



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

1.1. Product identifier

Name of product SEAL Spray

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

Recommended intended purpose(s)

Form a protective film

1.3. Details of the supplier of the safety data sheet

Manufacturer

F.W.Klever
Hauptstraße 20, D-84168 Aham
Phone +49 (0) 8744 96 99 10, Fax + 49 (0) 8744 96 99 96
E-Mail info@ballistol.de
Internet www.ballistol.de

Advice

Qualitätssicherung
Phone +49 (0) 8744 96 99 30
E-mail (competent person):
info@ballistol.de

1.4. Emergency telephone number

Emergency advice

Dr.Zettler (Werktags von 8.00 Uhr bis 16.00 Uhr)
Phone +49 (0) 8744 96 99 30
This number is only available at office times.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC

F+; R12
Xi; R36
R66
R67

R-phrases

12 Extremely flammable.
36 Irritating to eyes.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Flam. Aerosol 1	H222	
Eye Irrit. 2	H319	

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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STOT SE 3	H336	
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Hazard statements for physical hazards

H222 Extremely flammable aerosol.

Hazard statements for health hazards

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

2.2. Label elements

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



GHS02



GHS07

Signal word

Danger

Hazard statements for physical hazards

H222 Extremely flammable aerosol.

Hazard statements for health hazards

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary Statements

General

P102 Keep out of reach of children.

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

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

Response

P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage

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

Disposal

P501 Dispose of contents/container to recycling

2.3. Other hazards



Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/ information on ingredients

Additional advice

Aerosol: Propellant propane/butane gas

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

In case of inhalation

Ensure of fresh air.

In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off with soap and water.

In case of eye contact

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion

Do not induce vomiting.

If troubles appear bring to a medical treatment

Rinse out mouth thoroughly with water.

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

No information available.

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

Treatment (Advice to doctor)

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam

Carbon dioxide

Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Vapours may form explosive mixtures with air



5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply (isolated).

Additional information

Cool endangered containers with water spray jet.

Heating causes rise in pressure with risk of bursting

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Use personal protective clothing.

Keep away sources of ignition.

Do not breath vapour or spray.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up residues with absorbent material (e.g. sand, sawdust, general-purpose binder).

6.4. Reference to other sections

No information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Do not spray into flames or ignition sources

General protective measures

Avoid contact with eyes and skin

Do not inhale aerosols

Hygiene measures

At work do not eat, drink, smoke or take drugs.

Storing of food in workroom forbidden.

Wash hands before breaks and after work.

Use barrier skin cream.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

Protect aerosols from temperatures exceeding 50°C

Do not open with force or incinerate, even when empty

7.2. Conditions for safe storage, including any incompatibilities

Advice on storage compatibility

Do not store together with food.

Further information on storage conditions

Protect from extreme heat and cold.

Keep cool.

Storage group 2B



7.3. Specific end use(s)
No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation.

The following applies to propane in general: If the concentration is exceeded, closed-circuit breathing apparatuses must be used

Use filter apparatus type AX, identification colour brown according to EN 371

Hand protection

Gloves (solvent-resistant)

Eye protection

With demand: protective glasses

Skin protection

protective clothing

Limitation and surveillance of the environment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form

aerosol

Colour

colourless, clear

Odour

solvent-like

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
boiling range	ca. 78 °C				Details refer to the active agent (without consideration of the propellant)
melting temperature	ca. -85 °C			DIN/ISO 3016	Details refer to the active agent (without consideration of the propellant)
Flash point	< 0 °C				information for solvent
Lower explosion limit	ca. 2 Vol-%				information concern solvent



	Value	Temperature	at	Method	Remark
Upper explosion limit	ca. 11,5 Vol-%				information concern solvent
Vapour pressure	ca. 100 hPa	20 °C			Details refer to the active agent (without consideration of the propellant)

9.2. Other information
 No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Formation of explosive gas/air mixtures.

Container under pressure. Protect from direct exposure to sunlight and temperatures exceeding 50°C.

10.5. Incompatible materials

Materials to avoid

Reactions with strong oxidising agents.

10.6. Hazardous decomposition products

No hazardous decomposition products known.

Additional information

Product is stable under normal storage conditions

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	6600 mg/kg	rat	OECD 401	Information concerns to main component.
LD50 acute dermal	14000 mg/kg	rabbit	OECD 402	
LC50 acute inhalation	116 mg/l (8 h)	rat	OECD	Details refer to the main component



	Value/Validation	Species	Method	Remark
Irritability skin	low irritant effect - not necessary to label	rabbit		
Irritability eye	strong irritant	rabbit eye		
Skin sensitization	non-sensitizing	Guinea pig	OECD 406	

Toxicity test (Additional information)

There is no risk for a normal operation application

Experiences made from practice

Has a degreasing effect on the skin.

Frequent persistent contact with the skin may cause skin irritation.

Additional information

The product has not been tested. The information is derived from the properties of the individual components.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 460 mg/l (96 h)	Pimephales promelas		The product is highly volatile.
Daphnia	EC50 1450 mg/l (48 h)	Daphnia magna		
Algae	NOEC 6600 mg/l (48 h)	Pseudokirchneriella subcapitata (Grünalge)		
Bacteria	EC10 5800 mg/l (16 h)	Pseudomonas putida		

12.2. Persistence and degradability

Biological degradability 91 % (28 d) OECD 301 B

Degradability > 70 % (20 d) readily degradable

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

Additional ecological information

	Value	Method	Remark
COD	2100 mg/l		



	Value	Method	Remark
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BOD 5 d 1900 mg/l

General regulation

Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.

14 06 03*

Name of waste

other solvents and solvent mixtures

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 91/689/EEC on hazardous waste.

Recommendations for the product

Dispose as specified by the public authorities.

Recommendations for packaging

Totally emptied packaging may be taken for recycling.

Barrel: return by DSD (Dualistic System Germany)

SECTION 14: Transport information

Land and inland navigation transport ADR/RID

UN/ID-Number: 1950, Aerosols, flammable

Marine transport IMDG

UN 1950 Aerosols (max1L) IMDG class 2, Code- see SP63, EmS: F-D, S-U ; packaging instructions: P003 - LP02; packaging order: PP17-PP87-L2.

Air transport ICAO/IATA-DGR

UN/ID-Nummer:1950, Aerosols, flammable, Class 2.1, ICAO/IATA: Class 2.1, Passanger/Cargo:203

Special precautions for user

No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

SECTION 15: Regulatory information

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

Other regulations (EU)

Observe regulation 98/24/EC for employee health protection against the threat of chemical substances in the workplace.

Aerosol directive (75/324/EEC).

National regulations

Restriction of occupation

Observe employment restrictions for young people.

Water hazard class

1 value from literature



15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

Further information

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

R12 = Extremely flammable

R36 = Irritate the eyes

R66 = Repeated contact can lead to brittle or cracked skin

R67 = Steams can cause doziness or stupor