

# EC Material Safety Data Sheet

according to directive 1907/2006/EC

## 1. Identification of substance

### Product details

Trade name	<b>Asphalin B Tablets</b>
Application	keeping sterilized instruments sterile in an antiseptic atmosphere

### Manufacturer / Supplier

Alfred Becht GmbH  
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## 2. Hazard identifications

Classification acc. to directive 1272/2008/EC concerning classification, description and packaging of substances and mixtures:

H302 Harmful if swallowed, category 4  
H315 Causes skin irritations, category 2  
H317 May cause an allergic skin reaction, category 1  
H319 Causes serious eye irritation, category 2  
H332 Harmful if inhaled, category 4  
H335 May cause respiratory irritation, category 3  
H351 Suspected of causing cancer, category 3

Classification acc. to directive 67/548/EC

Xn  
R20/22      Harmful by inhalation and if swallowed  
R36/37/38    Irritating to eyes, respiratory system and skin  
R40          Limited evidence on a carcinogenic effect  
R43          May cause sensitisation by skin contact

## 3. Composition/Data on components

- Chemical characterisation / Description:

Mixture of substances listed below with harmless additions:

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Designation	CAS-No. EINECS-No	Index	R-phrases	Concentration
Paraformaldehyde	30525-89-4	Xn, Xi	20/21/22- 36/37/38-40-43	40 – 50%
Thymol	89-83-8 201-944-8	C, N	22-34-51/53	< 10%
D,L-Campfer synthetic	21368-68-3 244-350-4	F, Xi	11-36/37/38	< 10%

Classification acc. to directive 1272/2008/EC:

Harmful if swallowed, category 4, H302; Causes skin irritations, category 2, H315;

Causes skin irritations, category 1, H317; Causes serious eye irritation, category 2, H319;

Harmful if inhaled, category 4, H332; May cause respiratory irritation, category 3, H335;

Suspected to cause cancer, category 3, H351.

Hazard designation acc to directive 67/548/EC:

Xn, R20/21/22-36/37/38-40-43

In addition:

Risk assessment, please refer to chapter 16

## 4. First aid measures

General information: Instantly remove clothing soiled by the product.

Symptoms for poisoning may occur several hours after accident for the first time. In case of accident seek medical advice and stay under physician's supervision for at least 48 h

- After inhaling: Ensure adequate ventilation and seek medical advice. In case of unconsciousness bring patient in stable side position for transport.
- After skin contact: After contact with skin, wash immediately with plenty of water and soap. Seek medical advice if irritation persists.
- After eye contact: In case of contact with eyes, rinse immediately with plenty of water. Seek medical advice if irritation persists.
- After swallowing: Rinse out mouth and then drink plenty of water. If a whole tablet of a major part of it was swallowed: Seek medical advice immediately

## 5. Fire fighting measures

Suitable extinguishing agents:

water or water fog, alcohol resistant foam.

Non suitable extinguishing agents:

direct plain water jet

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Special hazards caused by the material, its products of combustion or resulting gases:

Flammable, in case of fire dangerous  
combustion gases: formaldehyde, nitrous oxides, carbon monoxide and  
carbondioxide

Special protective equipment:

Use self-contained breathing apparatus. Use protective clothing.

Additional information:

Use water to keep vapours down. Avoid fire-fighting water to reach sewage  
system.

### 6. Accidental release measures

- Person-related safety precautions:

Avoid contact with skin and eye. Wear suitable protective clothing. Keep  
unprotected people away. Ensure adequate ventilation. Use breathing apparatus if  
exposed to vapours, dust and aerosol.

- Measures for environmental protection:

Do not allow product to reach sewage system or water bodies. Inform respective  
official authorities in case product reaches water or sewage system.

- Measures for cleaning/ collecting:

Absorb mechanically. Dispose recovered material in suitable containers observing  
environmental regulations. Ensure adequate ventilation. Clean contaminated  
surfaces thoroughly with water.

### 7. Handling and storage

- Handling

see section 8 of this data sheet

- Storage

Requirements to be met by storerooms and containers.  
Keep container tightly locked and store in a cool and dry well ventilated area.  
Keep away from sources of ignition and heat. Use original packaging, only.  
Suitable material for containers: plastic

Information about storage in one common storage facility:

Keep away from foodstuff, strong oxidation medium and acids

- Further information about storage conditions:

Storage temperature: +5°C to +30°C

Expiry: 4 years max.

Avoid direct sun

Storage class VCI: 4.1 flammable solids

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### 8. Exposure controls and personal protection

Constituents with occupational exposure limits requiring monitoring:

MAK formaldehyde:	0,5 ml/m <sup>3</sup> bzw. 0,6 mg/m <sup>3</sup> vgl. Abschnitt III B, S
EC-value formaldehyde:	category C 3 (possibility of cancerogeneity on human body not outruled)
MAK camphor:	2 ml/m <sup>3</sup> or 13mg/m <sup>3</sup>

- Personal protective equipment
- General protective and hygienic measures:
  - Keep away from foodstuffs, beverages and food.
  - Take off immediately all contaminated clothing.
  - Wash hands during breaks and at the end of the work.
  - Do not inhale gas, vapours, aerosol
  - Avoid contact with eyes and skin
- Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment
- Protection of hands: Protective gloves.
- Eye protection: Safety glasses.
- personal protection: Wear suitable protective clothing

The vapor pressure of paraformaldehyde at room temperature is 140 ppm approx.. Take tablets from the blister at time of use only, place in the container with the instruments and lock container again tightly. If possible, keep container with the instruments in a locked place. Ensure adequate ventilation of working area.

