

Printing date 08/06/2014

Reviewed on 08/06/2014

1 Identification

- **Product identifier**
- **Trade name: V 1**
- **Application of the substance / the mixture**
Dry-cleaning
Spotting agent, stain remover
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SEITZ GmbH
Gutenbergstrasse 3
65830 Kriftel / Germany
Tel. + 49(0) 6192-9948-0
Fax + 49(0) 6192-9948-99
msds@seitz24.com
www.seitz24.com
- **Information department:**
CHEM-TEL Inc.
1305 North Florida Ave
Tampa Florida 33602
- **Emergency telephone number:** 1-800-255-3924

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 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



GHS05



GHS07

- **Signal word** Danger

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

benzenesulfonic acid, C10-13-alkyl derivs., sodium salts
cyclohexanone
acetic acid n-butylester

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- **Hazard statements**

H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H336 May cause drowsiness or dizziness.

- **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P280 Wear protective gloves / eye protection.
 P261 Avoid breathing mist/vapours/spray.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.

- **Hazard description:**

- **WHMIS classification**

B2 - Flammable liquid
 D2B - Toxic material causing other toxic effects



- **Classification system**

- **NFPA ratings (scale 0-4)**



Health = 2
 Fire = 3
 Reactivity = 0

- **HMIS-ratings (scale 0-4)**



Health = 2
 Fire = 3
 Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **CAS-No. Components:**

CAS-No.	Components:	
123-86-4	acetic acid n-butylester	< 25%
34590-94-8	dipropylen glycol monomethylether	< 25%
68411-30-3	benzenesulfonic acid, C10-13-alkyl derivs., sodium salts	< 15%
108-94-1	cyclohexanone	< 15%
108-65-6	2-methoxy-1-methylethyl acetate	< 10%
108-10-1	4-methylpentan-2-one	< 10%

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4 First-aid measures

- **Description of first aid measures**
- **General information**
Remove casualties from exposure.
Keep unprotected persons away.
Immediately remove any clothing soiled by the product.
- **After inhalation**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact**
Immediately rinse with water.
If skin irritation continues, consult a doctor.
- **After eye contact**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed**
Headache
Dizziness
Nausea
Unconsciousness
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Avoid contact with eyes and skin.
Keep away from ignition sources
Ensure adequate ventilation
Do not breathe gases/ vapours.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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- Dispose of the collected material according to regulations.
- **Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**
Keep away from heat and direct sunlight.
Avoid contact with eyes and skin.
Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Formation of explosive vapour- / air mixture possible.
Protect against electrostatic charges.
Flammable gas-air mixtures may be formed in empty receptacles.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Prevent any seepage into the ground.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidizing agents.
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.
Protect from frost.
Time of storage: max. 12 month
- **Specific end use(s)** Dry-cleaning

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:

123-86-4 acetic acid n-butylester

PEL (USA)	Long-term value: 710 mg/m ³ , 150 ppm
REL (USA)	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 710 mg/m ³ , 150 ppm
TLV (USA)	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 713 mg/m ³ , 150 ppm
EL (Canada)	Long-term value: 20 ppm
EV (Canada)	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 710 mg/m ³ , 150 ppm

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34590-94-8 dipropylen glycol monomethylether

PEL (USA)	Long-term value: 600 mg/m ³ , 100 ppm Skin
REL (USA)	Short-term value: 900 mg/m ³ , 150 ppm Long-term value: 600 mg/m ³ , 100 ppm Skin
TLV (USA)	Short-term value: 909 mg/m ³ , 150 ppm Long-term value: 606 mg/m ³ , 100 ppm Skin
EL (Canada)	Short-term value: 150 ppm Long-term value: 100 ppm Skin
EV (Canada)	Short-term value: 910 mg/m ³ , 150 ppm Long-term value: 605 mg/m ³ , 100 ppm

