## According to Regulation (EC) No 1907/2006

Issue date: September 17.1999 Revision # 4, date: July 15, 2019

#### 1: Identification of the substance / mixture and of the company / undertaking 1.1 Identification of the substance: Trade name: Potassium chloride Chemical name: Potassium chloride CAS No: 7447-40-7 Identification number: Exempted in accordance with Annex V.7. Registration number: 1.2 Use of the substance: Identified uses: infusion solutions, hemodialysis solutions, food supplement Unrecommended uses: 1.3 Company/undertaking identification: Macco Organiques, s. r.o. Zahradní 46c, 792 01 Bruntál, Czech Republic IČ: 26819210, phone: +420 - 555 - 530 334 SDS provider's contact: Jaroslav Zavadil, phone: +420 - 555 - 530 340, jaroslav.zavadil@macco.cz 1.4 Emergency telephone: The first aid details may be consulted with toxicological information centre (TIS): Job-related illness clinic, Na Bojišti 1, 128 08 Praha 2, tel. 2 24 91 92 93 or 2 24 91 54 02. Permanent poisoning information. 2: Hazard identification The substance is NOT classified as dangerous according to Directive 1272/2008/ES. 2.1 Classification of the substance: Acc. to Directive 1272/2008/ES The most important adverse physicochemical, human health and environmental effects and symptoms: Not specified. The product does not need to be labelled in accordance with EC directives or respective national laws. 2.2 Information on the label: Hazard pictogram Signal word Hazard statements Precautionary statements ---Additional information on label none 2.3 Other dangerousness: Substance is NOT classified as PBT or vPvB. 3: Composition / information on ingredients 3.1 Substance 3.1.1 Constituent **EINECS** Chemical identity Index No. CAS concentration classification list number none 7447-40-7 231-211-8 Potassium chloride 99 - 100%3.1.2 Impurities, stabilizers, Chemical identity Index No. CAS **EINECS** concentration classification list number none - - -

## 4: First aid measures

In all cases provide the physical and mental rest and avoid of getting chilled. In case of health problems or doubts inform physician and provide him with the information contained in this safety data sheet. Never pass a medication to a unconscious person. Maintain personal safeness during rescue operation.

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### 4.1 First aid description:

#### If inhaled:

Stop exposition, move the afflicted person to the fresh air. If symptoms persist seek medical advice.

## In the event of skin contact:

Remove contaminated clothes and footwear. Wash of any skin contamination with cool water and soap. Launder clothes before re-use. In case of persisting irritation contact physician.

#### In the event of eye contact:

Remove contact lenses if present. Rinse with a small amount of water for at least 10 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention.

#### Do not use neutralization solution!

#### If swallowed:

Wash out mouth with water and give plenty of water to drink (at least 300 ml). Do not induce vomiting. Seek medical advice if symptoms persist.

## 4.2 The most important acute and belated symptoms and effects:

Skin, airways or eye irritation. After consumption of a bigger amount vomiting and diarrhea, alimentary tract irritation may appear. Symptoms: red skin, eyes, blurred vision.

## 4.3 Immediate medical help instruction and special treatment:

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## 5: Fire fighting measures

## 5.1 Extinguishing media:

#### Suitable extinguishing media:

Non-combustible substance. All extinguishing media are allowed, select the appropriate extinguishing media depending on the surrounding fire and environment.

## Not suitable extinguishing media:

Strong water jet

#### 5.2 Specific hazards :

Non-combustible substance. When heated, decomposition occurs with the release of gaseous hydrogen chloride or chlorine.

## 5.3 Special protective actions for fire-fighters:

Use individual breathing apparatus, anti-gas safety clothing.

## <u> 6: Accidental release measures </u>

## 6.1 Personal precautions:

Use personal safety working clothes – section 8. Prevent from skin and eye contact. Do not inhale dust. Well ventilate areas. Prevent from dust making. Other safety precautions – section 7.

#### 6.2 Environmental precautions:

Prevent from escape to watercourses and soil and from their contamination.

