

DECACHEM DOO, Novi Sad, Serbia Address: Lozionicka 14/9, 21000 Novi Sad, Serbia ; PIB: 113353206 Matični broj: 21851396

Phones: +381 63 658 074 / +381 64 27 54 268

Email: info@decachem.com

Http://www.decachem.com

TECHNICAL DATA SHEET According to Regulation (CE) 1907/2006 (REACH) **POTASSIUM SULPHATE K2SO4**

CAS 7778-80-5

Customs commodity code 3104300000

Values	Test results
Mass fraction of Potassium as K2O, %	50,5
Mass part of S, %	17,0
Moisture, %, maximum	0,033
PH (1% SO Solution)	2,6
Water insoluble, %	0,11
Mass fraction of chlorides (Cl), %	0,76
Mass fraction of chromium content (Cr), mg/kg	14
Mass fraction of hexavalent chromium content (Cr +6), mg/kg	< 1,0
Mass fraction of arsenic (As), mg/kg	< 1,5
Mass fraction of lead (Pb), mg/kg	< 1,0
Mass fraction of cadmium (Cd), mg/kg	< 0,2
Mass fraction of mercury (Hg), mg/kg	< 0,1
Mass fraction of copper (Cu), mg/kg	< 1,0
Mass fraction of zinc (Zn), mg/kg	1,2
Mass fraction of nickel (Ni), mg/kg	2,5
Appearance	Microcrystallic non-caking powder, white colour.
Mass fraction of sulphur compound in terms of SO4,%, not less	52,0

PACKAGE	40' NOR	20' FCL
1000 kg big bags without pallets	up to 23-24 MT	up to 23-24 MT
1000 kg big bags on pallets	21 MT	20 MT*

QUANTITIES PER CONTAINER

* - The weight is stated for 2 layers, both are palletized.



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Upper pallets may damage first layer bags during transportation and unloading, so we do not recommend to use such type of loading. We bear no responsibility for any damage



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SAFETY DATA SHEET

According to Regulation (CE) 1907/2006 (REACH)

POTASSIUM SULPHATE

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

1.1 Product identifier		
Product name:	Potassium sulphate	
Chemical name	Potassium sulphate	
CAS Number	7778-80-5	
REACH Registration Number	01 <mark>-211948</mark> 9441- <mark>34-00</mark> 71	
1.2 Relevant identified uses of the substance or mixture and uses advised against		
Production of the fertilizer, plant protection products. Use as laboratory reagent, ph-regulators, flocculants, precipitants,		

L neutralisation agents, used in dyes and chemicals for textiles, leather and paper.

1.3 Emergency telephone number

112

SECTION 2: Hazards identification

2.1 Classification of the substance of mixture

Classification according to Regulation (EC) No 1272/2008	Not classified
	P102: Keep out of reach of children
Precautionary statements	P101: If medical advice is needed, have product container
	or label at hand
2.2 Label elements	
Hazard Pictogram:	No pictogram
Signal word:	No signal word
Hazard statements:	No known significant effects or critical hazards
Precautionary statements:	Keep out of reach of children. If medical advice is needed,
	have product container or label at hand

The substance does not meet the criteria for PBT/vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

SECTION 3: Composition/ information on ingredients

Chemical name C	Chemical Concentration,	CAS No	EC No	Classification Regulation
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	formula	%			(EC) No. 1272/2008 (CLP)
Potassium sulfate	K2SO4	93-95	7778-80-5	231-915-5	Not classified



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SECTION 4: First aid measures

4.1 Description of first aid measures

Immediately transport victim from the contaminated area; take deep breaths of fresh air.

In case of aspiration

Move to fresh air. Rinse immediately with plenty of water: mouth, face, eyes. Obtain medical attention if necessary.

In case of ingestion:

Make victim drink plenty of water. Induce vomiting. Get medical attention if symptoms occur.

In case of eye contact:

Rinse out with plenty of water for 15 minutes with the eyelid help wide open. Get medical attention if irritation occurs.

Do not apply neutralizing agents.

