

Safety Data Sheet according to Regulation  
(EC) No. 1907/2006 (REACH)

Printed 04.05.2009  
Revision 21.07.2008 (GB) Version 1.0

**PFINDER 890**  
11890000



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

**Name of product** PFINDER 890

**Manufacturer/distributor** Pfinder KG  
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**Emergency advice** Vergiftungs-Informations-Zentrale (Universitätsklinikum  
Freiburg)  
Phone +49(0)761-192 40

**Recommended intended purpose(s)**  
Cleaner

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## 2. HAZARDS IDENTIFICATION

### Classification

F; R11  
Xi; R36

### R-phrases

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

### Special hazards information for humans and environment

In use, may form flammable/explosive vapour-air mixture.  
In case of prolonged or repeated skin contact, inflammatory of skin as a result of the degreasing effect of the solvent may occur.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical characterization

Cleaner based on acetone and isopropanol

### Hazardous ingredients

CAS No	EC No	Name	[%]	Classification
67-63-0	200-661-7	propan-2-ol	15 - 20	F R11; Xi R36; R67
67-64-1	200-662-2	acetone	75 - 90	F R11; Xi R36; R66; R67

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#### **Additional advice**

Wording of the R-phrases see chapter 16.

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### **4. FIRST AID MEASURES**

#### **General information**

Remove contaminated soaked clothing immediately.

#### **In case of inhalation**

Move subject to fresh air, breath donation if necessary.  
In the event of symptoms refer for medical treatment.

#### **In case of skin contact**

After cleaning of skin apply a protective creme  
In case of contact with skin wash off immediately with soap and water.

#### **In case of eye contact**

Rinse affected eyes immediately under running water with eyelids held open, for at least 15 min. If symptoms persist, consult an oculist.

#### **In case of ingestion**

Do not induce vomiting.  
Call for a doctor immediately.  
Rinse out mouth thoroughly with water.

#### **Physician's information / possible symptoms**

Unconsciousness  
Shortness of breath  
Headache  
Irritation of mucous membranes  
Confusion

#### **Physician's information / possible dangers**

Risk of respiratory disorders  
Gefahr metabolischer Azidose.

#### **Treatment (Advice to doctor)**

Give sodium sulfate (1 tablespoon on 1 glass water) and plentifully activated carbon

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### **5. FIRE-FIGHTING MEASURES**

#### **Suitable extinguishing media**

Alcohol-resistant foam  
Dry powder  
Carbon dioxide  
Water spray jet

#### **Extinguishing media which must not be used for safety reasons**

Strong water jet

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

Fire gas of organic material has to be classed invariably as respiratory poison.  
Vapours are heavier than air and spread on ground.  
In case of incomplete burning, toxic substances (e.g. carbon monoxide) may be part of the fumes.

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In use, may form flammable/explosive vapour-air mixture.

**Special protective equipment for fire-fighters**

Use breathing apparatus with independent air supply.  
Wear full protective clothing.

**Additional information**

Containers: Effect of heat may cause rise of pressure - danger of bursting  
Keep threatened containers cool by spraying with water. As possible remove the container from the source of fire.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Ensure adequate ventilation.  
Keep away sources of ignition.  
Avoid contact with eyes and skin.

**Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.  
In case of infiltration into waters, drains etc. inform authorities.

**Methods for cleaning up**

Embank large quantities and pump with an ex-proof apparatus in containers.  
Take up small quantities and residues with absorbent material (e.g. universal binder) and dispose of in accordance with local regulations.

**Additional Information**

Informations for safe handling see chapter 7.  
Informations for personal protective equipment see chapter 8.  
Informations for disposal see chapter 13.

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**7. HANDLING AND STORAGE**

**Advice on safe handling**

Avoid contact with eyes and skin.  
Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking  
The heavy vapours may bridge a long distance to source of ignition.  
Take precautionary measures against static discharges.

**Requirements for storage rooms and vessels**

Provide solvent-resistant and impermeable floor.  
Prevent from infiltration into soil and waters.

**Advice on storage compatibility**

Do not store with acids, lyes and oxidizing agents.  
Store and transport separate of food.

**Further information on storage conditions**

Keep container tightly closed and store at cool and aired place.

**Storage group** 3A

**Fire class** B

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Spitzenb.	Remark
67-64-1	acetone	8 hours	1200	500	2(I)	DFG
67-63-0	propan-2-ol	8 hours	500	200	2(II)	DFG, Y

### Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC or 2006/15/EC)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
67-64-1	acetone	8 hours	1210	500	

### biological limits (TRGS 903)

CAS No	Name	Parameter	BGW	Unter- suchungs- material	Proben- nahme- zeitpunkt
67-64-1	acetone	Aceton	80 mg/l	U	b
67-63-0	propan-2-ol	Aceton	50 mg/l	B	b
67-63-0	propan-2-ol	Aceton	50 mg/l	U	b

### Respiratory protection

If ventilation is insufficient, wear respiratory protection.

Filter type AX

### Hand protection

Gloves: butyl rubber (thickness 0,5 mm; permeation time at least 4 h)

### Eye protection

tightly fitting goggles

### Skin protection

Protective clothing (antistatic)

### General protective measures

Avoid contact with eyes and skin

Do not inhale aerosols

### Hygiene measures

At work do not eat, drink and smoke.

