SAFETY DATA SHEET

According to Regulation (EC) 1907/2006 and Regulation (EC) 453/2010 (REACH)

Break-Cleaner-Spray

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier:

Trade name: Break-Cleaner

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

Use of the substance
/Mixture: cleaner agent

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

SDV Chemie GmbH
Gewerbepark Steigerwald 3
91477 Markt Bibart
TEL. 09162 2074 5-08
FAX 09126 2074 5-09
E-MAIL anfrage@sdv-chemie.de

1.4. Emergency telephone number:

Charité Berlin: 24/7 imergency-call **03030686700** (contracting party ofr SDV Chemie GmbH)

2. Hazard identification

2.1. Classification of the substance or mixture:

Classification (EC) 1272/2008

Aerosol 1; H222, H229
Skin Irrit. 2; H315
STOT SE 3; H336
Aquatic Chronic 2; H411

2.2. Label elements:

Label elements (CLP)



Signal word: Danger

Hazard statements:

H222	Extremely flammable aerosol.
H229	Pressurized 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:

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.
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50 oC/122oF.
P501	Dispose of contents/container to accordance with local / regional / national / international regulations.

Contains: Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic

Text for labelling:

Contains: > 30% aliphatic hydrocarbons

2.3. Other hazards:

No data available.

3. Composition/information on ingredients

Substance: ☐

Mixture: ☒

Chemical name:	Content (% m/m):	CAS: EC: Index:	Classification (1272/2008/EC):
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	50 - 100	/ 927-510-4 /	Flam. Liq. 2; H225, Asp. Tox. 1; H304, Skin Irrit. 2; H315, STOT SE 3; H336, Aquatic Chronic 2; H411
Carbon dioxide	2,5 - 10	124-38-9 204-696-9 /	Press. Gass: H280
Propane	2,5 - 10	74-98-6 200-827-9 601-003-00-5	Flam. Gas. 1; H220, Press. Gass; H280
Isobutane	2,5 - 10	75-28-5 200-857-2 601-004-00-0	Flam. Gas. 1; H220, Press. Gass; H280

4. First aid measures

4.1. Description of first measures:

General advice:

If inhaled	remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
In case of skin contact	remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
In case of eye contact	Flush eyes with water while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persist, transport to the nearest medical facility for additional treatment.
If swallowed	If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

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

Drowsiness and dizziness. Irritation and dermatitis, weakness.

4.3. Identification of any immediate medical attention and special treatment needed:

No data available.

5. Firefighting measures

5.1. Extinguishing media:

Suitable extinguishing media:	Foam, water spray or fog. Dry chemical powder, carbon dioxide.
Unsuitable extinguishing media	Water jet.

5.2. Special hazards arising from the substance or mixture:

Specific hazards during firefighting:	Exposure to decomposition products may cause health problems. Possible in case of fire / high temperatures the formation of hazardous / toxic fumes.

5.3. Advice for firefighters:

Special protective equipment for firefighters:	In the event of fire, self-contained breathing apparatus. Personal protective equipment.
Other information:	Standard procedure for chemical fires. Fighting measures that suit the environment. Explosion and fire fumes do not breathe. Use water spray to cool unopened containers. Collect contaminated firefighting water separately, do not empty into drains. Fire residues and contaminated firefighting water must be disposed in according to local regulations. Pay attention to flashback. Because of the high vapor pressure when heated bursting of the vessels.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Refer to protective measures listed in sections 7 and 8 Personal protective equipment. Remove all sources of ignition. Avoid contact with eyes and skin. Ensure adequate ventilation, especially in confined spaces. Personnel evacuate immediately to safe place. Avoid inhalation of vapors or mist . Himself against vapors accumulating to form explosive concentrations, beware. Vapors may accumulate in low lying areas.

6.2. **Environmental precautions:**

Do not flush into surface water or sanitary sewer. Prevent further leakage or spillage if possible without risk. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. **Methods and material for containment and cleaning up:**

Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid in suitable containers. Clean contaminated area. Dispose of according to local regulations.