### 6.3 Methods for cleaning up:

Clean up contamination/spillages as soon as they occur. Collect as much as possible in a suitable clean container, preferably for re-use, otherwise for disposal (according section 13). Avoid generation of dust. Wash the spillage area with large quantities of water. When packaging is damaged, replace the amount into a new packaging with proper marking.

#### 6.4 Other sections references:

Also follow the regulations in sections 8 and 13 of this safety data sheet.

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## 7: Handling and storage

## 7.1 Handling:

Use the personal safety tools (section 8). Ensure fresh water for the first aid. Maintain the cleanness and tidiness on the working area. Do not eat, drink or smoke during work. Avoid contact with skin and eyes. Wash hands duly with soap and water, take a shower. Use a body lotion.

#### 7.2 Storage:

Store at a dry place, not above normal room temperature. Liquors can cause pitting of and corrosion of some grades of stainless steel.

### 7.3 Specific uses:

Industrial chemical, component of infusion and dialysis solutions and food supplements

## 8: Exposure controls / personal protection

#### 8.1 Exposure limit values

#### 8.1.1 Exposure limits

- not specified

# 8.1.2 Biological limit values:

- not specified

#### 8.1.3 DNEL and PNEC values:

- not specified

#### 8.2 Exposure control

## 8.2.1 Occupational exposure control:

Operate in a well-ventilated area, avoid inhalation of dusts. Ensure shower and area for eyes rinsing. The mentioned personal safety instruments should be in compliance with EN standards.

## Personal protective equipment:

	<u> </u>
Respiratory protection:	In the case of high dust levels wear suitable respiratory protective equipment, ie. dust mask or respirator conforming to EN standards. Recommended filter = particle filter, P2.
Hand protection:	Wear suitable chemical resistant protective gloves for frequent or prolonged operations tested to EN374 with an acceptable permeation test. Suitable materials include neoprene (chloroprene), PVC and nitrile rubber. Contaminated gloves should be carefully rinsed with water before reuse. Non suitable materials: Leather gloves.
Eye / face protection:	Wear suitable eye/face protection. Most materials for protective googles and face visors will probably be suitable eg. polycarbonate.
Skin and body protection:	Normal working clothes is suitable.

Do not eat, drink or smoke during work. Remove contaminated clothing. Wash hands duly with soap and water. Use a body lotion.

#### 8.2.2 Environmental exposure controls:

Prevent from escape to environment.

# 9: Physical and chemical properties

#### 9.1 General information:

Physical state ( at 20 °C):	Solid - crystals
Colour:	Colorless up to white
Odour (fragrance):	odourless
Treshold odour value:	odourless
001	

#### 9.2 Important health, safety and environmental information

3.2 Important health, safety and environmental imormation .			
Ca 6 (5 % solution at 20 °C)			
770 °C			
1500 °C			
Not applicable, incombustible matter			
Not applicable			
The substance is non-flammable			

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Explosion limits	lower:	Not available, non-explosive matter Not available, non-explosive matter			
Vapour pressure:	upper:	irrelevant			
Vapour density:		irrelevant			
Relative density:		1,989 g/cm <sup>3</sup>			
Water solubility ( a	t 20 °C) :	34,2 g / 100 ml			
Solubility in solver		Not available			
Partition coefficien		Not available			
Self-ignition tempe		Not applicable			
Decomposition ten	nperature:	Not available			
Viscosity:		Not applicable			
Explosive properti		The substance is non-explosive			
Oxidizing properties:		The substance is non-oxidizing			
9.3 Other information	on:				
Fat solubility:		Not available			
Conductivity:		Not available			
Gas group:		Not applicable			

# 10: Stability and reactivity

Stable under recommended storage and handling conditions. Strong oxidizing agents generates chlorine.

#### 10.1 Conditions to avoid:

Humidity and moisture.

## 10.2 Materials to avoid:

Strong oxidizing agents, releasing chlorine, strong acids or bases.

