

Name: Flux Remover 4

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

The trade name: Flux Remover 4

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

Relevant identified uses: Designed for a professional use as a cleaning fluid for electrotechnical industry.

Uses advised against: Data are not available.

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer: DCT Czech s.r.o.

Street address: Tovární 85

Country ID/Postcode/Place: CZ-679 21 Černá Hora

Telephone number: + 420 515 539 762

Only available during office hours from 7 am to 3 pm.

E-mail address of competent person responsible for the SDS: lab@dctchemicals.com

1.4 Emergency telephone number

Toxicological information centre: Na Bojišti 1
CZ-120 00 Praha 2

Telephone number: +420 224 919 293

+420 224 915 402

Opening hours: Available non-stop.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

Flam. Aerosol 1 (Flammable aerosols, category 1) H222

Skin Irrit. 2 (Skin corrosion/irritation, category 2) H 315

STOT SE 3 (Specific target organ toxicity, single exposure, category 3) H 336

Aquatic Chronic 2 (Hazardous to the aquatic environment, long-term hazard, category 2) H 411

2.1.2 Classification according to Directive 1999/45/ES

extremely flammable R12

skin irritant R38, R 67

dangerous for the environment R51/53

2.1.3 Additional information: See SECTION 16 for full text of R-phrases and Hazard- and EU Hazard-statements.

2.2 Label elements

2.2.1 Labelling according to Regulation (EC) No 1272/2008 (CLP)

Product identifier: Flux Remover 4

Hazard pictograms:



Signal word: danger

Inscription: Contains: hydrocarbons C7 – C9, isoalkanes
Contents under pressure: do not expose to sunshine and temperatures above 50°C. Do not puncture or incinerate container even if empty.
Do not spray into open fire or on hot objects unless the aerosol spray is constructed for this purpose.

Hazard statements:

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H 222 Extremely flammable aerosol.
H 315 Causes skin irritation.
H 336 May cause drowsiness or dizziness.
H 411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P 243 Take precautionary measures against static discharge.
P 102 Keep out of reach of children.
P 260 Do not breathe dust/fume/gas/mist/vapours/spray.
P 262 Do not get in eyes, on skin, or on clothing.
P 273 Avoid release to the environment.
P 271 Use only outdoors or in a well-ventilated area.

2.3 Other hazards

Degreases and dries the skin and repeated contact may cause skin irritation. The product is dangerous for the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients: hydrocarbons C7 – C9, isoalkanes
1-methoxypropan-2-ol
isopropanol
propan
butan

CAS No	EC No	% weight	Name	Classification according to 67/548/EEC	Classification according to Regulation (EC) No 1272/2008 (CLP)
	921-728-3	32	hydrocarbons C7 – C9, isoalkanes	F; R11 Xi; R38 Xn; R65 R67 N; R51/53	Flam.Liq. 2; H 225 Skin Irrit. 2; H 315 STOT SE 3; H 336 Asp. Tox. 1; H 304 Aquatic Chronic 2; H 411
203-539-1	107-98-2	4	1-methoxypropan-2-ol	R 10 R 67	Flam.Liq. 3; H226 STOT SE 3; H336
67-63-0	200-661-7	4	isopropanol	F; R11 Xi; R36 R67	Flam.Liq. 2; H 225 Eye Irrit. 2; H 319 STOT SE 3; H 336
74-98-6	200-827-9	5-6	propan	F+; R12	Flam.Gas 1; H220 Press.Gas
106-97-8	203-448-7	50-55	butan	F+; R12	Flam.Gas 1; H220 Press.Gas

Additional information: For full text of H-statements and R-phrases: see SECTION 16

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Following inhalation: move victim to fresh air. In all cases keep patient warm and at rest.

Following skin contact: take off contaminated clothing and flush the affected area with tepid water and soap.

Following eye contact: immediately rinse with plenty of drinking water and seek medical advice.

Following ingestion: not possible as this is an aerosol.

4.2 Most important symptoms and effects, both acute and delayed

Irritated eyes, headache.

4.3 Indication of any immediate medical attention and special treatment needed

In case of health troubles, in case of doubts and if swallowed accidentally, contact the

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physician and provide him with information from this Safety Data Sheet.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: alcohol-resistant foam, water mist, carbon dioxide (CO₂), powder extinguisher, foam

Unsuitable extinguishing media: direct stream of water

5.2 Special hazards arising from the substance or mixture

During the fire toxic combustion products may develop.