108-94-1 cyclohexanone

PEL (USA)	Long-term value: 200 mg/m ³ , 50 ppm
REL (USA)	Long-term value: 100 mg/m ³ , 25 ppm Skin
TLV (USA)	Long-term value: 50 mg/m ³ , 20 ppm Skin
EL (Canada)	Short-term value: 50 ppm Long-term value: 20 ppm Skin
EV (Canada)	Short-term value: 50 ppm Long-term value: 20 ppm Skin

108-65-6 2-methoxy-1-methylethyl acetate

WEEL (USA)	Long-term value: 50 ppm
EL (Canada)	Short-term value: 75 ppm Long-term value: 50 ppm
EV (Canada)	Long-term value: 270 mg/m ³ , 50 ppm

108-10-1 4-methylpentan-2-one

PEL (USA)	Long-term value: 410 mg/m ³ , 100 ppm
REL (USA)	Short-term value: 300 mg/m ³ , 75 ppm Long-term value: 205 mg/m ³ , 50 ppm
TLV (USA)	Short-term value: 307 mg/m ³ , 75 ppm Long-term value: 82 mg/m ³ , 20 ppm BEI
EL (Canada)	Short-term value: 75 ppm Long-term value: 20 ppm IARC 2B
EV (Canada)	Short-term value: 75 ppm Long-term value: 205 mg/m ³ , 50 ppm

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· **Ingredients with biological limit values:**

108-94-1 cyclohexanone

BEI (USA)	80 mg/L Medium: urine Time: end of shift at end of workweek Parameter: 1.2-Cyclohexanediol with hydrolysis (nonspecific, semi-quantitative)
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8 mg/L	Medium: urine Time: end of shift Parameter: Cyclohexanol with hydrolysis (nonspecific, semi-quantitative)
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108-10-1 4-methylpentan-2-one

BEI (USA)	1 mg/L Medium: urine Time: end of shift Parameter: MIBK
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

· **Breathing equipment:**

Ensure good ventilation/exhaustion at the workplace.

Use suitable respiratory protective device in case of insufficient ventilation (exceeding the workplace limit values, formation of aerosols).

· **Protection of hands:**

Solvent resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

PE/EVAL/PE

Butyl rubber, BR

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.

· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed goggles.

· **Body protection:** Solvent resistant protective clothing

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9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- Form:

Fluid

- Color:

Yellow

- **Odor:**

Solvent-like

- **Odour threshold:**

No further relevant information available.

- **pH-value (100 g/l) at 20 °C (68 °F):**

~ 7.0

- **Change in condition**

- Melting point/Melting range:

undetermined

- Boiling point/Boiling range:

undetermined

- **Flash point:**

32 °C (90 °F) (ASTM D93 c.c.)

- **Flammability (solid, gaseous)**

No further relevant information available.

- **Ignition temperature:**

No further relevant information available.

- **Decomposition temperature:**

No further relevant information available.

- **Auto igniting:**

Product is not selfigniting.

- **Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

- Lower:

No further relevant information available.

- Upper:

No further relevant information available.

- **Oxidizing properties**

No further relevant information available.

- **Vapor pressure:**

No further relevant information available.

- **Density at 20 °C (68 °F):**

~ 0.95 g/cm³ (ISO 2811)

- **Relative density**

No further relevant information available.

- **Vapour density**

No further relevant information available.

- **Evaporation rate**

No further relevant information available.

- **Solubility in / Miscibility with**

- Water:

Not miscible or difficult to mix

- **Partition coefficient (n-octanol/water):** No further relevant information available.

- **Viscosity:**

- dynamic:

No further relevant information available.

- kinematic:

No further relevant information available.

- **Other information**

No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.

- **Chemical stability**

Stable under normal ambient conditions.

No decomposition if used and stored according to specifications.

- **Possibility of hazardous reactions** Forms flammable gases / fumes

- **Conditions to avoid**

Protect from heat and direct sunlight.

Keep away from ignition sources

- **Incompatible materials:** Strong oxidizing agents

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· **Hazardous decomposition products:** None if used as directed.

