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

1.1 Product identifier

Trade name/designation CleanSeam.Spray

Specification No.: 2031016

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

Relevant identified uses

Product categories [PC]

PC2 Adsorbents

PC14 Metal surface treatment products, including galvanic and electroplating products

1.3 Details of the supplier of the safety data sheet

Supplier

CleanSeam GmbH & Co. KG
Speditionstraße 8
DE-40221 Düsseldorf
E-mail: weld@cleanseam.de
www.cleanseam.de

1.4 Emergency telephone number

Poison control center: +49 228 19 240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

health hazards

Asp. Tox. 1

hazard statements for health hazards

H304 May be fatal if swallowed and enters airways.

health hazards

Skin Irrit. 2

hazard statements for health hazards

H315 Causes skin irritation.

health hazards

STOT SE 3

hazard statements for health hazards

H336 May cause drowsiness or dizziness.

Physical hazards

Flam. Aerosol 1

hazard statements for physical hazards

H222 Extremely flammable aerosol.

Physical hazards

Flam. Aerosol 1

hazard statements for physical hazards

H229 Pressurised container: May burst if heated.

Environmental hazards

Aquatic Chronic 2

hazard statements for environmental hazards

H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

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

Hazard components for labelling

contains: hydrocarbons, C7, n-alkanes, cyclics (CAS: 64742-49-0, EC: 927-510-4)

Hazard pictograms

GHS02 GHS07 GHS09

Signal word

Danger

Hazard statements

Hazard statements for physical hazards:

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

hazard statements for health hazards

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

Hazard statements for environmental hazards:

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

General:

P102 Keep out of reach of children.

Prevention:

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.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal:

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

Special rules for supplemental label elements for certain mixtures

EUH208 Contains orange, sweet, ext.. May produce an allergic reaction.

2.3 Other hazards

Adverse physicochemical effects

Caution! Container under pressure.

SECTION 3: Composition / information on ingredients

remark

Full text of H- and EUH-phrases: see section 16.

3.1/3.2 Substances/Mixtures

Description

The substance with CAS no. 8028-48-6 is a UVCB substance. Its main constituents are: (R)-p-mentha-1,8-diene (CAS: 5989-27- 5), myrcene (CAS: 123-35-3) and alpha-pinene (CAS: 80-56-8).

Hazardous ingredients

propane 10 - 25 %

CAS 74-98-6

EC 200-827-9

INDEX 601-003-00-5

Flam. Gas 1, H220 / Press. Gas, / Liquef. Gas, H280

isobutane 25 - 50 %

CAS 75-28-5

EC 200-857-2

INDEX 601-004-00-0
Flam. Gas 1, H220 / Press. Gas, / Liquef. Gas, H280
n-hexane <1 %
CAS 110-54-3
EC 203-777-6
INDEX 601-037-00-0
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
Orange, sweet, ext. <1 %
CAS 8028-48-6
EC 232-433-8
Asp. Tox. 1, H304 / Skin Irrit. 2, H315 / Skin Sens. 1, H317 / Aquatic Chronic 2, H411 / Flam. Liq. 3, H226
White mineral oil (petroleum) 10 - 25 %
CAS 8042-47-5
EC 232-455-8
Asp. Tox. 1, H304
hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic 25 - 50 %
CAS 64742-49-0
EC 927-510-4
Asp. Tox. 1, H304 / Skin Irrit. 2, H315 / STOT SE 3, H336 / Aquatic Chronic 2, H411 / Flam. Liq. 2, H225

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove victim out of the danger area. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Never give anything by mouth to an unconscious person or a person
with cramps.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician. If breathing is irregular or stopped, administer artificial respiration.

Following skin contact

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and
consult an ophthalmologist.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

No symptoms known up to now.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor

Treat symptomatically.

