

**Trade name:** JACKOCELL ®4

**Product no.:** JACK-002-S232-S332

**Current version :** 3.0.1, issued: 25.06.2015

**Replaced version:** 3.0.0, issued: 22.06.2015

**Region:** GB

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Trade name**

**JACKOCELL ®4**

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

**Relevant identified uses of the substance or mixture**

Raw material for plastic processing.

**Uses advised against**

No data available.

### 1.3 Details of the supplier of the safety data sheet

**Address**

Jackon GmbH  
Tonnenhofstrasse 16  
23970 Wismar

Telephone no. 0 3841 / 420-0  
Fax no. 0 3841 / 420-420

**Information provided by / telephone**

+49 (0) 38 41/420 0

**Advice on Safety Data Sheet**

sdb\_info@umco.de

### 1.4 Emergency telephone number

+44 (0) 1235 239 670 (24h)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification information**

Classification and labelling with respect to water pollution risks are based on ecotoxicological studies performed on the product (mixture).

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)**

**Hazard pictograms**

-

**Signal word**

-

**Hazard statements**

-

**Hazard statements (EU)**

EUH018 In use may form flammable/explosive vapour-air mixture.  
EUH210 Safety data sheet available on request.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P243 Take precautionary measures against static discharge.  
P403+P235 Store in a well-ventilated place. Keep cool.

**Labelling information**

The labelling (EU hazard statements) meets the criteria of annex II of Directive (EC) Nr. 1272/2008 (CLP).

### 2.3 Other hazards

During and after use possible formation of combustible mixture with solvents.

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### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not applicable. The product is not a substance.

#### 3.2 Mixtures

##### Chemical characterization

Expendable polystyrene; EPS

##### Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	<b>pentane</b>		
	109-66-0 203-692-4 601-006-00-1 -	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 EUH066 Flam. Liq. 2; H225 STOT SE 3; H336	<= 3.70 %-b.w.
2	<b>2-methylbutane</b>		
	78-78-4 201-142-8 601-085-00-2 -	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 EUH066 Flam. Liq. 1; H224 STOT SE 3; H336	<= 1.10 %-b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	C	-	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

In case of persisting adverse effects, consult a physician. Change contaminated, saturated clothing.

##### After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

##### After skin contact

Wash off immediately with soap and water.

##### After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.).

##### After ingestion

Seek medical advice immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do not induce vomiting.

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

No data available.

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

No data available.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Foam; Carbon dioxide; Extinguishing powder; Water spray jet

##### Unsuitable extinguishing media

High power water jet

#### 5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO); Styrene

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## 5.3 Advice for firefighters

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Pentane may be released upon heating. Wear protective clothing. Flammable concentrations of propellant may form in closed containers. Product burns on contact with fire or high temperatures.

## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid dust formation. Keep away sources of ignition. High risk of slipping due to leakage/spillage of product.

#### For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations".

### 6.4 Reference to other sections

No data available.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

No special measures necessary if stored and handled as prescribed. Avoid the formation and deposition of dust. Provide good ventilation of working area (local exhaust ventilation, if necessary).

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Provide eye wash fountain in work area. Do not inhale dust.

#### Advice on protection against fire and explosion

Dust can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition. Ignitable mixtures may be formed with air upon diffusion of pentane.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

#### Requirements for storage rooms and vessels

Store product in closed containers.

#### Advice on storage assembly

None known

### 7.3 Specific end use(s)

No data available.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	pentane	109-66-0	203-692-4
	2006/15/EG		
	Pentan		
	TWA	3000	mg/m <sup>3</sup> 1000 ml/m <sup>3</sup>
	List of approved workplace exposure limits (WELs) / EH40		
	Pentane		
	TWA	600	ppm 1800 mg/m <sup>3</sup>
2	2-methylbutane	78-78-4	201-142-8
	2006/15/EG		
	Isopentan		
	TWA	3000	mg/m <sup>3</sup> 1000 ml/m <sup>3</sup>
	List of approved workplace exposure limits (WELs) / EH40		
	Isopentane		
	TWA	600	ppm 1800 mg/m <sup>3</sup>

### 8.2 Exposure controls

#### Appropriate engineering controls

No data available.

#### Personal protective equipment

##### Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn.

##### Eye / face protection

Safety glasses (EN 166)

##### Hand protection

In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

##### Other

Normal chemical work clothing.