6.4. **Reference to other sections:**

See section: 7, 8, 11, 12 and 13.

7. Handling and storage

7.1. Precautions for safe handling:

Advice on safe handling:	Inventory levels at the workplace must be restricted. Use only in well ventilated areas. Vapors and spray mists. Avoid contact with eyes and skin. Do not spray on a naked flame or any incandescent material. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor exposure limits. Measures against electrostatic discharges. Personal protective equipment see section 8
Advice on protection against fire and explosion	Normal measures for preventive fire protection. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Keep away from heat and ignition sources. Do not smoke. Sparking tools. Electrical equipment should be protected to the appropriate standards.

7.2. Conditions for safe storage, including any incompatibilities:

Requirements for storage arease and containers:	Store in original container. CAUTION: Aerosol are under pressure. Keep away from direct sunlight and temperatures above 50 ° C. Do not apply force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep container tightly closed in a dry, cool and well ventilated place. Storage regulations for aerosols!
Storage class:	2B, Aerosols

7.3. Specific end use(s):

No data available.

8. Exposure controls/personal protection

8.1. Control parameters:

8.1.1. Limits for occupational exposure

Components	CAS-No.	Control parameters		Excess factor	Base
		ml/m³ (ppm)	mg/m³		
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	/	200	1.000	4	
Carbon dioxide	124-38-9	5.000	9.000		
Propane	74-98-6	1.000	1.800	4	
Isobutane	75-28-5	1.000	2.400	4	

8.1.2. DNEL-and PNEC-values

Substance	Type	Type of exposure	Exposure time	Value
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	DNEL (workers)	Inhalation	Long term exposure - systemic effects	2085 mg/m³
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	DNEL (workers)	dermal	Long term exposure - systemic effects	300 mg/kg bw/day
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	DNEL (consumer)	inhalation	Long term exposure - systemic effects	447 mg/m³
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	DNEL (consumer)	dermal	Long term exposure - systemic effects	149 mg/kg bw/day
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	DNEL (consumer)	oral	Long term exposure - systemic effects	149 mg/kg bw/day

8.2. Exposure controls:

Technical protective equipment:

Provide sufficient air exchange and / or exhaust in work rooms.

Personal protective equipment:

Respiratory protection: At concentrations above the exposure limit they must use respiratory protection. Respirator with combination filter for particles and vapors (EN 141). Respirator with A filter.

Hand protection: Solvent resistant protective gloves according to EN 374. Gloves material: nitrile rubber, breakthrough time (maximum wearing period):> 480 min and thickness 0.5 mm. The manufacturer of the gloves on permeability and breakthrough time must be observed.

Eye protection: Tightly fitting safety goggles.

Protective clothing: Flame retardant antistatic protective clothing. Choose body protection according to the amount and concentration of the hazardous substance at the workplace.

Hygien measures: Handle with good industrial hygiene and safety practice. General industrial hygiene measures. Do not breathe spray. Contact with skin, eyes and clothing. When using do not eat, drink or smoke. Wash hands before breaks and after work. Skin protection plan note. Wash contaminated clothing before reuse.

Environmental exposure controls:

General advice: Do not flush into surface water or sanitary sewer. Further leakage or spillage if possible without risk. If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and chemical properties

9.1. Information on basis physical and chemical properties:

	Value	Unit	At	Method	Notice
Appearance:	aerosol				
Color:	colorless				
Odor:	characteristic				
Flash point:	approx. -80	°C			Isobutane
Lower explosion limit:	1,4	Vol. %			

Upper explosion limit:	13,00	Vol. %		
Vapor pressure:	5200	hPa	20°C	
Density:	0,704	g/cm^3		Active substance
Water solubility:	insoluble			

9.2. **Other information:**

No data available.

10. Stability and reactivity

10.1. **Reactivity:**

No data available.

10.2. **Chemical stability:**

The product is chemical stable.