SECTION 5: Firefighting measures

Additional information

Burning produces heavy smoke. Do not inhale explosion and combustion gases. Use water spray jet to protect personnel
and to cool endangered containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

5.1 Extinguishing media

Suitable extinguishing media

Dry extinguishing powder
Foam
Carbon dioxide (CO2)
Water spray jet

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Can be released in case of fire:
Carbon dioxide (CO2)
Carbon monoxide

5.3 Advice for firefighters

Special protective equipment for firefighters

In case of fire: Wear self-contained breathing apparatus. protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Remove persons to safety.

Personal precautions

Use personal protection equipment. Be aware that gases can spread at ground level (heavier than air) and pay attention
to the wind direction. Beware of reignition.

Protective equipment

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

For emergency responders

Personal protection equipment

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Use appropriate respiratory protection.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment

Suitable material for taking up:

Sand
Kieselguhr
Earth
Universal binder

6.4 Reference to other sections

Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff. Work in well-ventilated zones or use proper respiratory protection. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing.
Wash hands before breaks and after work.

Protective measures

Advices on safe handling

Wear personal protection equipment (refer to section 8). Do not spray on naked flames or any incandescent material.
Avoid:
Inhalation of vapours or spray/mists
Skin contact
Eye contact

Measures to prevent fire

Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Use only antistatically equipped (spark-free)
tools. Vapours can form explosive mixtures with air. Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Environmental precautions

See section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed. Ensure adequate ventilation of the storage area.

Hints on joint storage

Materials to avoid

Keep away from:
Food and feedingstuffs
Do not store together with:
Combustible substance

Storage class

Aerosol dispensers and lighters

Storage class

2B

Further information on storage conditions

Keep container tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	Substance name	LTV	STV	remark
110-54-3	n-Hexane	72 mg/m³ 20 ppm		Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] ~ European Union

LTV = long-term occupational exposure limit value
STV = short-term occupational exposure limit value
source: GESTIS International Limit Values (http://limitvalue.ifa.dguv.de/)
Monitoring and observation processes: GESTIS Analytical Methods (http://amcaw.ifa.dguv.de/)

DNEL-/PNEC-values
DNEL Consumer
Substance name hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
DNEL type
inhalative, long-term, systemic
DNEL value 447 mg/m³
Substance name hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
DNEL type
dermal, long-term, systemic
DNEL value 149 mg/kg
Substance name hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
DNEL type
oral, long-term, systemic
DNEL value 149 mg/kg
Substance name White mineral oil (petroleum)
DNEL type
inhalative, long-term, systemic
DNEL value 35 mg/m³
Substance name White mineral oil (petroleum)
DNEL type
dermal, long-term, systemic
DNEL value 93 mg/kg
Substance name White mineral oil (petroleum)
DNEL type
oral, long-term, systemic
DNEL value 40 mg/kg
Substance name Orange, sweet, ext.
DNEL type
inhalative, long-term, systemic
DNEL value 7,78 mg/m³
Substance name Orange, sweet, ext.
DNEL type
dermal, long-term, systemic
DNEL value 4,44 mg/kg
Substance name Orange, sweet, ext.
DNEL type
oral, long-term, systemic
DNEL value 4,44 mg/kg
DNEL worker
Substance name hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
DNEL type
inhalative, long-term, systemic
DNEL value 2085 mg/m³
Substance name hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
DNEL type
dermal, long-term, systemic
DNEL value 300 mg/kg
Substance name White mineral oil (petroleum)
DNEL type
inhalative, long-term, systemic
DNEL value 160 mg/m³
Substance name White mineral oil (petroleum)

DNEL type
dermal, long-term, systemic
DNEL value 220 mg/kg
Substance name Orange, sweet, ext.
DNEL type
inhalative, long-term, systemic
DNEL value 31,1 mg/m³
Substance name Orange, sweet, ext.
DNEL type
dermal, long-term, systemic
DNEL value 8,89 mg/kg
PNEC
PNEC Value 5,4 µg/L
remark
CAS 8028-48-6
PNEC type
aquatic, freshwater
PNEC Value 0,54 µg/L
remark
CAS 8028-48-6
PNEC type
aquatic, marine water
PNEC Value 5,77 µg/L
remark
CAS 8028-48-6
PNEC type
aquatic, intermittent release
PNEC Value 2,1 mg/L
remark
CAS 8028-48-6
PNEC type
sewage treatment plant
PNEC Value 1,3 mg/kg
remark
CAS 8028-48-6
PNEC type
sediment, freshwater
PNEC Value 0,13 mg/kg
remark
CAS 8028-48-6
PNEC type
sediment, marine water
PNEC Value 0,261 mg/kg
remark
CAS 8028-48-6
PNEC type
soil

8.2 Exposure controls

Appropriate engineering controls

Substance/mixture related measures to prevent exposure during identified uses

Fresh air (open windows and doors) is necessary.

