

ELECTRO CLEANER N

Revision nr. 2

Dated 12/10/2018 Printed on 12/10/2018

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Replaced revision:1 (Dated: 28/09/2018)

HANDELS-GmbH			· · · · · · · · · · · · · · · · · · ·				
Safety Data Sheet							
According to A	Innex II to REACH	I - Regulation 2015/830					
SECTION 1. Identification of the substanc	e/mixture an	d of the company/under	aking				
1.1. Product identifier							
Product name ELECT	RO CLEANER N						
1.2. Relevant identified uses of the substance or mixture Intended use	and uses advised	l against					
1.3. Details of the supplier of the safety data sheet							
TECHNIQUA HANDELS GmbH Hartleitnerstraße 3 A-4653 Eberstalzell Tel: +43 (0) 7241 213 79 E-Mail: office@techniqua.at							
1.4. Emergency telephone number 0-24 hrs: +43 1 406 43 SECTION 2. Hazards identification		enring 6, A-1010 Vienna, Emergend Monday to Friday, 8 to 16 hrs, Tel.:					
SECTION 2. Hazards identification							
2.1. Classification of the substance or mixture							
The product is classified as hazardous pursuant to the provis supplements). The product thus requires a safety datasheet tha Any additional information concerning the risks for health and/o	t complies with the	e provisions of (EU) Regulation 2015	5/830.				
Hazard classification and indication: Aerosol, category 3 Carcinogenicity, category 2 Reproductive toxicity, category 1B Specific target organ toxicity - repeated exposure, category 2	H229 H351 H360FD H373	Pressurised container: may Suspected of causing cance May damage fertility. May da May cause damage to orgar exposure.	r.				
Skin irritation, category 2 Specific target organ toxicity - single exposure, category 3 Specific target organ toxicity - single exposure, category 3	H315 H335 H336	Causes skin irritation. May cause respiratory irritat May cause drowsiness or di					
2.2. Label elements							
Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) a	nd subsequent am	nendments and supplements.					

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Hazard pictograms: Signal words: Danger Hazard statements: H229 Pressurised container: may burst if heated. Suspected of causing cancer. H351 May damage fertility. May damage the unborn child. H360FD H373 May cause damage to organs through prolonged or repeated exposure. H315 Causes skin irritation. May cause respiratory irritation. H335 May cause drowsiness or dizziness. H336 Restricted to professional users. Precautionary statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P210 Do not pierce or burn, even after use. P251 P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F. P501 Dispose of contents / container to . . . P201 Obtain special instructions before use. P280 Wear protective gloves / eye protection / face protection. P308+P313 IF exposed or concerned: Get medical advice / attention. Contains: 1,2 EPOSSIBUTANO 1-BROMOPROPANO 2-METILPROPANO-2-OLO 2.3. Other hazards On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%. **SECTION 3. Composition/information on ingredients** 3.2. Mixtures Contains: x = Conc. % Identification Classification 1272/2008 (CLP) 1-BROMOPROPANO Flam. Liq. 2 H225, Repr. 1B H360FD, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336 CAS 106-94-5 $74 \le x < 78$ EC 203-445-0

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INDEX 602-019-00-5		
METHYLAL		
CAS 109-87-5	3≤x< 3,5	Flam. Liq. 2 H225
EC 203-714-2		
INDEX -		
CARBON DIOXIDE		
CAS 124-38-9	$3 \le x < 3,5$	Substance with a community workplace exposure limit.
EC 204-696-9		
INDEX -		
2-METILPROPANO-2-OLO		
CAS 75-65-0	$3 \le x < 3,5$	Flam. Liq. 2 H225, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335
EC 200-889-7		
INDEX -		
Reg. no. 2119444321-51-XXXX		
1,2 EPOSSIBUTANO		
CAS 106-88-7	1 ≤ x < 1,5	Flam. Liq. 2 H225, Carc. 2 H351, Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412
EC 203-438-2		
INDEX -		
Reg. no. 01-2119449161-46-XXXX		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 3,25 %

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

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5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

7.2. Conditions for safe storage, including any incompatibilities

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Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

	DEU FRA GBR ITA EU	Deutschland France United Kingdom Italia OEL EU TLV-ACGIH	TRGS 900 (Fassung 31.1.2018 ber.) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte JORF n°0109 du 10 mai 2012 page 8773 texte n° 102 EH40/2005 Workplace exposure limits Decreto Legislativo 9 Aprile 2008, n.81 Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC. ACGIH 2018
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1-BROMOPROPANO

Threshold Limit Value					
Туре	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH		50	0	0	0

CARBON DIOXIDE

Threshold Limit Value	e					
Туре	Country	TWA/8h		STEL/15min	1	
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	9100	5000	18200	10000	
MAK	DEU	9100	5000	18200	10000	
WEL	GBR	9150	5000	27400	15000	
VLEP	ITA	9000	5000			
OEL	EU	9000	5000			
TLV-ACGIH		9000	5000	54000	30000	

METHYLAL						
Threshold Limit Value	•					
Туре	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	960	300	1920	600	
VLEP	FRA	3100	1000			
WEL	GBR	3160	1000	3950	1250	
TLV-ACGIH		3112	1000			

