ETRA Brake Cleaner

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
SDS Reference Number: 100002765
Issue date: 16/02/2009 Revision date: 10/07/2024 Supersedes version of: 10/03/2022 Version: 5.1

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	ETRA Brake Cleaner
Type of product	:	Detergent
Vaporizer	:	Aerosol

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

Relevant identified uses

Intended for general public

Main use category	:	Consumer use,Professional use
Use of the substance/mixture	:	Cleaning agent Detergent

1.3. Details of the supplier of the safety data sheet

Supplier
Soudal N.V.
Everdongenlaan 18-20
2300 Turnhout
Belgium
T +32 14 42 42 31, F +32 14 42 65 14
sds@soudal.com, www.Soudal.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Brussels	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol, Category 1	H222;H229
Skin corrosion/irritation, Category 2	H315
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

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

Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. May cause drowsiness or dizziness. Causes skin irritation. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS07 GHS09

Signal word (CLP) : Danger

Contains : hydrocarbons, C6, isoalkanes, <5% n-hexane;hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Hazard statements (CLP) : H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
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.
P391 - Collect spillage.
P405 - Store locked up.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C, 122 °F.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

The product does not meet the PBT and vPvB classification criteria
Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	cyclohexane (110-82-7), n-hexane (110-54-3), carbon dioxide (124-38-9), butane (106-97-8), propane (74-98-6)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	cyclohexane (110-82-7), n-hexane (110-54-3), carbon dioxide (124-38-9), butane (106-97-8), propane (74-98-6)

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane (Note P)	EC-No.: 921-024-6 REACH-no: 01-2119475514-35	≥ 25	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
butane substance with national workplace exposure limit(s) (BE)	CAS-No.: 106-97-8 EC-No.: 203-448-7 EC Index-No.: 601-004-00-0 REACH-no: 01-2119474691-32	≥ 10 – < 25	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
propane substance with national workplace exposure limit(s) (BE)	CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5 REACH-no: 01-2119486944-21	≥ 10 – < 25	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
hydrocarbons, C6, isoalkanes, <5% n-hexane (Note P)	CAS-No.: 64742-49-0 EC-No.: 931-254-9 REACH-no: 01-2119484651-34	≥ 5 - < 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
carbon dioxide substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit	CAS-No.: 124-38-9 EC-No.: 204-696-9	≥ 5 – < 10	Press. Gas (Liq.), H280
n-hexane substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit	CAS-No.: 110-54-3 EC-No.: 203-777-6 EC Index-No.: 601-037-00-0	≥ 0,1 - < 1	Flam. Liq. 2, H225 Repr. 2, H361f Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
cyclohexane substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit	CAS-No.: 110-82-7 EC-No.: 203-806-2 EC Index-No.: 601-017-00-1 REACH-no: 01-2119463273-41	≥ 0,1 - < 1	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
n-hexane	CAS-No.: 110-54-3 EC-No.: 203-777-6 EC Index-No.: 601-037-00-0	(5 ≤ C < 100) STOT RE 2; H373

Note P: Note P : The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262- P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply. This note applies only to certain complex oil-derived substances in Part 3.

Product subject to CLP Annex I, item 1.1.3.7. The disclosure rules of the components is modified in this case.
Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects : May cause drowsiness or dizziness.
Symptoms/effects after skin contact : Irritation.
Symptoms/effects after ingestion : Risk of lung oedema.

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. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable aerosol.
Explosion hazard : Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

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

For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Absorb spilled material with sand or earth. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. Mechanically recover the product.
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 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Incompatible products : Heat sources. Ignition sources. Oxidizing agent. Strong acids. Strong bases.

Packaging materials : Aerosol.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

cyclohexane (110-82-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Cyclohexane
IOEL TWA	700 mg/m³
	200 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Belgium - Occupational Exposure Limits	
Local name	Cyclohexane # Cyclohexaan
OEL TWA	350 mg/m³
	100 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023

n-hexane (110-54-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	n-Hexane
IOEL TWA	72 mg/m³
	20 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Belgium - Occupational Exposure Limits	
Local name	n-Hexane # n-Hexaan
OEL TWA	72 mg/m³
	20 ppm

n-hexane (110-54-3)	
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023

carbon dioxide (124-38-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	9000 mg/m³
	5000 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	9131 mg/m³
	5000 ppm
OEL STEL	54784 mg/m³
	30000 ppm

butane (106-97-8)	
Belgium - Occupational Exposure Limits	
Local name	Butane, tous isomères: n-butane # Butaan, alle isomeren: n-butaan
OEL STEL	2370 mg/m³
	980 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023

propane (74-98-6)	
Belgium - Occupational Exposure Limits	
Local name	Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3) # Alifatische koolwaterstoffen in gas-vorm: Alkanen (C1-C3)
OEL TWA	1000 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023

