

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

BRAUN Cleaning Solution VC 951/18, Cartridge

Print date: 13.08.2012

Product code: MR12144

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

BRAUN Cleaning Solution VC 951/18, Cartridge

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

Reiniger

1.3. Details of the supplier of the safety data sheet

Company name:	Tunap Deutschland Vertriebs GmbH & Co. Betriebs KG		
Street:	Bürgermeister-Seidl-Str. 2		
Place:	D-82515 Wolfratshausen		
Telephone:	08171/1600 - 0	Telefax:	08171/1600 - 40
e-mail:	sdb@tunap.com		
Internet:	www.tunap.com		

1.4. Emergency telephone: Tel: + 49 (0) 30 / 19240 (Giftnotruf Berlin)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

Indications of danger : Highly flammable

R-phrases:

Highly flammable.

2.2. Label elements

Danger symbols: F - Highly flammable



F - Highly flammable

R phrases

11 Highly flammable.

S phrases

02	Keep out of the reach of children.
16	Keep away from sources of ignition - No smoking.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
200-746-9	propan-1-ol; n-propanol	
71-23-8	F, Xi R11-41-67	1 - 5 %
603-003-00-0	Flam. Liq. 2, Eye Dam. 1, STOT SE 3; H225 H318 H336	
205-341-0	dipentene, limonene	< 1 %
138-86-3	Xi, N R10-43-38-50-53	
601-029-00-7	Flam. Liq. 3, Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H226 H315 H317 H400 H410	

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

Further Information

Labelling for contents according to regulation (EC) No 648/2004, annex 7: 0,1% and more but less than 1%, : dipentene, limonene; below 0.1% perfumes : R)-p-Mentha-1,8-diene, Citral, Cis-, trans-3-methyl-5-phenyl-2-pentennitrile, 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Never give anything by mouth to an unconscious person or a person with cramps. Guide people to safety.

After inhalation

Provide fresh air. Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After contact with skin

Wash with generous amount of water. Change contaminated clothing. After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink large quantities of water. Caution if victim vomits: Risk of aspiration! Medical advice absolutely required!

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

No information available.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water. Carbon dioxide (CO₂). Foam. Extinguishing powder. Extinguishing powder. Foam. Water fog.

Extinguishing media which must not be used for safety reasons

High power water jet.

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5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. No information available.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray/stream to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray/stream to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Wear respiratory protection when in the presence of vapour, dust, and aerosols. Wear personal protection equipment. Refer to chapter 8.

6.2. Environmental precautions

Do not allow uncontrolled leakage of product into the environment. Explosion hazard. Do not empty into drains or the aquatic environment. Prevent spreading over great surfaces (e.g. by damming or installing oil booms). Ensure all waste water is collected and treated via a waste water treatment plant.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the assimilated material according to the section on waste disposal. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Refer to chapter 8.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide for sufficient ventilation and punctiform suction at critical points. Dust must be vacuumed up immediately at the place it occurs. Do not eat, drink, smoke or sneeze at the workplace.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours may form explosive mixtures with air. Keep away from sources of ignition - No smoking.

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Keep container tightly closed in a cool, well-ventilated place.

Advice on storage compatibility

Do not store together with: Material, rich in oxygen, oxidizing.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters**Exposure limits (EH40)**

CAS No	Chemical name	ml/m ³	mg/m ³	F/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
71-23-8	Propan-1-ol	200	500		TWA (8 h)	WEL
		250	625		STEL (15 min)	WEL

Additional advice on limit values

U: Urea

8.2. Exposure controls**Protective and hygiene measures**

Change contaminated clothing. Wash hands before breaks and at the end of work. When using do not eat or drink. Wear suitable protective clothing.

Respiratory protection

Wear respiratory protection when in the presence of vapour, dust, and aerosols.

Hand protection

Suitable material: NBR (Nitrile rubber). penetration time (maximum wearing period): 480min

Eye protection

Suitable eye protection: Tightly sealed safety glasses.

Skin protection

Only wear fitting, comfortable and clean protective clothing.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: liquid
Colour: colourless
Odour: Alcohol.