In case of skin contact:

Wash off with plenty of water and soap. Take off contaminated clothing.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute and delayed effects:

Not known.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contract poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5: Firefighting measures

Suitable extinguishing	Not flammable. Adapt extinguishing media to the environment. Depending on materials stored
media:	in the nearest neighbourhood. All extinguishing media products are allowed: water,
	water/foam, carbon dioxide CO2, extinguishing powder.
Unsuitable extinguishing	No unsuitable extinguishing media know.
media:	

When heated to decomposition toxic gas fumes of sulfur dioxide are emitted.





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5.3 Advice for firefighters

Isolate the area by removing all persons from the surrounding of the accident, when a fire broke out. Do not take any action involving any personal risk. Fire fighters should wear appropriate protective equipment and breathing apparatus. This product is not flammable.



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SECTION 6: Accidental release measures

6.1 Personal precaution	ons, protective equipment and emergency procedures	
For non-emergency	Do not take any action that could cause personal risk unless you are properly trained.	
personnel	Do not touch or walk through spillage of material. Wear appropriate personal protective	
	equipment.	
For emergency re-	Workwear, respiratory protection (fabric or protective masks with particle filter P2), tight-fitting	
sponders	goggles, gloves.	
6.2 Environmental pre	cautions	

Should not be released into the environment. When such situation occurs, call the relevant health and environmental protection authorities.

6.3 Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Residues rinse with water.

6.4 Reference to other sections

Information on appropriate personal protective equipment are specified in section 8. Information regarding waste treatment are given in section 13.

SECTION 7: Handling and storage

-7.1 Precautions for safe had	ndling	
Precaution measures	Wear personal protective equipment. Use of the basic principles of Industrial Hygiene. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation	
Advice on general	Eating, drinking and smoking in areas where the material is handled, stored and processed	
occupational hygiene	should be forbidden. Workers should wash hands and face before eating, drinking and smoking.	
7.2 Conditions for safe storage, including any incompatibilities		

Store in a tightly closed container. Keep containers in a cool, well-ventilated place. Store away from food and drink.

Warehouse personnel must be equipped with the necessary protective equipment.

7.3 Specific end use(s)

No specific end uses



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SECTION 8: Exposure controls/personal protection

CAS	Agent	Threshold Limit Value	
(-)	dust and powder	10 mg/m₃	
Recommended monitoring procedure	es:atmosphere or biological monitoring may be re	quired to determine the	
	er control measures and/or the necessity to use re		
	ean Standard EN 689 for methods for the assessme		
	ce documents for methods for the determination of	hazard <mark>ous</mark> substan <mark>ce</mark> s.	
8.1.2. Derived No Effect Levels (DN	ELs) – Workers		
8.1.2.1 ACUTE / SHORT TERM EXP			
0.1.2.1 ACUTE / SHORT TERMIEAP	OSURE (STSTEMIC EFFECT)		
DNEL Dermal	Since no local effects were noted after dermal	and inhalatory exposure, local	
DNEL Inhalation	DNELs were not derived.		
8.1.2.2. ACUTE / SHORT TERM EXF			
	Since no local effects were noted after dermal	and	
DNEL Dermal DNEL Inhalation	inhalatory exposure, local DNELs were noted after dermal		
8.1.2.3 LONG-TERM EXPOSURE (S		nveu.	
,			
DNEL Dermal DNEL Inhalation	21.3 mg/kg bw/day		
DNEL Innalation	37.6 mg/m ₃		
8.1.2.4 LONG-TERM EXPOSURE (L	OCAL EFFECT)		
DNEL Dermal		Since no local effects were noted after dermal and inhalatory exposure, local	
DNEL Inhalation	DNELs were not derived.		
8.1.3. Derived No Effect Levels (DN			
8.1.3.1. ACUTE / SHORT TERM EXF	POSURE (SYSTEMIC EFFECT)		
DNEL Dermal	The long-term DNEL is considered sufficient to	o ensure that effects from acute	
DNEL Inhalation	exposure to the substance do not occur.		
DNEL Oral			
8.1.3.2. ACUTE / SHORT TERM EXP	· · · · · · · · · · · · · · · · · · ·		
DNEL Dermal	DNELs were not derived.	Since no local effects were noted after dermal and inhalatory exposure, local	
DNEL Inhalation 8.1.3.3. LONG-TERM EXPOSURE (S			
	,		
DNEL Dermal	12.8 mg/kg bw/day		
DNEL Inhalation	11.1 mg/m ₃		
DNEL Oral	12.8 mg/kg bw/day		
8.1.3.4. LONG-TERM EXPOSURE (,		
DNEL Dermal	Since no local effects were noted after dermal	and inhalatory exposure, local	
DNEL Inhalation	DNELs were not derived.		
8.1.4. Predicted No Effect Concent			
PNEC aqua freshwater	0.68 mg/L (Assessment factor 1000)		
	0.68 mg/L (Assessment factor 10000)		
PNEC aqua marine water PNEC aqua (intermittent releases)	0.68 mg/L (Assessment factor 10000) 6.8 mg/L (Assessment factor 100)		