DNEL and PNEC

cyclohexane (110-82-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	1400 mg/m³
Acute - local effects, inhalation	1400 mg/m³
Long-term - systemic effects, dermal	2016 mg/kg bw/day
Long-term - systemic effects, inhalation	700 mg/m³
Long-term - local effects, inhalation	700 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	412 mg/m³
Acute - local effects, inhalation	412 mg/m³
Long-term - systemic effects,oral	59,4 mg/kg bw/day
Long-term - systemic effects, inhalation	206 mg/m³
Long-term - systemic effects, dermal	1186 mg/kg bw/day
Long-term - local effects, inhalation	206 mg/m³

cyclohexane (110-82-7)	
PNEC (Water)	
PNEC aqua (freshwater)	44,7 µg/l
PNEC aqua (marine water)	4,47 µg/l
PNEC aqua (intermittent, freshwater)	0,209 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3,6 mg/kg dwt
PNEC sediment (marine water)	0,36 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,694 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	3,24 mg/l

n-hexane (110-54-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	11 mg/kg bw/day
Long-term - systemic effects, inhalation	75 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	4 mg/kg bw/day
Long-term - systemic effects, inhalation	16 mg/m³
Long-term - systemic effects, dermal	5,3 mg/kg bw/day

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Safety glasses (EN 166)

Skin protection

Skin and body protection:
Protective clothing (EN 14605 or EN 13034)

Hand protection:
Protective gloves against chemicals (EN 374)

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
	Butyl rubber	6 (> 480 minutes)	0.7		EN ISO 374

Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Various colours.
Appearance	:	Aerosol.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	-42 – 95 °C
Flammability	:	Extremely flammable aerosol.
Explosive properties	:	Pressurised container: May burst if heated.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	-20 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	10,4
Viscosity, kinematic	:	Not available
Solubility	:	Insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	8530 hPa (20°C)
Vapour pressure at 50°C	:	Not available
Density	:	0,721 kg/l (20°C)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosion limits	:	1,1 – 9,5 vol %
% of flammable ingredients	:	93,5 %

Other safety characteristics

VOC content	:	95 % (619.850g/l)

SECTION 10: Stability and reactivity

10.1. Reactivity

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

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.

10.5. Incompatible materials

Heat sources. Ignition sources. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

cyclohexane (110-82-7)	
LD50 oral rat	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LD50 oral	> 5000 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 32,88 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	13900 mg/l

n-hexane (110-54-3)	
LD50 oral rat	16000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	> 3350 mg/kg bodyweight (Equivalent or similar to OECD 402, 4 h, Rabbit, Male, Read-across, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 17,6 mg/l air (Equivalent or similar to OECD 403, 24 h, Rat, Male, Experimental value, Inhalation (vapours))

butane (106-97-8)	
LC50 Inhalation - Rat [ppm]	> 800000 ppm (15 minutes, Rat, Male / female, Experimental value of similar product, Inhalation (gases))

propane (74-98-6)	
LC50 Inhalation - Rat [ppm]	> 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (gases))

hydrocarbons, C6, isoalkanes, <5% n-hexane (64742-49-0)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	5610 mg/m³

Skin corrosion/irritation : Causes skin irritation.
pH: 10,4

cyclohexane (110-82-7)	
pH	7 (0.005 %, 24 °C)

n-hexane (110-54-3)	
pH	7 (< 0.01 %, 25 °C)

carbon dioxide (124-38-9)	
pH	Not applicable (gas)

butane (106-97-8)	
pH	No data available in the literature

propane (74-98-6)	
pH	No data available in the literature

Serious eye damage/irritation : Not classified
pH: 10,4

cyclohexane (110-82-7)	
pH	7 (0.005 %, 24 °C)

n-hexane (110-54-3)	
pH	7 (< 0.01 %, 25 °C)

carbon dioxide (124-38-9)	
pH	Not applicable (gas)

butane (106-97-8)	
pH	No data available in the literature

propane (74-98-6)	
pH	No data available in the literature

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.

cyclohexane (110-82-7)	
STOT-single exposure	May cause drowsiness or dizziness.

n-hexane (110-54-3)	
STOT-single exposure	May cause drowsiness or dizziness.

hydrocarbons, C6, isoalkanes, <5% n-hexane (64742-49-0)	
STOT-single exposure	May cause drowsiness or dizziness.