Test method

pH-Value (at 20 °C): not applicable

Changes in the physical state

Melting point: No information available.
Boiling point: 78 °C
Sublimation point: No information available.
Softening point: No information available.
:
Flash point: 12 °C
Lower explosion limits: 3,5 vol. %
Upper explosion limits: 15 vol. %
Ignition temperature: No information available.
Vapour pressure: No information available.
Density (at 20 °C): 0,8 g/cm³
Water solubility: insoluble
Partition coefficient: No information available.

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Viscosity / dynamic:	No information available.
Viscosity / kinematic: (at 40 °C)	No information available. DIN 53019-1
Flow time: (at 20 °C)	No information available. 8 DIN EN ISO 2431
Vapour density:	No information available.
Evaporation rate:	No information available.
Solvent separation test:	No information available.
Solvent content:	No information available.

9.2. Other information

Solid content:	No information available.
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SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No information available.

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
71-23-8	propan-1-ol; n-propanol				
	oral	LD50	1870 mg/kg	Rat.	
	dermal	LD50	7000 mg/kg	Rabbit.	
	inhalative (4 h)	LC50	33,8 mg/l	Rat.	
138-86-3	dipentene, limonene				
	oral	LD50	5300 mg/kg	Rat.	

Specific effects in experiment on an animal

No information available.

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Irritation and corrosivity

No information available.

Sensitising effects

No information available.

Severe effects after repeated or prolonged exposure

No information available.

Carcinogenic/mutagenic/toxic effects for reproduction

No information available.

Additional information on tests

The classification was undertaken in accordance with the calculation method governed by the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information**12.1. Toxicity**

CAS No	Chemical name				
	Aquatic toxicity	Method	Dose	h	Species
71-23-8	propan-1-ol; n-propanol				
	Acute fish toxicity	LC50	4480 mg/l	96	Pimephales promelas
138-86-3	dipentene, limonene				
	Acute fish toxicity	LC50	0,5 mg/l	96	

12.2. Persistence and degradability

There are no data available on the mixture itself. AOX (mg/l): 0

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
71-23-8	propan-1-ol; n-propanol	0,29

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

Further information

The classification was undertaken in accordance with the calculation method governed by the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Waste disposal according to official state regulations. Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions.

Waste disposal number of waste from residues/unused products

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors
Classified as hazardous waste.

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Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Completely emptied packings can be re-cycled. Contaminated packing must be completely emptied and can be re-used following appropriate cleaning.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number: UN1170
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3
Classification code: F1
Special Provisions: 144 601
Limited quantity: 1 L
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Other applicable information (land transport)

E2

Inland waterways transport

14.1. UN number: UN1170
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3
Classification code: F1
Special Provisions: 144 601
Limited quantity: 1 L

Other applicable information (inland waterways transport)

E2

Marine transport

14.1. UN number: UN1170
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3
Special Provisions: 144
Limited quantity: 1 L
EmS: F-E, S-D

Other applicable information (marine transport)

E2

Air transport

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UN/ID number: UN1170
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3
Special Provisions: A3 A58 A180
Limited quantity Passenger: 1 L
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L
Other applicable information (air transport)
E2
Passenger-LQ: Y341

14.5. Environmental hazards

Dangerous for the environment: no

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

1999/13/EC (VOC): VOC-CH: 0,756 kg/ Ltr.
VOC 1999/13/EG: 94,55 % w/w

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Data concerning the Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC-RL)

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

SECTION 16: Other information**Abbreviations and acronyms**

DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level
WEL (UK): Workplace Exposure Limits
TWA (EC): Time-Weighted Average
ATE: Acute Toxicity Estimate
STEL (EC): Short Term Exposure Limit
LC50:: Lethal Concentration
EC50:: half maximal Effective Concentration
ErC50:: means EC50 in terms of reduction of growth rate

Full text of R-phrases referred to under sections 2 and 3

10 Flammable.
11 Highly flammable.
38 Irritating to skin.
41 Risk of serious damage to eyes.
43 May cause sensitization by skin contact.
50 Very toxic to aquatic organisms.
53 May cause long-term adverse effects in the aquatic environment.
67 Vapours may cause drowsiness and dizziness.

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)