

Safety Data Sheet
according to HPR, Schedule 1

Date of issue 08/31/2025

Version number 1

Revision: 08/21/2025

1 Identification

- **Product identifier**
- **Trade name: RMS1-Spray**
- **Other means of identification**
- **Article number: 1-RMS1-Spray**
- **Application of the substance / the mixture** Solvent cleaner
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Hottinger Brüel & Kjaer GmbH
Im Tiefen See 45
D-64293 Darmstadt
Germany
Tel: +49 6151 803 0
E-Mail: info@hbkworld.com
<https://www.hbkworld.com>
- **Information department:**
Tel. +49(0)6131 19240
EMail support-esa@hbkworld.com
- **Emergency telephone number:**
Canada:
+1 800 332 1414 (Alberta, NW Territories);
+1 866 454 1212 (Saskatchewan);
+1 403 944 1414 (Calgary, outside Alberta, VOIP users)
Poison and Drug Information Services
Foothills Medical Centre
1403 29th Street N.W.
T2N 2T9 Calgary

National Capital Poison Center, U.S.A.:
1-800-222-1222
3201 New Mexico Ave Ste 310
20016 Washington, DC
USA
CHEMTREC: +1 703-741-5970 (24h emergency call).
Outside continental USA please call CHEMTREC at +1-703-527-3887 (R-calls are accepted).

2 Hazard identification

- **Classification of the substance or mixture**



GHS02 Flame

Aerosols, Section 2.3.1 – Category 1

H222-H229 Extremely flammable aerosol.
Pressurized container: may burst if heated.



GHS07

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Eye damage/irritation – Category 2A H319 Causes serious eye irritation.
 Specific target organ toxicity (single exposure) – Category 3 H336 May cause drowsiness or dizziness.

· **Label elements**

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

2-propanol

Propanone-2

· **Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

· **Precautionary statements**

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.

P261 Avoid breathing spray.

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

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Please refer to additional labeling elements in Section 15 of this Safety Data Sheet, if applicable.

3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

CAS: 67-63-0 RTECS: NT 8050000	2-propanol	15 - 40% w/w *
CAS: 67-64-1 RTECS: AL 3150000	Propanone-2	15 - 40% w/w *
CAS: 74-98-6 RTECS: TX 2275000	Propane	5 - 10% w/w *
CAS: 75-28-5 RTECS: TZ 4300000	Isobutane	5 - 10% w/w *

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CAS: 106-97-8
RTECS: EJ 4200000

Butane

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5 - 10% w/w *

* Actual concentration ranges are withheld as a trade secret.

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Personal protection for the First Aider.
If symptoms occur or in case of doubt consult a doctor.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Remove contaminated clothing immediately.
Rinse with water.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Remove contact lenses if possible.
Do not rub eyes dry, the mechanical stress can cause additional cornea damages.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Avoid vomiting.
In case of disorders get medical advice.
- **Most important symptoms and effects, both acute and delayed** Dizziness
- **After eye contact:** eye irritation
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
Alcohol-resistant foam, extinguishing powder or carbon dioxide. Fight larger fire with water spray.
- **For safety reasons unsuitable extinguishing agents:**
Water with full jet
The use of a water jet may cause the fire to spread by splashing the burning product.
- **Special hazards arising from the substance or mixture**
Inhalation of combustion gases may cause serious health hazards.
During incomplete combustion carbon monoxide can be formed.
Formation of flammable mixtures of vapours with air possible.
In case of fire the aerosols bursting can be projected to distance with violence, with risk of propagation of the fire.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Remove goods in stock from incendiary zone, if possible.
Use water to keep fire exposed containers cool.

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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **For non-emergency personnel** Avoid contact with the product.
- **For emergency responders** Put on suitable personal protective equipment.
- **Environmental precautions:** Do not allow to enter drainage system, ground/soil and water bodies.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with eyes, skin and clothes.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
- **Handling:**
Do not eat, drink, smoke or sniff while working.
Avoid direct contact with eyes, skin and clothing.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
TLV: Threshold Limit Value

67-63-0 2-propanol

EL	STEL: 400 ppm TWA: 200 ppm
EV	STEL: 400 ppm TWA: 200 ppm

67-64-1 Propanone-2

EL	STEL: 500 ppm TWA: 250 ppm
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EV STEL: 750 ppm
TWA: 500 ppm

74-98-6 Propane

EL Simple asphyxiant; EX
EV TWA: 1,000 ppm
revoked as of 01/01/18

75-28-5 Isobutane

EL STEL: 1000 ppm
EX
EV TWA: 800 ppm
revoked as of 01/01/18

106-97-8 Butane

EL STEL: 1000 ppm
EX
EV TWA: 800 ppm
revoked as of 01/01/18

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic 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.
Wash contaminated clothing before re-use.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Filter AX
- **Protection of hands:**



Protective gloves

Only use chemical-protective gloves with CE-labeling of category III.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
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.
Butyl rubber, BR
Recommended material thickness: 0.3 mm, breakthrough time: 480 min.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:**

Safety goggles according to EN 166.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Physical state**

Aerosol

· **Color:**

transparent

· **Odor:**

Solvent-like

· **Odor threshold:**

Not determined.