## 10.3 Hazardous decomposition products:

No dangerous reaction known under conditions of normal use. Irritant or toxic gases can be generated at temperature over 770 °C.

# 11: Toxicological information

Acute toxicity:		
- LD <sub>50</sub> oral, rat (mg.kg <sup>-1</sup> ):	2600	
- LD <sub>50</sub> dermal, rabbit (mg.kg <sup>-1</sup> ):	Not specified	
<ul> <li>LC<sub>50</sub> inhalation, rat, for aerosols or particles (mg.l<sup>-1</sup>):</li> </ul>	Not specified	
Skin irritation:	No irritation	
Eye irritation:	No eye irritation	
Sensitisation:	Substance does not have sensitive effects on skin and respiratory system	
Carcinogenicity:	Not carcinogenic substance	
Mutagenicity:	Not mutagenic substance	
Toxicity for reproduction:	Not toxic substance for reproduction	
Toxicity for specific target body – single exposition	Substance does not have toxic effects within single exposition	
Toxicity for specific target body – repeated exposition:	Substance does not have toxic effects within repeated exposition	
Irritation if inhaled:	Substance does not have irritable effects	
Other information: none		

# 12: Ecological information

## 12.1 Ecotoxicity:

1211 Locioxiony.			
- LC <sub>50</sub> 96 hr., fish ( Lepomis macrochirus (mg.l <sup>-1</sup> ):	1	060	
- EC50 48 hr., daphnia (mg.l <sup>-1</sup> ):		825	
- EC <sub>50</sub> 72 hr. algae (mg.l⁻¹):	2	2 500	

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12.2 Mobility :	Not specified
12.3 Persistence and degradability:	Not specified (not relevant for inorganic substances)
12.4 Bioacumulative potential:	Not specified
12.5 Results of PBT assessment:	Substance is not classified as PBT or vPvB.
12.6 Other adverse effects:	
Not specified.	

## 13: Disposal considerations

#### 13.1 Product:

If recycling or reuse is not practical then the product must be disposed of by authorized personnel in accordance with local, state or national regulations. Never dispose by flushing into the drainage! Waste former is responsible for its sorting and disposal.

## Special safety precaution for recommended waste treatment:

Preferably dispose in independent container. Do not dispose of with acids.

#### 13.2 Packaging:

If recycling or reuse is not practical then packaging must be disposed of by authorized personnel in accordance with local, state or national regulations. Clean packaging with water and disposes of washings in accordance to local regulations. Packaging can be passed to a packaging return system after the cleaning.

## 13.3 Legal waste regulations:

Directive 2008/98/ES

National or regional provisions may be in force!

## 14: Transport information

14.1 ADR/RID (Land Transport) :	Not classified as hazardous for transportation.
14.2 ADN/ADNR (Inland Waterway Transport):	Not classified as hazardous for transportation.
14.3 IMDG (Marine Transport):	Not classified as hazardous for transportation.
14.4 ICAO/IATA (Air Transport):	Not classified as hazardous for transportation.

## 15: Regulatory Information

15.1 Health, safety and environmental information on the label : ---

## 15.2 Chemical Safety Assessment:

Not available

#### 15.3 National legislation:

Regulation (EC) No. 1907 / 2006 / ES, REACH Regulation (EC) No. 1272 / 2008 / ES, CLP National laws or provisions may be in force!

## 16: Other information

#### Changes made in Safety Data Sheet in terms of revision:

Revision of Safety data sheet in terms of avoidance of Directive 67/548/EHS, text modification.

## Key or explanation for abbreviations:

DNEL Derived No Effect Level (derived concentration of substance, at which no unfavorable effects occur)

PNEC Predicted No Effect Concentration (prediction of substance concentration, at which no unfavorable effects occur)

# Important literature references and data sources:

SDS from other producers, special literature.

#### Training instructions:

According to Material Safety Data Sheet.

## Recommended restrictions of use:

Not specified

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#### Other:

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