TECNOWARE

Safety Data Sheet FOE17305 - ELECTRICAL CONTACT CLEANER spray 200 ml

Safety Data Sheet dated 7/11/2016, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: FOE17305 - ELECTRICAL CONTACT CLEANER spray 200 ml

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

Recommended use:

AGENT OF SURFACE DEGREASER

Uses advised against:

do not use on humans and animals

1.3. Details of the supplier of the safety data sheet

Company:

TECNOWARE SRL Via Montetrini 2/E - Loc. Molino del Piano - 50065 - Pontassieve - Florence - Italy

TECNOWARE SRL Phone. n. +39 05588404 Fax n. +39 0558367457

1.4. Emergency telephone number

TECNOWARE SRL Phone. n. +39 05588404 Fax n. +39 0558367457

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

- Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.
- Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2, Causes serious eye irritation.
- Warning, STOT SE 3, May cause drowsiness or dizziness.
- Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:







Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized 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.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

FOE17305 - ELECTRICAL CONTACT CLEANER spray 200 ml

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.

P271 Use only outdoors or in a well-ventilated area.

P405 Store locked up.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents:

EPTANO

propan-2-ol; isopropyl alcohol; isopropanol

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

may form explosive vapor / air mixtures in places not well ventilated

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number		Classification
>= 60% - < 70%	EPTANO	Index number: CAS: EC: REACH No.:	601-008-00-2 142-82-5 205-563-8 01- 2119666169- 27-XXXX	2.6/2 Flam. Liq. 2 H225 3.2/2 Skin Irrit. 2 H315 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336 3.10/1 Asp. Tox. 1 H304 4.1/C2 Aquatic Chronic 2 H411 DECLP (CLP)*
>= 25% - < 30%	GPL	CAS: EC: REACH No.:	68476-40-4 270-681-9 01- 2119486557- 22-XXXX	2.5/C Compr. Gas H280 2.2/1 Flam. Gas 1 H220 DECLK (CLP)*
>= 5% - < 7%	propan-2-ol; isopropyl alcohol; isopropanol	Index number: CAS: EC: REACH No.:	603-117-00-0 67-63-0 200-661-7 01- 2119457558- 25	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336
>= 0.5% - < 1%	ethanol; ethyl alcohol	Index number: CAS: EC:	603-002-00-5 64-17-5 200-578-6	• 2.6/2 Flam. Liq. 2 H225

FOE17305 - ELECTRICAL CONTACT CLEANER spray 200 ml

*DECLP (CLP): This substance is classified in accordance with Note P, Annex VI of EC Regulation 1272/2008. 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.

*DECLK (CLP): This substance is classified in accordance with Note K, Annex VI of EC Regulation CE 1272/2008. 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 1,3-butadiene (EINECS No 203-450-8). If the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 (Table 3.1) or the S-phrases (2-)9-16 (Table 3.2) should apply. This note applies only to certain complex oil-derived substances in Part 3.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

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

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Section 11

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

FOE17305 - ELECTRICAL CONTACT CLEANER spray 200 ml

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

store in a cool, well ventilated place, away from heat, flames, sparks or other sources of ignition

keep only in the original container away from sunlight neighborhoods

avoid contact with skin and eyes, inhalation of vapours/mists/dusts.

do not use empty containers before they are cleaned.

contaminated clothing must be replaced before entering the dining areas.

at work do not eat or drink.

avoid the accumulation of electrostatic charges

do not smoke

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

cleaner electrical contacts

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

ACGIH - LTE(8h): 200 ppm - STE: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair

ethanol; ethyl alcohol - CAS: 64-17-5

ACGIH - STE: 1000 ppm - Notes: A3 - URT irr

DNEL Exposure Limit Values EPTANO - CAS: 142-82-5

Worker Professional: 1100 mg/kg - Consumer: 640 mg/kg - Exposure: Human

Inhalation - Frequency: Short Term, local effects

Worker Professional: 1300 mg/kg - Consumer: 1200 mg/kg - Exposure: Human

Inhalation - Frequency: Short Term, systemic effects

Consumer: 180 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, local

effects

Worker Professional: 840 mg/kg - Exposure: Human Inhalation - Frequency: Long

Term, local effects

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

PVC (polyvinyl chloride).

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

Do not expose to temperatures exceeding 50° c.