If used with a normal container with a tight fitting, but not fixed lid and exchange of air of 2-3 times per hour at the working area it is not expected that the MAK-value of TRGS of 0,5 ppm or the MAK-value of 0,3 ppm will be exceeded. May be irritant to eyes of humans sensible to formaldehyde above concentration of 0,1 ppm. and the smell may be felt unpleasant.

### 9. Physical and chemical properties

- Form:	solid
- Colour:	white
- Odour:	characteristic odour
- pH-value:	no data available
- Change in condition	
- Melting point/ Melting range	Not determined
- Boiling point/ Boiling range	Not determined
- Flash point:	66° C (D-Camphor)
- Self-inflammability:	no data available
- Danger of explosion:	no data available
- Density:	at 20° C no data available

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- Solubility in / Miscibility with
- Water: little miscible

## 10. Stability and reactivity

- Thermal decomposition/ conditions to be avoided:  
No decomposition if used according to specifications.
- Dangerous reactions:  
No dangerous reactions if used according to specifications.
- Dangerous products of decomposition:  
No dangerous products of decomposition if stored and used according to specifications.

## 11. Toxicological information

- Acute toxicity: formaldehyde
  - acute oral toxicity LD50 (rat): 592 mg/kg (calculated)
  - acute toxicity LD50 (inhaled): 1,07 mg/l 4 hours
- Subacute and chronic toxicity:  
According to „Mitteilungen der Deutschen Forschungsgemeinschaft“ is not reproductive toxicity to be feared if the recommended maximum working place concentrations are not exceeded. Evidence for cancerogenity is not sufficient to allow an ultimate conclusion  
According to „Mitteilungen der Deutschen Forschungsgemeinschaft“ is not cancerogenity potential to be feared if the recommended maximum working place concentrations are not exceeded. Gravity: group „C“
- Primary irritant effect:  
after inhaling of dust or vapours: sneezing, coughing, choking, breathing may stop, severe over-exposure may cause lung damage
  - on the skin: strong irritant to skin
  - on the eye: strong irritation of eyes
- after swallowing: burning, sneezing, vomiting
- Additional toxicological information:  
the product has to be labeled according to 1999/45/EC:
  - inhalation: sensitizer
  - skin contact: sensitizer
- systemic toxicity: shock, unconsciousness, collapse of blood pressure
- mutagenity (vertebrate cells): positive

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### 12. Ecological information:

Ecotoxicological effects:

Formation of toxic products of decomposition with water.

Toxicity of fish: *Pimephales promelas* LC<sub>50</sub> 24mg/l 96h (Formaldehyde)

Toxicity of Daphnien: *Daphnia magna* EC<sub>50</sub> 42mg/l 24h (Formaldehyde)

Toxicity with algae: *Scenedesmus quadricauda* IC<sub>5</sub> 2,5mg/l 8d (Formaldehyde)

Toxicity with bacteria: *Photobacterium phosphoreum* EC<sub>50</sub> 30min (Formaldehyde)

- General notes:

Water danger class 2 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water bodies or sewage system undiluted.

### 13. Disposal considerations

product: no common regulations exist in the EEC for waste disposal. Dispose waste according to local laws and regulations as hazardous waste.  
Small amounts ( single tablets) may be disposed as waste from private areas according to local regulations and laws.

### 14. Transport information

**All informations refer to paraformaldehyde, only.**

#### Road transport ADR/RID and GGV/SGGVS/GGVE (cross border / domestic)

ADR/RID-GGVS/E Class	4.1
Classification Code / LQ:	F 1 / 9
UN No.:	2213
Packing Group	III
Label:	4.1
Designation of goods:	PARAFORMALDEHYDE

**Shipment by inland waterways ADN / ADR:** not classified

#### Maritime Transport IMDG:

IMDG Class:	4.1
UN Number:	2213
Packing group:	III
Label:	4.1
EMS Number	F-A, S-G
Marine pollutant:	no
Proper Shipping Name:	PARAFORMALDEHYDE

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## Air transport ICAO-TI and IATA-DGR:

ICAO/ IATA Class: 4.1  
UN/ID Number: 2213  
Label: 4.1  
Packaging group: III  
Proper Shipping Name: PARAFORMALDEHYDE

## 15. Regulatory information

Designation acc. to EC guidelines:

The product has been classified and labelled in accordance with EC Directives/  
Ordinance on Hazardous Materials (GefStoffV)

Code letter and hazard designation of product:

Piktograms:



Signal: Warning

### Hazard statements:

H302 Harmful if swallowed, category 4  
H315 Causes skin irritations, category 2  
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### Precautionary statements

P102 Keep out of reach of children  
P261 Avoid breathing spray  
P264 Wash hands thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P280 Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water  
P304 + P340 IF INHALED: remove victim to fresh air and keep at rest in a position 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.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention

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P337 + P313 If eye irritation persists: Get medical advice/attention  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

National regulations:

Water hazard class: Water danger class 2 (Self-assessment)

Storage class VCI: 4.1 B

### 16. Sonstige Angaben

n.a. = not applicable

\* = modifications to last version

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

R-phrases:

- 11 Highly flammable
- 20 Harmful by inhalation
- 21 Harmful in contact with skin
- 22 Harmful if swallowed
- 34 Causes burns
- 36 Irritating to eyes
- 37 Irritating to respiratory system
- 38 Irritating to skin
- 40 Limited evidence of a cancerogenic effect
- 43 May cause sensitisation by skin contact
- 51 Toxic to aquatic organisms
- 53 May cause long-term adverse effects in the aquatic environment