Remove soiled or soaked clothing immediately.

Keep away from food and drink.

Use barrier skin cream.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	<b>Colour</b>	<b>Odour</b>
liquid	colourless, clear	sweetish

### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
<b>boiling point</b>	ca. 56 °C				
<b>melting point</b>	< -90 °C				
<b>Flash point</b>	-18 °C				
<b>Ignition temperature</b>	ca. 425 °C				
<b>Lower explosion limit</b>	2 Vol-%				
<b>Upper explosion limit</b>	13 Vol-%				
<b>Vapour pressure</b>	247 hPa	20 °C			
<b>Density</b>	ca. 790 kg/m <sup>3</sup>	20 °C			
<b>Rel. vapour density</b>	ca. 2				
<b>Solubility in water</b>					miscible
<b>Solvent concentration</b>	100 %				

### Explosive properties

Not explosive; however in use, may form flammable/explosive vapour-air-mixture

## 10. STABILITY AND REACTIVITY

### Conditions to avoid

Formation of explosive gas/air mixtures.  
Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.  
Strong oxidizing agents (ignition possible)

### Materials to avoid

Reactions with strong acids.  
Reactions with oxidising agents.  
Reactions with alkali metals.  
Reactions with halogenated compounds.

### Hazardous decomposition products

Carbon monoxide  
Carbon dioxide  
Peroxide

### Additional information

No dangerous decomposition products if appropriately stored and handled.

The solvent is distillable at normal pressure.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
<b>LD 50 acute oral</b>	> 2000 mg/kg	rat		Information refers on solvent
<b>LD 50 acute dermal</b>	> 12000 mg/kg	rabbit		Data refer to solvent
<b>Irritability skin</b>				Frequent or persisting skin contact may degrease and dry up skin.
<b>Irritability eye</b>	irritant			
<b>Skin sensitization</b>	Sensitization effects are not known			

### Toxicity test (Additional information)

The risk assessment of the preparation concerning adverse health effects is based on the available data.

### Experiences made from practice

After inhalation of vapors: irritations of mucous membranes, drowsiness; in high doses: head aches, nausea, vomiting, dizziness, narcosis

## 12. ECOLOGICAL INFORMATION

### Data on elimination (persistence and degradability)

	Elimination rate	Method of analysis	Method	Validation
<b>Degradability</b>	> 75 % (21 d)			readily degradable
	Information refers to solvent.			

### Mobility and bioaccumulative potential

The product is probably not bioaccumulative.

### General regulation

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

## 13. DISPOSAL CONSIDERATIONS

Waste code No.	Name of waste
07 01 04*	other organic solvents, washing liquids and mother liquors

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

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#### Recommendations for the product

In accordance with regulations for special waste, must be taken to a special waste disposal.

#### Recommendations for packaging

In emptied drains ignitable vapour/air-mixtures may be formed.

#### Recommended cleansing agent

Water, if necessary with addition of cleaner

#### General information

Waste code acc. EAK: 15 01 10 - packaging, containing residues of dangerous substances or soiled by dangerous substances.

The waste key number has to be specified acc. European Waste Directory (depending on branches and processes).

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### 14. TRANSPORT INFORMATION

#### Land and inland navigation transport ADR/RID

UN 1993 Flammable liquid, n.o.s. (Aceton, 2-Propanol), 3, II, Special provisions 640D, Classification code: F1  
Classification code: F1

#### Marine transport IMDG

UN 1993 Flammable liquid, n.o.s. (Acetone, 2-propanol), 3, II  
EmS-No. F-E, S-E

#### Air transport ICAO/IATA-DGR

UN 1993 Flammable liquid, n.o.s. (Acetone, 2-propanol), 3, II

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### 15. REGULATORY INFORMATION

#### Remarks for classification

The product is classified and labelled in accordance with EC directives.

#### Classification

**F** Highly flammable  
**Xi** Irritant

#### R-phrases

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

#### S-phrases

16 Keep away from sources of ignition - No smoking.  
2300 Do not breathe vapour/aerosol.  
24/25 Avoid contact with skin and eyes.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
33 Take precautionary measures against static discharges.  
51 Use only in well-ventilated areas.  
9 Keep container in a well-ventilated place.

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## National regulations

### Restriction of occupation

Observe employment restrictions for mothers-to-be and nursing mothers and young people.

**Water hazard class** 1 Classification acc.VwVwS (Germany), Annex 4

### VOC standard

**VOC content** 100 %  
**VOC value** 790 g/L

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## 16. OTHER INFORMATION

### Training advice

Leaflet BG Chemie (Germany): M 053 (Allgemeine Arbeitsschutzmaßnahmen für den Umgang mit Gefahrstoffen / General occupational health measures for the handling of dangerous substances)

Leaflet Kühn-Birett: P 35 (2-Propanol)

Merkblatt Kühn-Birett: A 003 (Aceton)

### Further information

The information contained herein is based on the present state of our knowledge and does not guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.

### Wording of the R-phrases specified in chapter 3 (not the classification of the formulation!)

R 11 Highly flammable.

R 36 Irritating to eyes.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.