· **Melting point/Melting range:**

Undetermined.

· **Boiling point/Boiling range:**

Not applicable, as aerosol.

· **Flammability:**

Not applicable.

· **Explosion limits:**· **Lower:**

Not determined.

· **Upper:**

Not determined.

· **Flash point:**

Not applicable, as aerosol.

· **Auto igniting:**

Product is not selfigniting.

· **Decomposition temperature:**

Not determined.

· **SADT**· **pH-value:**

Not determined.

· **Viscosity:**· **Kinematic:**

Not determined.

· **Dynamic:**

Not determined.

· **Solubility in / Miscibility with**· **Water:**

mixable

· **Segregation coefficient (n-octanol/water):**

Not determined.

· **Vapor pressure:**

Not determined.

· **Density:**

Not determined.

· **Relative density**

Not determined.

· **Vapor density**

Not determined.

· **Particle characteristics**

No further details.

· **Other information**· **Appearance:**· **Form:**

Aerosol

· **Important information on protection of health and environment, and on safety.**· **Ignition temperature:**

Product is not selfigniting.

· **Danger of explosion:**

Not determined.

· **Solvent content:**· **Organic solvents:**

70.0 %

· **Change in condition**· **Evaporation rate**

Not applicable.

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10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
Avoid direct sunlight, heat and ignition sources.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Protect from direct sunlight.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
None in case of intended use and storage in compliance with instructions.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

67-63-0 2-propanol

Oral	LD50	5,840 mg/kg (Rat) (OECD 401)
Dermal	LD50	13,400 mg/kg (Rabbit)
Inhalative	LC50	30 mg/l/4h (Rat)

67-64-1 Propanone-2

Oral	LD50	5,800 mg/kg (Rat)
Dermal	LD50	> 7,426 mg/kg (guinea pig) (21 CFR 191.10)
		> 7,426 mg/kg (Rabbit) (21 CFR 191.10)
Inhalative	LC50	132 mg/l/3h (Rat)

- **Primary irritant effect:**
- **on the eye:** Irritating effect.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

67-63-0	2-propanol	3
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

67-63-0 2-propanol

EC50 (static)	> 10,000 mg/l/24h (Daphnia magna) (OECD202)
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LC50 (dynamic)	9,640 mg/l/96h (Pimephales promelas) (OECD203)
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67-64-1 Propanone-2

EC50	> 10,000 mg/l/24h (Daphnia magna)
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LC50 (dynamic)	8,120 mg/l/96h (Pimephales promelas) (OECD 203)
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- **Persistence and degradability** No further relevant information available.
- **Other information:** There are no data available about the preparation.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
Dispose of packaging according to regulations on the disposal of packagings.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- **UN-Number**
- **DOT/TDG, ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
- **DOT/TDG** Aerosols, flammable
- **ADR** 1950 Aerosols
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable
- **Transport hazard class(es)**
- **DOT/TDG (Transport dangerous goods):**
- 
- **Class** 2.1 Gases
No hazardous good

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· **Label** 2.1

· **ADR**



· **Class** 2.5F Gases
 · **Label** 2.1

· **IMDG**



· **Class** 2.1 Gases
 · **Label** 2.1

· **IATA**



· **Class** 2.1 Gases
 Not Restricted
 · **Label** 2.1

· **Packing group**
 · **DOT/TDG, ADR, IMDG, IATA** Void

· **Environmental hazards:** Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT/TDG**
 · **Quantity limitations** On passenger aircraft/rail: 75 kg
 On cargo aircraft only: 150 kg

· **ADR**
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity

· **IMDG**
 · **Limited quantities (LQ)** 1L
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity

· **Special precautions for user** Warning: Gases
 · **Hazard identification number (Kemler code):** -
 · **EMS Number:** F-D,S-U

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<ul style="list-style-type: none"> · Stowage Code · Segregation Code 	<p>SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.</p> <p>SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</p>
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN 1950 AEROSOLS, 2.1

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

- **Section 313 (Specific toxic chemical listings):**

67-63-0 2-propanol

- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Canadian Non-Domestic Substances List (NDSL)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

67-63-0 2-propanol

67-64-1 Propanone-2

106-97-8 Butane

- **Per- and polyfluoroalkyl substances (PFAS)**

None of the ingredients is listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:**



*This Safety Data Sheet has been drawn up in cooperation with:
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· **Kit-Components:**

· **Date of preparation** 08/31/2025

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· *** Data compared to the previous version altered.**

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