Personal protection equipment
Eye/face protection
Suitable eye protection:
Eye glasses with side protection
Skin protection
Suitable material:
NBR (Nitrile rubber)
Butyl caoutchouc (butyl rubber)
FKM (fluoro rubber)
Breakthrough time (maximum wearing time) >480 min
Body protection:
Suitable protective clothing:
Chemical resistant safety shoes
Required properties:
antistatic
flame-resistant
Respiratory protection
Respiratory protection necessary at:
exceeding exposure limit values
Suitable respiratory protection apparatus:
Combination filtering device (EN 14387)
Full-/half-/quarter-face masks (DIN EN 136/140)
ABEK-P2
remark
Usually no personal respirative protection necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
Physical state
Aerosol
Colour
colourless
Odour
Fruity

		parameter	Method - source - remark
pH not determined			
Melting point/freezing point			not determined
Initial boiling point and boiling range			not determined
Flash point (°C)			not determined
Evaporation rate			not determined
flammability			not determined
Upper explosion limit	10,9 Vol-%		(propellant)
lower explosion limit	1,5 Vol-%		(propellant)
Vapour pressure	0,1 hPa	Temperature 20 °C	
Vapour density			not determined
Relative density	0,753 g/cm³	Temperature 20 °C	
Fat solubility (g/L)			not determined
Water solubility (g/L)			not determined
Soluble (g/L) in			not determined
Partition coefficient: n-octanol/water			not determined
Auto-ignition temperature			not determined
Decomposition temperature			not determined

9.2 Other information
Solvent content (%)
Value 84 %
Physical hazards
Flammable aerosols
Assessment/classification
Extremely flammable aerosol (H222)

SECTION 10: Stability and reactivity

10.1 Reactivity
No information available.
10.2 Chemical stability
The product is stable under storage at normal ambient temperatures.
10.3 Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.
10.4 Conditions to avoid
In case of warming:
Danger of bursting container.
10.5 Incompatible materials
Materials to avoid
Oxidising agent, strong
10.6 Hazardous decomposition products
Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Acute dermal toxicity
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Acute dermal toxicity >22920 mg/kg
Effective dose
LD50:
Species:
Rat
ingredient White mineral oil (petroleum)
Acute dermal toxicity >2000 mg/kg
Effective dose
LD50:
Species:
Rabbit
Acute inhalation toxicity (vapour)
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Acute inhalation toxicity (vapour) >23300 mg/m³
Effective dose
LC50:
Exposure time 4 h
Species:
Rat
ingredient White mineral oil (petroleum)
Acute inhalation toxicity (vapour) >5000 mg/L

Effective dose
LC50:
Exposure time 4 h
Species:
Rat
Acute oral toxicity
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Acute oral toxicity >5840 mg/kg
Effective dose
LD50:
Species:
Rat
ingredient White mineral oil (petroleum)
Acute oral toxicity >5000 mg/kg
Effective dose
LD50:
Species:
Rat
skin corrosion/irritation
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Assessment/classification
Irritant.
Serious eye damage/irritation
Assessment/classification
Not an irritant.
Respiratory or skin sensitisation
Skin sensitisation
Assessment/classification
May cause sensitization by skin contact.
STOT-single exposure
STOT SE 3
Narcotic effects
Assessment/classification
May cause drowsiness or dizziness.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity
Acute (short-term) fish toxicity
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Acute (short-term) fish toxicity >13,4 mg/L
Effective dose
LL50:
Test durarion 96 h
species
Oncorhynchus mykiss (Rainbow trout)
Method
OECD 203
ingredient White mineral oil (petroleum)
Acute (short-term) fish toxicity >1000 mg/L