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

n-hexane (110-54-3)	
STOT-repeated exposure	May cause damage to organs (nervous system) through prolonged or repeated exposure (if inhaled).

Aspiration hazard : Not classified

ETRA Brake Cleaner	
Vaporizer	Aerosol

cyclohexane (110-82-7)	
Viscosity, kinematic	1,16 mm²/s (26 °C, Calculated)

n-hexane (110-54-3)	
Viscosity, kinematic	No data available in the literature

carbon dioxide (124-38-9)	
Viscosity, kinematic	0,047 mm²/s (20 °C)

butane (106-97-8)	
Viscosity, kinematic	No data available in the literature

propane (74-98-6)	
Viscosity, kinematic	No data available in the literature

hydrocarbons, C6, isoalkanes, <5% n-hexane (64742-49-0)	
Viscosity, kinematic	0,46 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
Viscosity, kinematic	0,7 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Toxic to aquatic life with long lasting effects.

cyclohexane (110-82-7)	
LC50 - Fish [1]	4,5 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Measured concentration)
EC50 - Crustacea [1]	0,9 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 - Other aquatic organisms [1]	2,2 mg/l waterflea
EC50 - Other aquatic organisms [2]	1,8 mg/l
EC50 72h - Algae [1]	9,3 mg/l (Equivalent or similar to OECD 201, Pseudokirchneriella subcapitata, Experimental value, Growth rate)

carbon dioxide (124-38-9)	
LC50 - Fish [1]	35 mg/l (96 h, Salmo gairdneri, Literature study, Lethal)

butane (106-97-8)	
LC50 - Fish [1]	24 mg/l (ECOSAR, 96 h, Pisces, Fresh water, QSAR)
EC50 96h - Algae [1]	7,7 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR)

propane (74-98-6)	
LC50 - Fish [1]	50 mg/l (96 h, Pisces, Fresh water, QSAR, Estimated value)
EC50 96h - Algae [1]	12 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR)

hydrocarbons, C6, isoalkanes, <5% n-hexane (64742-49-0)	
LC50 - Fish [1]	8,2 – 10 mg/l (read-across to all substances in the naphtha category)
EC50 - Crustacea [1]	4,5 mg/l (read-across to all substances in the naphtha category)
ErC50 algae	3,1 mg/l (read-across to all substances in the naphtha category)

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
LC50 - Fish [1]	8,2 – 10 mg/l (read-across to all substances in the naphtha category)
EC50 - Crustacea [1]	4,5 mg/l (read-across to all substances in the naphtha category)
ErC50 algae	3,1 mg/l (read-across to all substances in the naphtha category)
LOEC (chronic)	0,32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0,17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

ETRA Brake Cleaner	
Persistence and degradability	Not rapidly degradable

cyclohexane (110-82-7)	
Persistence and degradability	Readily biodegradable.

n-hexane (110-54-3)	
Persistence and degradability	Readily biodegradable.
ThOD	3,52 g O_2/g substance

carbon dioxide (124-38-9)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

butane (106-97-8)	
Persistence and degradability	Readily biodegradable in water.

propane (74-98-6)	
Persistence and degradability	Readily biodegradable in water.

hydrocarbons, C6, isoalkanes, <5% n-hexane (64742-49-0)	
Persistence and degradability	Not rapidly degradable

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

cyclohexane (110-82-7)	
BCF - Fish [1]	167 l/kg (Pimephales promelas, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	3,4 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

n-hexane (110-54-3)	
BCF - Fish [1]	501,187 (Pimephales promelas, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	4 (Experimental value, Equivalent or similar to OECD 107, 20 °C)
Bioaccumulative potential	Potentially bioaccumulable.

carbon dioxide (124-38-9)	
Bioaccumulative potential	Not bioaccumulative.

butane (106-97-8)	
Partition coefficient n-octanol/water (Log Pow)	2,8 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

propane (74-98-6)	
Partition coefficient n-octanol/water (Log Pow)	1,1 – 2,8 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

cyclohexane (110-82-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2,9 (log Koc, QSAR)
Ecology - soil	Low potential for adsorption in soil.

n-hexane (110-54-3)	
Surface tension	17,89 mN/m (25 °C, 1 g/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3,34 (log Koc, QSAR)
Ecology - soil	Low potential for mobility in soil.

carbon dioxide (124-38-9)	
Ecology - soil	Not applicable (gas).

