



## SAFETY DATA SHEET

FLUX-OFF

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Compilation date: 11.07.2016

Revision No: 1

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name:** FLUX-OFF

**Product code:** 705.400.000

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

**Use of substance / mixture:** Cleaning agent / Cleaner

#### 1.3. Details of the supplier of the safety data sheet

**Company name:** ECS AG

Roosstr.53

CH-8832 Wollerau

Switzerland

**Tel:** +41 (0)44 / 7875353

**Email:** gunnar.kleinmann@ecsag.com

#### 1.4. Emergency telephone number

**Emergency tel:** Germany: Intoxications Information Center; +49 761 19240

Switzerland: Swiss Toxicological Information Centre; +41 44 251 51 51

Austria: Intoxication information center; +43 1 406 43 43

### Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**Classification under CLP:** STOT SE 3: H336; Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Flam. Aerosol 1: H222; Skin Irrit. 2: H315; Asp. Tox. 1: H304; -: H229

**Most important adverse effects:** Extremely flammable aerosol. Pressurised container: May burst if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects. May be fatal if swallowed and enters airways.

#### 2.2. Label elements

**Label elements:**

**Hazard statements:** H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects.

H304: May be fatal if swallowed and enters airways.

**Hazard pictograms:** GHS02: Flame

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GHS07: Exclamation mark

GHS09: Environmental



**Signal words:** Danger

**Precautionary statements:** 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.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P337+313: If eye irritation persists: Get medical advice/attention.

P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

P501: Dispose of to.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

PROPAN-2-OL

EINECS	CAS	PBT / WEL	CLP Classification	Percent
200-661-7	67-63-0	-	Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336	25.000%

KOHLENWASSERSTOFFE, C6-C7, N-ALKANE, ISOALKANE, CYLENE, <5%N-HEXAN - REACH registered number(s):  
01-2119475514-35

921-024-6	-	-	Flam. Liq. 2: H225; Aquatic Chronic 2: H411; Skin Irrit. 2: H315; STOT SE 3: H336; Asp. Tox. 1: H304	25.000%
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N-BUTYL ACETATE

204-658-1	123-86-4	-	Flam. Liq. 3: H226; STOT SE 3: H336; -: EUH066	15.000%
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1-METHOXY-2-PROPANOL

203-539-1	107-98-2	-	Flam. Liq. 3: H226; STOT SE 3: H336	5.000%
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## DIMETHOXYMETHAN

203-714-2	109-87-5	Substance with a Community workplace exposure limit.	Flam. Liq. 2: H225	5.000%
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## KOHLENDIOXID

204-696-9	124-38-9	Substance with a Community workplace exposure limit.	Press. Gas: H280	5.000%
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**Contains:** aliphatic hydrocarbons 15-30%

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

**Eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**Ingestion:** If symptoms persist consult doctor.

**Inhalation:** In case of unconsciousness place patient stably in side position for transportation.

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

**Skin contact:** Causes skin irritation.

**Eye contact:** Causes serious eye irritation.

**Ingestion:** May be fatal if swallowed and enters airways.

**Inhalation:** May cause drowsiness or dizziness.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** No further relevant information available.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Carbon dioxide. Dry chemical powder. Water spray. Fight Larger fires with water spray or alcohol resistant foam.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** No further relevant information available.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Protective equipment: No special measures required. Additional information: Collect contaminated fire fighting water separately. It must not enter the sewage system.

## Section 6: Accidental release measures

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## 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Wear protective equipment. Keep unprotected persons away.

## 6.2. Environmental precautions

**Environmental precautions:** Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.

## 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

## 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS. Safe handling: see section 7

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use. Do not spray onto a naked flame or any incandescent material.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Observe official regulations on storing packagings with pressurised containers. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Storage class: 2B

### 7.3. Specific end use(s)

**Specific end use(s):** No further relevant information available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

**PROPAN-2-OL**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	999 mg/m <sup>3</sup>	1250 mg/m <sup>3</sup>	-	-

**N-BUTYL ACETATE**

UK	724 mg/m <sup>3</sup>	966 mg/m <sup>3</sup>	-	-
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## 1-METHOXY-2-PROPANOL

UK	375 mg/m <sup>3</sup>	560 mg/m <sup>3</sup>	-	-
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## DIMETHOXYMETHAN

EU	3200 mg/m <sup>3</sup>	-	-	-
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## KOHLENDIOXID

EU	9100 mg/m <sup>3</sup>	-	-	-
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### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

**Respiratory protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Short term filter device: Filter A/P2

**Hand protection:** Protective gloves. The glove material has to be impermeable and resistant to the product / the substance / the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Viton gloves. Recommended thickness of the material:  $\geq 0,4\text{mm}$  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Breakthrough time of the glove material > 8 hours.