11 Toxicological information

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

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

123-86-4 acetic acid n-butylester

Oral	LD50	10760 mg/kg (rat) (OECD 423)
Dermal	LD50	> 14112 mg/kg (rabbit) (OECD 402)
Inhalative	LC50 (4h)	23.4 mg/l (rat) (OECD 403)

34590-94-8 dipropylen glycol monomethylether

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	9500 mg/kg (rabbit)
Inhalative	LC50 (7h)	> 500 mg/l (rat)

68411-30-3 benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Oral	LD50	200 - 2000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)

108-94-1 cyclohexanone

Oral	LD50	1530 mg/kg (rat)
Dermal	LD50	948 mg/kg (rabbit)
Inhalative	LC50 (4h)	10.7 mg/l (rat)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)
Inhalative	LC50 (4h)	> 5 mg/l (rat)

108-10-1 4-methylpentan-2-one

Oral	LD50	2080 mg/kg (rat) (OECD 401)
Dermal	LD50	> 2000 mg/kg (rab) (OECD 402)
Inhalative	LC50 (4h)	8.2 - 16.4 mg/l (rat) (OECD 403)

- **Primary irritant effect:**
- **on the skin:** Irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

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

108-94-1	cyclohexanone	3
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.

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- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Contaminated adsorbent, soil, water must be disposed of in a permitted hazardous waste management facility. Recovered products may be reused, reprocessed or incinerated or must be treated in a permitted hazardous waste management facility. It is your duty to dispose of the chemical materials and/or their containers in accordance with the Clean Air Act, The Clean Water Act, RCRA, as well as applicable Federal, State, and local Regulations regarding disposal.

14 Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, IMDG, IATA | UN1993 |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR · IMDG, IATA | Flammable liquids, n.o.s. (Butyl acetates, Methyl isobutyl ketone)
1993 Flammable liquids, n.o.s. (Butyl acetates, Methyl isobutyl ketone)
FLAMMABLE LIQUID, N.O.S. (BUTYL ACETATES, METHYL ISOBUTYL KETONE) |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | |
|  | |
| <ul style="list-style-type: none"> · Class · Label | 3 Flammable liquids
3 |
| <ul style="list-style-type: none"> · ADR | |
|  | |
| <ul style="list-style-type: none"> · Class | 3 (F1) Flammable liquids |

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· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	III
· DOT, ADR, IMDG, IATA	III
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	F-E,S-E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN1993, Flammable liquids, n.o.s. (Butyl acetates, Methyl isobutyl ketone), 3, III

15 Regulatory information

· Canadian substance lists

· Canadian domestic substance list (DSL):

All ingredients are listed.

· Canadian ingredient disclosure list (limit 0.1%):

108-94-1 cyclohexanone

· Canadian ingredient disclosure list (limit 1%):

123-86-4	acetic acid n-butylester
34590-94-8	dipropylen glycol monomethylether
68411-30-3	benzenesulfonic acid, C10-13-alkyl derivs., sodium salts
108-10-1	4-methylpentan-2-one

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- **Sara**

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

None of the ingredients is listed.

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

108-10-1 | 4-methylpentan-2-one

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

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

108-10-1 | 4-methylpentan-2-one

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

108-10-1 | 4-methylpentan-2-one

- **Cancerogeny categories**

- **EPA (Environmental Protection Agency)**

108-10-1 | 4-methylpentan-2-one | I

- **TLV (Threshold Limit Value established by ACGIH)**

108-94-1 | cyclohexanone | A3

- **MAK (German Maximum Workplace Concentration)**

108-94-1 | cyclohexanone | 3B

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **National regulations**

- **Other regulations, limitations and prohibitive regulations**

- **Please note:**

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another. It is the buyers responsibility to ensure that its activities comply with Federal, State or provincial, and local laws. The following specific information is made for the purpose of complying with numerous laws and regulations.

- **Other information:** The product has been designed for professional use only.

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.

- **Date of preparation / last revision** 08/06/2014 / 1

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

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HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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

USA