Usually no personal respirative protection necessary.

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Page 5 of 10

Revision date: 11.03.2019

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical state: Liquid Colour: opaque Odour: like: Lemon Test method pH-Value (at 20 °C): 8 - 9 Data apply to the technically active substance. Changes in the physical state Melting point: not determined < -20 °C Initial boiling point and boiling range: < -20 °C Flash point: Flammability Solid: not applicable Gas: not applicable **Explosive properties** In use may form flammable/explosive vapour-air mixture. Lower explosion limits: 5 vol. % Upper explosion limits: 9,4 vol. % Ignition temperature: not determined Auto-ignition temperature Solid: not applicable Gas: not applicable not determined Decomposition temperature: **Oxidizing properties** Not oxidising. Vapour pressure: not determined (at 20 °C) Vapour pressure: not determined (at 50 °C) Density (at 20 °C): 0,918 g/cm³ Water solubility: easily soluble (at 20 °C) Solubility in other solvents not determined Partition coefficient: not determined Viscosity / kinematic: not applicable not determined Vapour density: Evaporation rate: not determined 9.2. Other information Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol.

LogiLink

Page 6 of 10

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name						
	Exposure route Dose Species Source Method						
1336-21-6	ammonia 25 %						
	oral	LD50 750 mg/kg	Rat				

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019

Page 7 of 10

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
106-97-8	Butane						
	Acute fish toxicity	LC50 mg/l	49,9	96 h	Fish, no other information	United States Environmental Protection A	The Ecosar class program has been develo
	Acute algae toxicity	ErC50 mg/l	16,47	96 h	Green algea	United States Environmental Protection A	Calculation using ECOSAR Program v1.00.
	Acute crustacea toxicity	EC50 mg/l	46,6		Daphnid no other information.	United States Environmental Protection A	Calculation using ECOSAR Program v1.00
74-98-6	Propane						
	Acute fish toxicity	LC50 mg/l	49,9	96 h	Fish, no other information	United States Environmental Protection A	The Ecosar class program has been develo
	Acute algae toxicity	ErC50 mg/l	16,47	96 h	Green algea	United States Environmental Protection A	Calculation using ECOSAR Program v1.00.
	Acute crustacea toxicity	EC50 mg/l	69,43	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.
1336-21-6	ammonia 25 %						
	Acute fish toxicity	LC50 mg/l	0,53	96 h	Onchorhynchus mykiss		
	Acute crustacea toxicity	EC50	24 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation

(EC) No. 648/2004 on detergents.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
1336-21-6	ammonia 25 %			
	Biodegradation	<70 %	28	
	Not readily biodegradable (according to OECD criteria)			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-97-8	Butane	1,09
74-98-6	Propane	1,09
1336-21-6	ammonia 25 %	-0,64

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

LogiLink

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)	
<u>14.1. UN number:</u>	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L F0
Excepted quantity: Transport category:	E0 2
Tunnel restriction code:	D
Inland waterways transport (ADN)	2
14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Marine transport (IMDG)	
<u>14.1. UN number:</u>	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1

Page 8 of 10

LogiLink

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019 Page 9 of 10 14.4. Packing group: Hazard label: 2.1 **Special Provisions:** 63, 190, 277, 327, 344, 959 1000 mL Limited guantity: Excepted quantity: F0 F-D. S-U EmS: Air transport (ICAO-TI/IATA-DGR) UN 1950 14.1. UN number: AEROSOLS, flammable 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 2.1 14.4. Packing group: Hazard label: 2.1 **Special Provisions:** A145 A167 A802 Limited quantity Passenger: 30 kg G Passenger LQ: Y203 Excepted quantity: E0 IATA-packing instructions - Passenger: 203 IATA-max. quantity - Passenger: 75 kg IATA-packing instructions - Cargo: 203 IATA-max. quantity - Cargo: 150 kg 14.5. Environmental hazards ENVIRONMENTALLY HAZARDOUS: no 14.6. Special precautions for user Warning: Flammable gases. 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code not applicable **SECTION 15: Regulatory information** 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulatory information 2010/75/EU (VOC): 10,4% (95,42 g/l) 2004/42/EC (VOC): 10,4 % (95,42g/l) Information according to 2012/18/EU P3a FLAMMABLE AEROSOLS (SEVESO III): Additional information Regulation (EC) No. 648/2004 (Detergents regulation). Aerosol directive (75/324/EEC). National regulatory information Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Water contaminating class (D): 1 - slightly water contaminating

LogiLink

according to Regulation (EC) No 1907/2006

LogiLink Schaumreiniger TFT/LCD RP0012

Revision date: 11.03.2019

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 12.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service LC50: Lethal concentration, 50% LD50: Lethal dose, 50% For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

Page 10 of 10