

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation

K2r Fleckenspray / Spray Détachant 90'597 AQ/04

Use of the substance/preparation

Cleaning agent

Company/undertaking identification

Trichema AG, Lättichstrasse 4, CH-6341 Baar
Telephone +41 (0)768 02 02, Fax +41 (0)768 02 00
www.trichema.ch, info@trichema.ch

Distributor:

K2r Produkte AG, Haggenstrasse 45, CH-9014 St. Gallen
Tel.: +41 (0)71 274 18 00, Fax: +41 (0)71 274 18 01

Omegin Dr. Schmidgall GmbH, Industriepark 210, D-78244 Gottmadingen
Tel.: +49 (0)7731/9825-0, Fax: +49 (0)7731/9825-13

Dr. A.&L. Schmidgall KG, Wolfganggasse 45-47, A-1121 Wien
Tel.: +43-1-811 580, Fax: +43-1-811 587

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

Emergency telephone

Advisory office in case of poisoning:

Tel.: Swiss Toxicological Information Centre, Zurich (STIC, 24h): Tel. 145 (outside of Switzerland: +41 44 251 51 51)

Telephone number of the company in case of emergencies:

Tel. ---

2. HAZARDS IDENTIFICATION

To people

See point 11 and 15.

Preparation is classified as hazardous in the sense of directive 1999/45/EC.

Product is extremely flammable.

Possible build up of explosive/highly flammable vapour/air mixture.

Danger of bursting (explosion) when heated.

Vapours may cause drowsiness and dizziness

To the environment

See point 12.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Aerosol

Chemical name			
content %	Symbol Registration number (ECHA)	R-phrases DNEL	EINECS, ELINCS PNEC
Pentane			
15 -< 25	F+/Xn/N	12-51-53-65-66-67	203-692-4
Cyclopentane			
25 - 30	F	11-52/53	206-016-6

Isopentane			
1 - 5	F+/Xn/N	12-51-53-65-66-67	201-142-8

For complete wording of the R-phrases, refer to point 16.

4. FIRST AID MEASURES

4.1 Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

If the person is unconscious, place in a stable side position and consult a doctor.

Respiratory arrest - Artificial respiration apparatus necessary.

4.2 Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

4.3 Skin contact

Wash thoroughly with soap and copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

4.4 Ingestion

Typically no exposure pathway.

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

4.5 Special resources necessary for first aid

Indications for the physician:

Symptomatic treatment

Ingestion:

Gastric lavage (stomach washing) only under endotracheal intubation.

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

CO2

Exinction powder

Water jet spray

Alcohol resistant foam

Cool container at risk with water.

5.2 Extinguishing media which shall not be used for safety reasons

High volume water jet

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of fire the following can develop:

Oxides of carbon

Toxic pyrolysis products.

Danger of explosion by prolonged heating.

Explosive vapour/air mixture

Dangerous vapours heavier than air.

In case of spreading near the ground, flashback to distance sources of ignition is possible.

5.4 Special protective equipment for fire-fighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply

According to size of fire

Full protection, if necessary

5.5 Further information

Dispose of contaminated extinction water according to official regulations.

6. ACCIDENTAL RELEASE MEASURES

Refer to point 13. and for personal protection refer to point 8.

6.1 Personal precautions

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental precautions

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods for cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Without adequate ventilation, formation of explosive mixtures may be possible.

Active substance:

Collect using absorbant material (e.g. Universal binding medium, sand, kieselguhr) and dispose of according to point 13.

Fill the absorbed material into lockable containers.

Flush residue using copious water.

7. HANDLING AND STORAGE

7.1 Handling

Tips for safe handling:

See point 6.1

Ensure good ventilation.

Room ventilation also at ground level.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

Keep away from sources of ignition - Do not smoke.

Take measures against electrostatic charging, if appropriate.

Do not use on hot surfaces.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Wash hands before breaks and at end of work.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.2. Storage

Requirements for storage rooms and containers:

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Observe special regulations for aerosols.

Special storage conditions:

See point 10

Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung").

Store in a well ventilated place.

Keep protected from direct sunlight and temperatures over 50°C.

Store cool

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure limit values

Chemical Name	Pentane	
WEL-TWA: 1800 mg/m3 (normal and branched chain alkanes C5-C6) (WEL), 1000 ppm (3000 mg/m3) (EC)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	
Chemical Name	Cyclopentane	
WEL-TWA: 1800 mg/m3 (Cycloalkanes C5-C6)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	
Chemical Name	Isopentane	
WEL-TWA: 1800 mg/m3 (normal and branched chain alkanes C5-C6) (WEL), 1000 ppm (3000 mg/m3) (EC)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	
Chemical Name	Butane	
WEL-TWA: 600 ppm (1450 mg/m3)	WEL-STEL: 750 ppm (1810 mg/m3)	---
BMGV: ---	Other information: ---	
Chemical Name	Silica, amorphous	

WEL-TWA: 6 mg/m3 (total inh. dust), 2,4 mg/m3 (resp. dust)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Occupational exposure controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Respiratory protection:

If OES or MEL is exceeded.

Filter A2 P2 (EN 141)

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

Hand protection:

Solvent resistant protective gloves (EN 374).

If applicable

Protective PVC gloves (EN 374)

Protective nitrile gloves (EN 374)

Protective Viton gloves (EN 374)

Protective hand cream recommended.

Eye protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection:

Protective working garments (e.g. safety shoes EN 344, long-sleeved protective working garments)

Additional information on hand protection - No tests have been performed.

