# **SAFETY DATA SHEET**

## 1. PRODUCT

## 1.1 Product identifiers

Name: Benzoylecgonine solution

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Specific target organ toxicity - single exposure (Category 1), H370

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Danger
Hazard statement(s)	H225 Highly flammable liquid and vapour. H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled H370 Causes damage to organs.
Precautionary statement(s)	P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician. P322 Specific measures (see supplemental first aid instructions on this label). P330 Rinse mouth. P361 Remove/Take off immediately all contaminated clothing. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Mixtures

Formula:  $C_{16}H_{19}NO_4 C_{16}H_{19}NO_4$ 

Molecular weight: 289.33 g/mol

## **Hazardous components**

Component		Classification	Concentration	
Methanol		~ ~		
CAS-No.	67-56-1	Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301 +	90 -100 %	
EC-No.	200-659-6	H311 + H331, H370		
o-Benzoylec	gonine	C.		
CAS-No.	519-09-5	Acute Tox. 3; H301	0.1 -1 %	
EC-No.	208-263-5			

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 4. FIRST AID MEASURES

## 4.1 Description of first aid measures

# General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.2 Indication of any immediate medical attention and special treatment needed

No data available

#### 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 5.4 Further information

Use water spray to cool unopened containers.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations.

Vapours can accumulate in low areas.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### 6.4 Reference to other sections

For disposal see section 13.

#### 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature 2 - 8 °C

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

## Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis		
Methanol	67-56-1	TWA	200 ppm	USA. ACGIH Threshold Limit Values (TLV)		
	Remarks	Headache Eye	damage	O'		
			which there is a r of cutaneous at	Biological Exposure Index or Indices (see BEI® osorption		
25		STEL 250 ppm	USA. ACGIH Th	reshold Limit Values (TLV)		
		Headache Eye damage Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Danger of cutaneous absorption				
900		TWA 200 ppm 260 USA. NIOSH Recommended Exposure Limits mg/m3				
		Potential for dermal absorption				
		ST 250 ppm 325 USA. NIOSH Recommended Exposure Limits mg/m3				
		Potential for dermal absorption				
		TWA 200 ppm 260 mg/m3 USA. Occupational Exposure Limits (OSHA) -Table Z-1 Limits for Air Contaminants				
		The value in mg/m3 is approximate.				

Component	CAS-No.	Value	Control parameters	Basis
25		STEL	250 ppm 325 mg/m3	USA. OSHA -TABLE Z-1 Limits for Air Contaminants -1910.1000
		Skin notation		
100		TWA	200 ppm 260 mg/m3	USA. OSHA -TABLE Z-1 Limits for Air Contaminants -1910.1000
		Skin notation		

# **Biological occupational exposure limits**

Component	CAS-No.	Parameters		Biological specimen	Basis
Methanol	67-56-1	Methanol	15 mg/l	Urine	ACGIH -Biological Exposure Indices (BEI)
	Remarks	End of shift (As soon as possible after exposure ceases)			

## 8.2 Exposure controls

# Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

# Personal protective equipment

Eye/face protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.  Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
Body Protection	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmen tal exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

Appearance	Form: liquid
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	Melting point/range: -98 °C (-144 °F)
Initial boiling point and boiling range	64.6 - 64.7 °C (148.3 - 148.5 °F) at 1,013 hPa (760 mmHg)
Flash point	11 °C (52 °F) - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available

Upper/lower flammability or explosive limits	Upper explosion limit: 36 %(V) Lower explosion limit: 6 %(V)
Vapour pressure	130.23 hPa (97.68 mmHg) at 20 °C (68 °F) 547 hPa (410 mmHg) at 50 °C (122 °F)
Vapour density	No data available
Relative density	0.791 g/cm3
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	385 °C (725 °F)
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

## 10.1 Reactivity

No data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

## 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

## 10.5 Incompatible materials

Acids, Oxidizing agents, Alkali metals, Strong oxidizing agents, Acid chlorides, Acid anhydrides, Reducing agents

## 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

cute toxicity	
o data available halation: No data available ermal: No data available o data available	
kin corrosion/irritation	
o data available	
erious eye damage/eye irritation	
o data available	
espiratory or skin sensitisation	
o data available	
erm cell mutagenicity	
o data available	
arcinogenicity	

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

No data available

No data available

### Specific target organ toxicity -single exposure

No data available

#### Specific target organ toxicity -repeated exposure

No data available

## **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: Not available

Methyl alcohol may be fatal or cause blindness if swallowed., Cannot be made non-poisonous., Effects due to ingestion may include:, Nausea, Dizziness, Gastrointestinal disturbance, Weakness, Confusion., Drowsiness, Unconsciousness, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system - Breathing difficulties - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

#### 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

### 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

DOT (US)

UN number: 1230 Class: 3 Packing group: II

Proper shipping name: Methanol

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN number: 1230 Class: 3 (6.1) Packing group: II EMS-No: F-E, S-D

Proper shipping name: METHANOL

Marine pollutant: No

**IATA** 

UN number: 1230 Class: 3 (6.1) Packing group: II

Proper shipping name: Methanol

#### 15. REGULATORY INFORMATION

## **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

Component	CAS-No.	Revision Date
Methanol	67-56-1	2007-07-01

#### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

### **Massachusetts Right To Know Components**

Component	CAS-No.	Revision Date
Methanol	67-56-1	2007-07-01

## Pennsylvania Right To Know Components

Component	CAS-No.	Revision Date
Methanol	67-56-1	2007-07-01

## **New Jersey Right To Know Components**

Component	C	CAS-No.	Revision Date
Methanol	6	67-56-1	2007-07-01

### California Prop. 65 Components

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Component	CAS-No.	Revision Date
Methanol	67-56-1	2012-03-16

## **16. OTHER INFORMATION**

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

Acute Tox. Acute toxicity

Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H301 + H311 +H331 Toxic if swallowed, in contact with skin or if inhaled

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

STOT SE Specific target organ toxicity - single exposure

## **HMIS Rating**

Health hazard: 2

Chronic Health Hazard: \*

Flammability: 3

Physical Hazard 0

## **NFPA** Rating

Health hazard: 2

Fire Hazard: 3

Reactivity Hazard: 0

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