12.5. Results of PBT and vPvB assessment

ETRA Brake Cleaner
The product does not meet the PBT and vPvB classification criteria

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	cyclohexane (110-82-7), n-hexane (110-54-3), carbon dioxide (124-38-9), butane (106-97-8), propane (74-98-6)

Component	
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	cyclohexane (110-82-7), n-hexane (110-54-3), carbon dioxide (124-38-9), butane (106-97-8), propane (74-98-6)

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

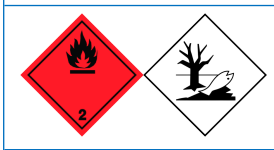
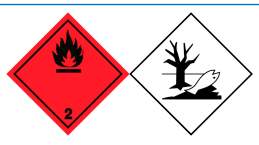
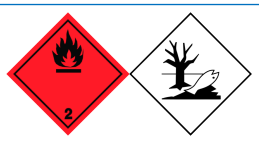
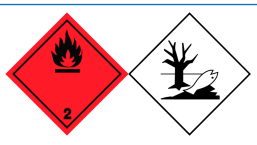
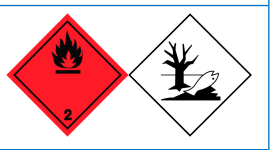
SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Do not discharge into drains or the environment.
Ecological waste information : Avoid release to the environment.
European List of Waste (LoW, EC 2000/532) : 16 05 04* - gases in pressure containers (including halons) containing dangerous substances
20 01 29* - detergents containing dangerous substances
15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name				
AEROSOLS	AEROSOLS (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)	Aerosols, flammable	AEROSOLS	AEROSOLS
Transport document description				
UN 1950 AEROSOLS, 2.1, (D), ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics), 2.1, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS (-20°C c.c.)	UN 1950 Aerosols, flammable, 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA	ADN	RID
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-D EmS-No. (Spillage): S-U	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : 5F
Special provisions (ADR) : 190, 327, 344, 625
Limited quantities (ADR) : 1l
Excepted quantities (ADR) : E0
Packing instructions (ADR) : P207, LP200
Special packing provisions (ADR) : PP87, RR6, L2
Mixed packing provisions (ADR) : MP9
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V14
Special provisions for carriage - Loading, unloading and handling (ADR) : CV9, CV12
Special provisions for carriage - Operation (ADR) : S2
Tunnel restriction code (ADR) : D

Transport by sea

Special provisions (IMDG) : 63, 190, 277, 327, 344, 381, 959
Packing instructions (IMDG) : P207, LP200
Special packing provisions (IMDG) : PP87, L2
Stowage category (IMDG) : None
Stowage and handling (IMDG) : SW1, SW22
Segregation (IMDG) : SG69

Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Y203
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 203
PCA max net quantity (IATA) : 75kg
CAO packing instructions (IATA) : 203
CAO max net quantity (IATA) : 150kg
Special provisions (IATA) : A145, A167, A802
ERG code (IATA) : 10L

Inland waterway transport

Classification code (ADN) : 5F
Special provisions (ADN) : 190, 327, 344, 625
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E0
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01, VE04
Number of blue cones/lights (ADN) : 1

Rail transport

Classification code (RID) : 5F
Special provisions (RID) : 190, 327, 344, 625
Limited quantities (RID) : 1L
Excepted quantities (RID) : E0
Packing instructions (RID) : P207, LP200

Special packing provisions (RID)	:	PP87, RR6, L2
Mixed packing provisions (RID)	:	MP9
Transport category (RID)	:	2
Special provisions for carriage – Packages (RID)	:	W14
Special provisions for carriage - Loading, unloading and handling (RID)	:	CW9, CW12
Colis express (express parcels) (RID)	:	CE2
Hazard identification number (RID)	:	23

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 95 % (619.850g/l)

Detergent Regulation (648/2004)

Labelling of contents	
Component	**%**
aliphatic hydrocarbons	≥30%

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	**Changed item**	**Comments**
	according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878	
14.2		**Modified** IMDG

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit

Abbreviations and acronyms:	
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Aerosol 1	Aerosol, Category 1
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aerosol 1	H222;H229	On basis of test data
Skin Irrit. 2	H315	Calculation method
STOT SE 3	H336	Calculation method
Aquatic Chronic 2	H411	Calculation method

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.