Effective dose
LC50:
Test durarion 96 h
Acute (short-term) toxicity to crustacea
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Acute (short-term) toxicity to crustacea 3 mg/L
Effective dose
EL50:
Test durarion 48 h
species
Daphnia magna (Big water flea)
Method
OECD 202
ingredient White mineral oil (petroleum)
Acute (short-term) toxicity to crustacea >100 mg/L
Effective dose
EC50
Test durarion 48 h
Chronic (long-term) toxicity to crustacea
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Chronic (long-term) toxicity to crustacea 1 mg/L
Effective dose
NOELR:
Test durarion 21 d
species
Daphnia magna (Big water flea)
Method
OECD 211
Chronic (long-term) fish toxicity
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Chronic (long-term) fish toxicity 1,53 mg/L
Effective dose
NOELR:
Test durarion 28 d
species
Oncorhynchus mykiss (Rainbow trout)
Method
QSAR Petrotox
Acute (short-term) toxicity to aquatic algae and cyanobacteria
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Acute (short-term) toxicity to aquatic algae and cyanobacteria 10 - 30 mg/L
Effective dose
ErC50:
Test durarion 72 h
species
Pseudokirchneriella subcapitata
Method
OECD 201
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Acute (short-term) toxicity to aquatic algae and cyanobacteria 10 - 30 mg/L
Effective dose
EbC50:

Test durarion 72 h
species
Pseudokirchneriella subcapitata
Method
OECD 201
Assessment/classification
No data available
12.2 Persistence and degradability
Biodegradation
ingredient hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic
Degradation rate (%): 98 %
Method
OECD 301F
ingredient White mineral oil (petroleum)
Degradation rate (%): 31,8 %
Method
OECD 301F
12.3 Bioaccumulative potential
Assessment/classification
No data available
12.4 Mobility in soil
Assessment/classification
not determined
12.5 Results of PBT and vPvB assessment
No data available
12.6 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Appropriate disposal / Product
Non-contaminated packages may be recycled.
Waste code packaging 150111
hazardous waste Yes.
Waste name
metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers
Waste code product 160504
hazardous waste Yes.
Waste name
gases in pressure containers (including halons) containing hazardous substances

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN-No.	1950	1950	1950
14.2 Proper Shipping Name	AEROSOLS (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)	AEROSOLS (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)	Aerosols, flammable (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
14.3 Class(es)	2	2.1	2.1
14.4 Packing group			
14.5 ENVIRONMENTALLY HAZARDOUS	Yes.	Yes.	Yes.
14.6 Special precautions for user	not applicable	not applicable	not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	not applicable	not applicable	not applicable

Additional information - Land transport (ADR/RID)
Hazard label(s) 2.1
Classification code 5F
Limited quantity (LQ) 1 L
tunnel restriction code D
transport category 2
Additional information - Sea transport (IMDG)
Marine pollutant Yes.
Additional information - Air transport (ICAO-TI / IATA-DGR)
Limited quantity (LQ) 30

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU legislation
Other regulations (EU)
Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).
Volatile organic compounds (VOC) content in percent by weight: 84 Wt %
VOC-value (in g/L): 537 g/L
To follow:
Aerosol directive (75/324/EEC)
Regulation (EC) No. 648/2004 (Detergents regulation)
≥ 30% aliphatische Kohlenwasserstoffe, Duftstoffe (Limonene)
≥ 30%: aliphatic hydrocarbons; perfumes (Limonene)
15.2 Chemical Safety Assessment
For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms
See overview table at www.euphrac.eu
For abbreviations and acronyms, see table at http://abbrev.esdscom.eu
Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
See SECTION 2.1 (classification).
Indication of changes
* Data changed compared with the previous version
Additional information
Data arise from reference works and literature.
Relevant R-, H- and EUH-phrases (Number and full text)
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.

H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H411 Toxic to aquatic life with long lasting effects.