5.3 Advice for firefighters

Do not enter fire area without appropriate protective clothing and breathing apparatus. Prevent leaking of extingnants into the environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment - protective clothing, goggles and gloves. Secure outlet of vapours and admission of fresh air in closed rooms. No smoking, no manipulation with open fire. Remove all sources of ignition.

6.2 Environmental precautions

Prevent leaks to the environment.

6.3 Methods and material for containment and cleaning up

Let evaporate, wipe out.

6.4 Reference to other sections

No.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle the packing, i.e. the pressurized container with care, do not heat, puncture or incinerate. Avoid contact with the skin and eyes. Use only in well-aired rooms with an established vapour outlet and an admission of fresh air.

7.2 Conditions for safe storage, including any incompatibilities

Store in the well-aired rooms at temperatures from 5 to 25 °C.

7.3 Specific end use(s)

Cleaning fluid for electrotechnical industry.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits according to regulation 316/2007 Sb.

CAS No	Name	PEL mg/m ³	NPK- P mg/m ³	Conversion factor to ppm	Note
107-98-2	1-methoxypropan-2-ol	270	550	0,271	D - Major permeation of the substance through the skin during the exposition.
67-63-0	isopropanol	500	1000	0,407	I - Irritating to mucous membranes (eyes, respiratory system) respectively. skin.

8.2 Exposure controls

8.2.1 Personal protection equipment:

Do not eat, drink or smoke during the work. Wash hands before the break and after the work with warm water and soap, apply a regeneration cream.

Respiratory protection: if PELs are exceeded – half-mask with filter type A against

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- Hand protection: vapors of organic solvents.
protective gloves resistant to organic solvents. Necessary to respect the time of use recommended by the producer.
- Eye protection: closed goggles or a face shield.
- Skin protection: cotton work dress.
- 8.2.2 Environmental exposure controls:
Prevent unnecessary leaks to sewage system, surface water and soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- Appearance: clear aerosol and gas
- Odour: hydrocarbon and isopropanol odour
- Upper explosion limits: 6,3 % vol.
- Lower explosion limits: 0,7 % vol.
- Density at 20°C: 0,8 kg/l
- Solubility: solubility in water is limited
- Ignition temperature: >200 °C
- Flash point: <10 °C
- Viscosity: data are not available
- Oxidising properties: does not show oxidation properties.

9.2 Other information

- Content of organic solvents – VOC 0.99 kg/kg
- Content of organic carbon total - TOC 0.61 kg/kg
- Content of non-volatile substances 0.95% per volume

SECTION 10: STABILITY AND REACTIVITY

- 10.1 **Reactivity:** Reacts with agents with oxidation properties.
- 10.2 **Chemical stability:** Stable when professionally used for specified aims.
- 10.3 **Possibility of hazardous reactions:** Explosive reaction with oxidation agents.
- 10.4 **Conditions to avoid:** Prevent formation of concentrations above the explosion limit and avoid high temperatures, open fire and sources of ignition.
- 10.5 **Incompatible materials:** Agents with oxidation properties.
- 10.6 **Hazardous decomposition products:** At high temperatures toxic substances may develop.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity of the hazardous substances contained in mixture:

CAS No	Name	LD50 oral. rat	LD50 inhal. rat	LD50 derm. rabbit
107-98-2	1-methoxypropan-2-ol	>5000 mg/kg	>5,2 mg/15 min.	>3500 mg/kg
67-63-0	isopropanol	>2000 mg/kg		>2000 mg/kg
	hydrocarbons C7 – C9, isoalkanes	>5000 mg/kg	21 mg/l 6 hod.	>2000 mg/kg

- Sensibilization: does not contain any sensitizing substances.
- Germ cell mutagenicity: does not contain substances classified as mutagens.
- Carcinogenicity: does not contain any carcinogenic substances.

Reproductive toxicity:	does not contain substances classified as toxic for reproduction.
Other toxicological informations::	no.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity was not tested. Mixture contains hydrocarbons, C7 - C9, isoalkanes, which are harmful to aquatic organisms, may cause adverse effects in the aquatic environment.

12.2 Persistence and degradability

The preparation is easily biodegradable.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Substances and mixtures are not PBT and vPvB.