10.3. **Possibility of hazardous reactions:**

No decomposition if stored and applied. Vapors may form explosive mixtures with air. Because of the high vapor pressure when heated bursting of the vessels.

10.4. **Conditions to avoid:**

Heat, flames and sparks.

10.5. **Incompatible materials:**

No data available.

10.6. **Hazardous decomposition products:**

Hazardous decomposition products::	Possible in case of fire / high temperatures the formation of hazardous / toxic fumes.

11. Toxicological information

Acute toxicity:

Acute oral toxicity:

Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	LD_{50} > 8 ml/kg (rat)
Propan-2-ol	LD_{50} > 2000 mg/kg

Acute inhalation toxicity:

Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	LC_{50} > 23,3 mg/l (rat, 4 h)
Propan-2-ol	LC_{50} > 20 mg/l

Acute dermal toxicity:

Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	LD_{50} > 4 ml/kg (rat)
Propan-2-ol	LD_{50} > 2000 mg/kg

Skin corrosion/irritation: Cause irritation.

Serious eye damage/eye irritation:	May cause irritation.
Respiratory or skin sensitization:	Possible sensitization through the skin.
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive and developmental toxicity:	No data available
Other information:	Drowsiness and dizziness. Irritation and dermatitis, weakness.

12. Ecological information

12.1. Toxicity:

Toxicity to fish:

Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	LL/EL/IL50 >1 - <= 10 mg/l
Propan-2-ol	100 < LC/EC/IC50 <= 1000 mg/l

Toxicity to Daphnia:

Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	LL/EL/IL50 >1 - <= 10 mg/l
Propan-2-ol	LC/EC/IC50 > 1000 mg/l

Toxicity to algae:

Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	LL/EL/IL50 >10 - <= 100 mg/l
Propan-2-ol	LC/EC/IC50 > 1000 mg/l

Toxicity to bacteria:

Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclic	LL/EL/IL50 >10 - <= 100 mg/l
Propan-2-ol	LC/EC/IC50 > 1000 mg/l

12.2. Persistence and degradability:

No data available.

12.3. Bioaccumulative potential:

No data available.

12.4. Mobility in soil:

No data available.

12.5. Results of PBT- and vPvB assessment:

No data available.

12.6. Other adverse effects:

The penetration of the product into drains, water courses or the soil should be prevented.

13. Disposal considerations

13.1. Product:

Waste key number: 160504* = Accumulators containing certain dangerous gases in pressurized containers.
* = The disposal must be provided.

Recommendation: Do not open, even after use or burn.
Disposal according to official regulations.

13.2. Packaging:

Waste key number: 150110 = Packaging containing residues of hazardous substances or contaminated by dangerous substances

Recommendation: Drain thoroughly and completely as possible. Disposal according to official regulations.

14. Transport information

ADR

UN number:	1950
Product designation:	AEROSOLS
Class:	2
Packaging group:	--
Code:	5F
Label:	2.1
Limited quantities:	1 L
Tunnel restriction code:	(D)
Dangerous for the environment:	yes

RID

UN number	1950
Product designation:	AEROSOLS
Class:	2
Packaging group:	--
Code:	5F
Label:	2.1
Hazard identification No.	23
Limited quantities:	LQ2
Tunnel restriction code:	(D)
Environmentally hazardous:	yes

Special precautions for user:

See chapter: 6, 7 and 8

15. Regulatory information

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

		Quantity 1	Quantity 2
Council Directive (2012/18/EC):	P3a FLAMMABLE AEROSOLS	150 t (net)	500 t (net)
	E2 Hazardous to the Aquatic Environment in Category Chronic 2	200 t	500 t
According to EU Detergents EG 648/2004:	> 30 %: aliphatic hydrocarbons		
VOC (Directive 1999/13/EG):	VOC: 686 g/l = 97 %		

15.2. Chemical safety assessment:

No data available.

16. Other information

Full text of H-statements referred to under sections 2 and 3:

H220	Extremely flammable gas.
H225	Highly 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.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Changes:

- Item 2
- Item 3
- Item 8.2
- Item 15.1