#### Environmental exposure controls

No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form/Colour</b>			
Solid substance; beads			
white			
<b>Odour</b>			
mild			
<b>Odour threshold</b>			
No data available			
<b>pH value</b>			
No data available			
<b>Boiling point / boiling range</b>			
No data available			
<b>Melting point / melting range</b>			
No data available			
<b>Softening point / softening temperature (Vicat softening point)</b>			
Value	appr.	70	°C

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<b>Decomposition point / decomposition range</b>			
Value	appr.	220	°C
<b>Flash point</b>			
Value		-56	°C
Reference substance		pentane	
<b>Auto-ignition temperature</b>			
No data available			
<b>Oxidising properties</b>			
No data available			
<b>Explosive properties</b>			
No data available			
<b>Flammability (solid, gas)</b>			
No data available			
<b>Lower flammability or explosive limits</b>			
Value		1.3	% vol
Reference substance		pentane	
<b>Upper flammability or explosive limits</b>			
Value		7.8	% vol
Reference substance		pentane	
<b>Vapour pressure</b>			
Value		761	mbar
Reference temperature		20	°C
Reference substance		pentane	
<b>Vapour density</b>			
Value		2.5	
Reference temperature		20	°C
Reference substance		pentane	
<b>Evaporation rate</b>			
No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value		1.03 - 1.05	g/ml
<b>Bulk density</b>			
Value		600	kg/m <sup>3</sup>
<b>Solubility in water</b>			
Remarks		insoluble	
Remarks		immiscible	
<b>Solubility(ies)</b>			
No data available			
<b>Soluble in</b>			
Aromatic hydrocarbons; Ketones; organic solvents			
<b>Partition coefficient: n-octanol/water</b>			
No data available			
<b>Viscosity</b>			
No data available			
<b>9.2 Other information</b>			
<b>Other information</b>			
No data available.			

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

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**10.2 Chemical stability**

stable if stored and handled properly.

**10.3 Possibility of hazardous reactions**

Risk of formation of explosive gas mixtures in air.

**10.4 Conditions to avoid**

Keep away sources of ignition. Protect from heat and direct sunlight. static discharges

**10.5 Incompatible materials**

strong oxidizing agents

**10.6 Hazardous decomposition products**

Carbon dioxide; Carbon monoxide; Flammable gases/vapours

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute oral toxicity**

No data available

**Acute dermal toxicity**

No data available

**Acute inhalational toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Reproduction toxicity**

No data available

**Carcinogenicity**

No data available

**STOT-single exposure**

No data available

**STOT-repeated exposure**

No data available

**Aspiration hazard**

No data available

**Symptoms related to the physical, chemical and toxicological characteristics**

Eye contact may cause mechanical irritation through dust particles.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Inhalation of dusts may irritate the respiratory tract. Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin.

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## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>
No data available
<b>Toxicity to fish (chronic)</b>
No data available
<b>Toxicity to Daphnia (acute)</b>
No data available
<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
No data available

### 12.2 Persistence and degradability

<b>Biodegradability</b>	
<b>No</b>	<b>Product Name</b>
1	JACKOCELL ®4
Evaluation	Slightly biodegradable

### 12.3 Bioaccumulative potential

<b>Bioconcentration factor (BCF)</b>	
<b>No</b>	<b>Product Name</b>
1	JACKOCELL ®4
Remarks	Not potentially bioaccumulative.

### 12.4 Mobility in soil

No data available.

### 12.5 Results of PBT and vPvB assessment

No data available.

### 12.6 Other adverse effects

No data available.

### 12.7 Other information

<b>Other information</b>
Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

## SECTION 14: Transport information

### 14.1 Transport ADR/RID/ADN

Class	9
Classification code	M3
Packing group	III
Hazard identification no.	90
UN number	UN2211
Technical name	POLYMERIC BEADS, EXPANDABLE
Tunnel restriction code	D/E
Label	keine

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## 14.2 Transport IMDG

Class	9
Packing group	III
UN number	UN2211
Proper shipping name	POLYMERIC BEADS, EXPANDABLE
EmS	F-A+S-I
Label	9

## 14.3 Transport ICAO-TI / IATA

Class	9
Packing group	III
UN number	UN2211
Proper shipping name	Polymeric beads, expandable
Label	9

## 14.4 Other information

No data available.

## 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

## 14.6 Special precautions for user

No data available.

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

##### **Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

##### **REACH candidate list of substances of very high concern (SVHC) for authorisation**

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

##### **Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

##### **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is not subject to Part 1 or 2 of Annex I.

### 15.2 Chemical safety assessment

No data available.

## SECTION 16: Other information

#### **Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

#### **Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

EUH066	Repeated exposure may cause skin dryness or cracking.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.



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**Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)**

C Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

**Department issuing safety data sheet**

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

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