12.6 Additional information

If used in standard way the mixture does not show anomalies in biological cleaning facilities.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

13.1.1 Packaging disposal:

The used and fully emptied packing must be disposed at the collection point of waste containers.

Designation of waste under the Waste Catalogue:

15 01 11* Metal containers containing hazardous filler (e.g. asbestos) including empty pressurized containers.

13.1.2 Product disposal:

Collected residues of the product devalued by use in marked packs and hand over for liquidation to the person authorized to handle dangerous waste.

Designation of waste under the Waste Catalogue:

16 05 04* Gasses in pressurized containers (including halons) containing hazardous substance.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number: UN 1950

14.2 UN proper shipping name: Aerosols, flammable

14.3 Transport hazard class(es): 2

14.4 Packing group: No.

14.5 Environmental hazards: Dangerous for the environment.

14.6 Special precautions for user: No.

14.7 Transport in bulk according to Annex II MARPOL 73/78 and the IBC Code: No.

SECTION 15: REGULATORY INFORMATION

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

Directive of European Parliament and Council (EC) No.1907/2006, on registration, evaluation, approvals and restrictions of chemical substances, on establishment of European Agency for chemical substances and implementing and related regulations. Act No.185/2001 Coll., on waste and amendments to some other acts, Decree No.381/2001 Coll., Waste Catalogue. Decree No.383/2001 Coll., on details of handling waste. Act No.258/2000 Coll., on public health. Government Directive No.178/2001 Coll., stipulating the conditions of health protection

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of employees at work. Decree No.432/2003 Coll., stipulating conditions for the classification of work to categories, limit values of indicators of the biological exposure tests and requirements as to the reporting of works with asbestos and biological agents. Act No.477/2001 Coll., on packing, as amended. Decree No..115/2002 Coll., on details of handling the packing. Act No. 59/2006 Coll., on prevention of serious accidents. Communication No..33/2005 Coll., (ADR), Communication No..34/2005 Coll., (RID).

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

a) R-phrases and H-statements (number and full text):

R 10	Flammable.
R 11	Extremely flammable.
R 36	Irritating to eyes.
R 38	Irritating to skin.
R 51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 65	Harmful: may cause lung damage if swallowed.
R 67	Vapours may cause drowsiness and dizziness.
H 225	Highly flammable liquid and vapour.
H 226	Flammable liquid and vapour.
H 304	May be fatal if swallowed and enters airways.
H 315	Causes skin irritation.
H 319	Causes serious eye irritation.
H 336	May cause drowsiness or dizziness.

b) Abbreviations and acronyms:

PEL	Permissible exposure limit long-term (8 hours).
NPK-P	The highest allowable concentration of a chemical to which a worker may be exposed over a period.
CLP	Regulation EC 1272/2008
REACH	Regulation EC 1907/2006
PBT	Substance which is persistent bioaccumulative and toxic simultaneously.
vPvB	Substance which is very persistent and very bioaccumulative.
Eye Irrit. 2	Serious damage/eye irritation, category 2
Skin Irrit. 2	Skin corrosion/irritation, category 2
Flam. Liq. 2	Flammable liquids, category 2
STOT SE 3	Specific target organ toxicity, single exposure, category 3
Asp. Tox. 1	Aspiration hazard, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, long-term hazard, category 2
Flam. Liq. 3	Flammable liquids, category 3
Flam. Gas 1	Flammable gases, category 1
Press. Gas	Gas pressure

c) Indication of changes: no.

d) Sources of the most important data used to prepare this SDS:

Safety Data Sheets of raw materials from suppliers, Database ECB ESIS :EINECS/ELINCS (European Chemical Bureau – European Information System of Chemical Substances) ChemDat Merck, Fluka, Database DANELA Ekoline s.r.o. Brno

e) Instructions for Training:

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A corporate entity or a private entrepreneur manipulating with this chemical preparation must get acquainted with information and details stated in this Safety Data Sheet and must be trained in the area of the safety rules.

f) Notice:

This Safety Data Sheet was prepared based on Directive of the European Parliament and Council (EC), No. 1907/2006. The classification was done by the conventional calculation method. It contains data necessary to secure the safety and protection of health at work and the living environment protection. The data provided correspond to the current state of knowledge and experience and they are in accordance with the valid legal regulations. They cannot be deemed the guarantee of suitability and usability of the product for a given specific application.

g) Contact point for technical information:

Specialized help line for the preparation use: +420 516 432 677

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