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Spray can		
Odour:	of solvent		
Odour threshold:	Not Relevant		
pH:	Not Relevant		
Melting point / freezing point:	<-20°C		
Initial boiling point and	>90°C		
boiling range:			
Flash point:	< 0 ° C		
Evaporation rate:	Not Relevant		
Solid/gas flammability:	Not Relevant		
Upper/lower flammability or explosive limits:	Not Relevant		
Vapour pressure:	6 bar		
Vapour density:	>2		
Relative density:	0.72 Kg/L		
Solubility in water:	undissolvable		
Solubility in oil:	complete		
Partition coefficient (noctanol/water):	Not Relevant		

FOE17305 - ELECTRICAL CONTACT CLEANER spray 200 ml

Auto-ignition	400°C (gas)	
temperature:		
Decomposition	Not Relevant	
temperature:		
Viscosity:	Not Relevant	
Explosive properties:	no	
Oxidizing properties:	no	

9.2. Other information

Properties	Value	Method:	Notes:
kinematic viscosity:	kv > 2,05 mm2/s (a 40°C)		
Miscibility:	no		
Fat Solubility:	organic solvent		
Conductivity:	Not Relevant		
Substance Groups relevant properties	Not Relevant		

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

may form explosive vapor / air mixtures in places not well ventilated

10.4. Conditions to avoid

strong acids

avoid the accumulation of electrostatic charges

keep away from heat, sources of ignition

10.5. Incompatible materials

acids, alkalis and alkaline metals

oxidizing agents

10.6. Hazardous decomposition products

the product is flammable, following combustion can lead to the formation of dangerous decomposition products

by thermal decomposition can rid COx

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

ΝΔ

Toxicological information of the main substances found in the mixture:

EPTANO - CAS: 142-82-5

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Positive

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Inhalation Mist - Species: Rabbit > 200 Ppm

h) STOT-single exposure:

Test: Inhalation Sesitization - Route: Inhalation Vapour Positive

GPL - CAS: 68476-40-4

a) acute toxicity:

```
Test: LC50 - Route: Inhalation - Species: Rat > 658 mg/l
            propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
            a) acute toxicity:
                   Test: LD50 - Route: Oral - Species: Rat > 5840 mg/kg
                   Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
      If not differently specified, the information required in Regulation (EU)2015/830 listed below
      must be considered as N.A.:
            a) acute toxicity;
            b) skin corrosion/irritation;
            c) serious eye damage/irritation;
            d) respiratory or skin sensitisation;
            e) germ cell mutagenicity;
            f) carcinogenicity;
            g) reproductive toxicity:
            h) STOT-single exposure;
            i) STOT-repeated exposure;
            j) aspiration hazard.
SECTION 12: Ecological information
      12.1. Toxicity
            Adopt good working practices, so that the product is not released into the environment.
            EPTANO - CAS: 142-82-5
            a) Aquatic acute toxicity:
                   Endpoint: LC50 - Species: Fish 10 mg/l - Duration h: 96
                   Endpoint: EC50 - Species: Daphnia 4.5 mg/l - Duration h: 48
            b) Aquatic chronic toxicity:
                   Endpoint: NOEC - Species: Daphnia 2.6 mg/l - Notes: riproduzione
            c) Bacteria toxicity:
                   Endpoint: EC50 - Species: 1 15.41 mg/l - Duration h: 40 - Notes: inibizione della
                   crescita
            e) Plant toxicity:
                   Endpoint: EC50 - Species: Algae 3.1 mg/l
            GPL - CAS: 68476-40-4
            a) Aquatic acute toxicity:
                   Endpoint: LC50 - Species: Fish Negative 19 mg/l - Duration h: 96
                   Endpoint: LC50 - Species: Daphnia Negative 14.2 mg/l - Duration h: 48
                   Endpoint: EC50 - Species: Algae Negative 7.7 mg/l - Duration h: 96
            propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
            a) Aquatic acute toxicity:
                   Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48
                   Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72
                   Endpoint: EC50 - Species: Fish > 100 mg/l - Duration h: 48
      12.2. Persistence and degradability
            None
            EPTANO - CAS: 142-82-5
                   Biodegradability: N.A.Test: N.A.Duration: N.A.%: N.A.Notes: sostanza UVCB
      12.3. Bioaccumulative potential
            EPTANO - CAS: 142-82-5
                   Bioaccumulation: N.A.Test: N.A.N.A.Duration: N.A.Notes: sostanza UVCB
      12.4. Mobility in soil
```

Mobility in soil: N.A.Test: N.A.N.A.Duration: N.A.Notes: sostanza UVCB

EPTANO - CAS: 142-82-5

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

FOE17305 - ELECTRICAL CONTACT CLEANER spray 200 ml

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 1950 IATA-Un number: 1950 IMDG-Un number: 1950

14.2. UN proper shipping name

14.3. Transport hazard class(es)

ADR-Class: 2.5°F CAP. 2.2.2.1.6 UN1950

IATA-Class: 2.1

IMDG-Class: 2 Aerosols UN 1950

14.4. Packing group

14.5. Environmental hazards

Marine pollutant: Marine pollutant

14.6. Special precautions for user

IMDG-Page: 2102

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII

Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions:

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1 Product belongs to category: P3a, E2

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

H280 Contains gas under pressure; may explode if heated.

H220 Extremely flammable gas.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,

Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation

Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.

(ACGIH Standard).

WGK: German Water Hazard Class.