Selection made for preparations according to the best available knowledge and information on the ingredients.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.2 Environmental exposure controls

n.av.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Aerosol
Colour:	Colourless
Odour:	Hydrocarbons
pH-value undiluted:	n.a.
Boiling point/boiling range (°C):	n.a.
Melting point/melting range (°C):	n.a.
Flash point (°C):	- 32
Ignition temperature:	> 360°C
Oxidising properties:	No
Minimum limit of explosion:	1,2 Vol%
Maximum limit of explosion:	12,0 Vol%
Product is not explosive.	
Possible build up of explosive/highly flammable vapour/air mixture.	
Vapour pressure:	3,8 bar (20°C), 7,3 bar (50°C)
Density (g/ml):	n.a.
Water solubility:	Insoluble
Vapour density (air = 1):	Vapours heavier than air.

10. STABILITY AND REACTIVITY

Conditions to avoid

See point 7

Stable when handled and stored correctly.

Heating, open flame, ignition sources

Pressure increase will result in danger of bursting.

Electrostatic charge

Materials to avoid

Avoid contact with strong oxidizing agents.

Avoid contact with strong alkalis.

Avoid contact with strong acids.

Hazardous decomposition products

No decomposition when used as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg): n.av.

Inhalation, LC50 rat inhal.(mg/l/4h): n.av.

Skin contact, LD50 rat dermal (mg/kg): n.av.

Eye contact: n.av.

Delayed and chronic effects

Sensitization: n.c.

Carcinogenicity: n.c.

Mutagenicity: n.c.

Reproductive toxicity: n.c.

Narcosis: Possible

Further information

The product was not tested.

Classification according to calculation procedure.

The following may occur:

Irritation of the eyes

Irritation of the respiratory tract

Coughing

Headaches

Dizziness

Effects/damages the central nervous system

Coordination disorders

With long-term contact:

Product removes fat

Drying of the skin.

Dermatitis (skin inflammation)

Ingestion:

Nausea

Vomiting

Danger of aspiration.

Oedema of the lungs

Other dangerous properties cannot be ruled out.

12. ECOLOGICAL INFORMATION

The product was not tested.

Water hazard class (Germany): 1

Self classification: Yes (VwVwS)

Persistence and degradability:

Readily biodegradable *, **

Behaviour in sewage plants:

Mechanical precipitation possible.

According to the recipe, contains no AOX.

Aquatic toxicity:

See point 2.

Ecological toxicity:

n.av.

Mobility:

Product is slightly volatile.

Accumulation:

Concentration in organisms possible. *, **

* Pentane

** Cyclopentane

13. DISPOSAL CONSIDERATIONS

Revision: 12.12.2007 Replaces the version of: 12.12.2007 PDF date: 13.12.2007
 K2r Fleckenspray / Spray Détachant
 90'597 AQ/04

13.1. for the material / preparation / residue

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)

14 06 03 other solvents and solvent mixes

16 05 04 gases in pressure containers (including halons) containing dangerous substances

20 01 29 detergents containing dangerous substances

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

13.2 for contaminated packing material

See point 13.1

Pay attention to local and national official regulations

Recommendation:

Do not perforate, cut up or weld uncleaned container.

Recycling

15 01 04 metallic packaging

14. TRANSPORT INFORMATION

General statements

UN-Number: 1950

Road/Rail-transport (ADR/RID)

Class/packing group: 2/- 

UN 1950 AEROSOLS

Classification code: 5F

LQ: 2

Transport by sea

IMDG-code: 2.1/- (class/packing group)

EmS: F-D, S-U 

Marine Pollutant: n.a

AEROSOLS

Transport by air

IATA: 2.1/-/ (class/secondary danger/packing group)

Aerosols, flammable

Additional information:

Danger code and packing code on request.

15. REGULATORY INFORMATION

Classification according to Dangerous Product Regulations incl. EC Directives (67/548/EEC and 1999/45/EC)



Symbols: F+

Indications of danger:

Extremely flammable

R-phrases:

12 Extremely flammable.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

67 Vapours may cause drowsiness and dizziness.

S-phrases:

7/9 Keep container tightly closed and in a well-ventilated place.

23.c Do not breathe spray.

33 Take precautionary measures against static discharges.

35 This material and its container must be disposed of in a safe way.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

Additions:

Pressurized container:

protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition - No smoking.

Keep out of the reach of children.

Without adequate ventilation, formation of explosive mixtures may be possible.

Observe restrictions: Yes

Observe youth employment law (German regulation).

Observe restrictive guidelines 76/769/EEC, 1999/51/EC, 1999/77/EC

VOC (1999/13/EC): 93,5% w/w

16. OTHER INFORMATION

These details refer to the product as it is delivered.

Storage class VCI (Germany): 2 B

Revised points: n.a.

The following phrases represent the prescribed R-phrases for the ingredients (designated in point 2).

12 Extremely flammable.

51 Toxic to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

65 Also harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

11 Highly flammable.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Legend:

n.a. = not applicable / n.v., k.D.v. = n.av. = not available / n.g. = n.c. = not checked

WEL = Workplace Exposure Limit EH40, TWA = Long-term exposure limit (8-hour TWA (= time weighted average) reference

period), STEL = Short-term exposure limit (15-minute reference period) / BMGV = Biological monitoring guidance value EH40

AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)

VbF = Regulations for flammable liquids (Austria)

WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water

VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds

VwVwS = Administrative Order relating to substances hazardous to water (Germany)

The statements made here should describe the product with regard to the necessary safety precautions - they are

not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

Chemical Check GmbH, Wöbblers Straße 2-4, D-32839 Steinheim, Tel.: +49 5233 94 17 0, +49 1805-

CHEMICAL / +49 180 52 43 642, Fax: +49 5233 94 17 90, +49 180 50 50 455

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document

is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.