**Eye protection:** Tightly fitting safety goggles.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Aerosol

**Colour:** Colourless

**Odour:** Characteristic odour

**Solubility in water:** Not miscible or difficult to mix.

**Viscosity:** Not determined.

**Boiling point/range°C:** Not applicable.

**Flammability limits %: lower:** 1,0 Vol%

**Flash point°C:** -18°C

**Vapour pressure:** bei 20 °C: 6500hPa

**pH:** Not applicable.

**Melting point/range°C:** Undetermined.

**upper:** 12,0 Vol%

**Autoflammability°C:** >200°C

**Relative density:** Not determined.

**VOC g/l:** 95,10%

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## 9.2. Other information

**Other information:** Product is not selfigniting. Product is not explosive. However, formation of explosive air / vapour mixtures are possible. Density at 20°C: 0,78 g/cm<sup>3</sup>

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** No further relevant information available.

### 10.2. Chemical stability

**Chemical stability:** No decomposition if used according to specifications.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** No dangerous reactions known.

### 10.4. Conditions to avoid

**Conditions to avoid:** No further relevant information available.

### 10.5. Incompatible materials

**Materials to avoid:** No further relevant information available.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** No dangerous decomposition products known.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Hazardous ingredients:

#### PROPAN-2-OL

IVN	RAT	LD50	1088	mg/kg
ORL	MUS	LD50	3600	mg/kg
ORL	RAT	LD50	5045	mg/kg
SCU	MUS	LDLO	6	gm/kg

#### KOHLLENWASSERSTOFFE, C6-C7, N-ALKANE, ISOALKANE, CYLENE, <5%N-HEXAN

DERMAL	RBT	LD50	>2920	mg/kg
GASES	RAT	4H LC50	25,2	mg/l
ORAL	RAT	LD50	>5840	mg/kg

#### N-BUTYL ACETATE

ORL	MUS	LD50	6	gm/kg
ORL	RAT	LD50	10768	mg/kg

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## 1-METHOXY-2-PROPANOL

IVN	RAT	LD50	4200	mg/kg
ORL	MUS	LD50	11700	mg/kg
ORL	RAT	LDLO	3739	mg/kg

### Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	-	Hazardous: calculated
Aspiration hazard	-	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** Causes skin irritation.

**Eye contact:** Causes serious eye irritation.

**Ingestion:** May be fatal if swallowed and enters airways.

**Inhalation:** May cause drowsiness or dizziness.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

## Section 12: Ecological information

### 12.1. Toxicity

#### Hazardous ingredients:

#### KOULENWASSERSTOFFE, C6-C7, N-ALKANE, ISOALKANE, CYLENE, <5%N-HEXAN

ALGAE	72H ErC50	30	mg/l
Daphnia magna	48H EC50	3	mg/l
Oncorhynchus mykiss	96H ErC50	11,4	mg/l

### 12.2. Persistence and degradability

**Persistence and degradability:** No further relevant information available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No further relevant information available.

### 12.4. Mobility in soil

**Mobility:** No further relevant information available.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

**Other adverse effects:** Toxic for fish Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

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Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Waste code number:** 15 01 10

**Disposal of packaging:** 15 01 04 metallic packaging Recommendation: Disposal must be made according to official regulations.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN1950

### 14.2. UN proper shipping name

**Shipping name:** ENVIRONMENTALLY HAZARDOUS AEROSOLS  
(Hydrocarbons, C6-C7, N-ALKANES, ISOALKANES, CYCLICS, <5%N-HEXANE)

### 14.3. Transport hazard class(es)

**Transport class:** 2 (5F+Gase)

### 14.4. Packing group

### 14.5. Environmental hazards

**Environmentally hazardous:** Yes

**Marine pollutant:** No

### 14.6. Special precautions for user

**Special precautions:** Warning: Gases EMS Number: F-D,S-U Stowage Code: SW1, SW22 Segregation Code: SG69

**Tunnel code:** D

**IMDG seg. group:** LQ: 1L; EQ E0

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

**Transport in bulk:** Not applicable.

## Section 15: Regulatory information

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

**Specific regulations:** Directive 2012/18/EU Named dangerous substances - ANNEX 1 None of the ingredients is listed. Seveso category:  
E2 Hazardous to the Aquatic Environment  
P3b Flammable Aerosols Qualifying quantity (tonnes) for the application of lower-tier

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requirements 200 t. Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t.

## 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** EUH066: Repeated exposure may cause skin dryness or cracking.

H222: Extremely flammable aerosol.

H225: Highly flammable liquid and vapour.

H226: 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.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