TLV-ACGIH

Legend:

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(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION None required.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	aerosol
Colour	yellowish
Odour	characteristic
Odour threshold	Not available
pН	Not available
Melting point / freezing point	Not available
Initial boiling point	Not applicable
Boiling range	Not available
Flash point	Not applicable
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,94
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available

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Decomposition temperature Viscosity Explosive properties Oxidising properties

Not available Not available Not available Not available

9.2. Other information

 Total solids (250°C / 482°F)
 83,75 %

 VOC (Directive 2010/75/EC) :
 3,25 % - 30,55 g/litre

 VOC (volatile carbon) :
 1,54 % - 14,45 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

Avoid overheating.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

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Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture: > 20 mg/l LD50 (Oral) of the mixture: >2000 mg/kg LD50 (Dermal) of the mixture: >2000 mg/kg

METHYLAL

LD50 (Oral) 6453 mg/kg Rat - Wistar

LD50 (Dermal) > 5000 mg/kg Rabbit - New Zeland white

LC50 (Inhalation) 57 mg/l Mouse - Swiss

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Suspected of causing cancer

REPRODUCTIVE TOXICITY

May damage fertility - May damage the unborn child

STOT - SINGLE EXPOSURE

May cause respiratory irritation May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

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May cause damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

12.1. Toxicity

METHYLAL	
LC50 - for Fish	> 1000 mg/l/96h Danio rerio
EC50 - for Crustacea	> 1000 mg/l/48h Daphnia magna
12.2. Persistence and degradability	
METHYLAL	
Solubility in water	> 10000 mg/l
NOT rapidly degradable	
12.3. Bioaccumulative potential	
METHYLAL	
Partition coefficient: n-octanol/water	0,18
BCF	0,6
12.4. Mobility in soil	
Information not available	
momation not available	
12.5. Results of PBT and vPvB assessment	
• • • • • • • • • • • • • • • • • • •	
On the basis of available data, the product does not contain any	PBT or VPVB in percentage greater than 0,1%.
12.6. Other adverse effects	

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

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Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, 1950 IATA:

14.2. UN proper shipping name

ADR / RID:	AEROSOLS
IMDG:	AEROSOLS
IATA:	AEROSOLS, NON-FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID:	Class: 2	Label: 2.2
IMDG:	Class: 2	Label: 2.2
IATA:	Class: 2	Label: 2.2



14.4. Packing group

ADR / RID, IMDG, IATA:

14.5. Environmental hazards

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ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: Special Provision: -	Limited Quantities: 1 L	Tunnel restriction code: (D)
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 150 Kg	Packaging instructions: 203
	Pass.:	Maximum	Packaging

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	Special Inst	ructions:	quantity: 75 Kg A145, A167, A802	instructions: 203
14.7. Transport in bulk acco	rding to Annex II of Marpo	ol and the IBC Code		
Information not relevant				
SECTION 15. Regul	atory information			
15.1. Safety, health and en	vironmental regulations/l	egislation specific for the su	bstance or mixture	
Seveso Category - Directive 2	012/18/EC: P3b			
Restrictions relating to the pro-	duct or contained substanc	es pursuant to Annex XVII to E	C Regulation 1907/2006	
Contained substance				
Point	30	1-BROMOPROPANO Nr. Reg.: 2119519252-48		
Substances in Candidate List	(Art. 59 REACH)			
1-BROMOPROPANO Nr. Reg	.: 2119519252-48			
Substances subject to authoris	sation (Annex XIV REACH)			
1-BROMOPROPANO Nr. Reg	.: 2119519252-48			
Sunset Date: 04/07/2020				
Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:				
None				
Substances subject to the Rot	terdam Convention:			
None				
Substances subject to the Stor	ckholm Convention:			
None				
Healthcare controls				
Workers exposed to this chem workers' health and safety are	nical agent must not underg modest and that the 98/24	go health checks, provided that /EC directive is respected.	t available risk-assessment d	ata prove that the risks related to the
15.2. Chemical safety assessment				

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No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Aerosol 3	Aerosol, category 3		
Flam. Liq. 2	Flammable liquid, category 2		
Carc. 2	Carcinogenicity, category 2		
Repr. 1B	Reproductive toxicity, category 1B		
Acute Tox. 4	Acute toxicity, category 4		
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2		
Eye Irrit. 2	Eye irritation, category 2		
Skin Irrit. 2	Skin irritation, category 2		
STOT SE 3	Specific target organ toxicity - single exposure, category 3		
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3		
H229	Pressurised container: may burst if heated.		
H225	Highly flammable liquid and vapour.		
H351	Suspected of causing cancer.		
H360FD	May damage fertility. May damage the unborn child.		
H302	Harmful if swallowed.		
H312	Harmful in contact with skin.		
H332	Harmful if inhaled.		
H373	May cause damage to organs through prolonged or repeated exposure.		
H319	Causes serious eye irritation.		
H315	Causes skin irritation.		
H335	May cause respiratory irritation.		
H336	May cause drowsiness or dizziness.		
H412	Harmful to aquatic life with long lasting effects.		

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration

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- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- The Merck Index. 10th Edition Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users: The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 11 / 12 / 15.