8.2 Exposure controls

Appropriate engineering controls:



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Ensure sufficient ventilation, use personal protection equipment.

Individual protection measures:





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Occupation hygiene practices:	After work wash the skin and take of contaminated clothes. Do not eat, drink, smoke or take drugs during the work.
Eye/face protection:	Safety glasses, tight-fitting goggles.
Hand protection:	Protective gloves resistant to chemicals, made of nitrile rubber or other approved by the manufacturer to contact with the product.
Skin protection:	Protective clothing of a compact fabric. Working boots.
Other:	Prior to handling with this product, please select the appropriate footwear and additional skin protection measures, based on the tasks performed and he associated risks. They are subject to approval by the Health and Safety Specialist.
Respiratory protection:	Fabric or protective masks with particle filter P2.
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Solid, fine crystalline
Colour:	Off-white
Odour:	Odourless
Density:	2660 kg/m ₃
Bulk density:	1400 kg/m ₃
Flammability:	Not flammable
Melting point:	1067 °C
Boiling point:	1689 °C
Solubility in water:	120 g/l (25 °C)
pH (50 g/l H ₂ O/25°C):	7-9

9.2 Other information

T

Molecular weight: 174,27 g/mol

SECTION 10: Stability and reactivity



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10.2 Chemical stability	ility Stable under normal conditions of use	
10.3 Possibility of hazardous reactions	No possible reactions	
10.4 Conditions to avoid	No specific data	
10.5 Incompatible materials	No specific data	
10.6 Hazardous decomposition products	On burning: release of toxic and corrosive gase/vapours (sulphur oxides)	



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

	LD50 (oral, rat) > 2000 mg/kg			
Acute toxicity	LC0 (inhalation, rat) > 1200 mg/m ³ air			
	LD50 (dermal, rat) > 2000 mg/kg bw			
Skin corrosion/ irritation	No known significant effects or critical hazards.			
Serious eye damage/irritation	No known significant effects or critical hazards.			
Respiratory or skin sensitization	No known significant effects or critical hazards.			
Germ cell mutagenicity	No known significant effects or critical hazards.			
Carcinogenicity	No known significant effects or critical hazards.			
Reproductive toxicity	No known significant effects or critical hazards.			
STOT-single exposure	No known significant effects or critical hazards.			
STOT-repeated exposure	No known significant effects or critical hazards.			
Aspiration hazard	Not applicable.			
Information on likely routes of exposure	Inhalation, skin/eyes, ingestion			
	<u>Contact with skin</u> : No specific data.			
Symptoms related to the physical, chemical .	Contact of dust with eyes: May cause slight irritation with redness and			
and toxicological characteristics	tearing			
	Inhalation of dust: May cause slight irritation, coughing.			
	Ingestion: of large amounts may cause nausea.			
	Ingestion			
Delayed and immediate effects as well as				
chronic effects from short and long-term	No data			
exposure				
Interactive effects	No data			
Other information	No other information			

SECTION 12: Ecological information

	Fish: LC50 (Pimephales promelas)= 680 mg/L/96h.
12.1 Toxicity	LC50 (lepomis macrochirus)= 3550 mg/L/96h.
	Daphnia: EC50 (daphnia) =720 mg/L/48h
	Algae: LC50 (for freshwater) = 2700mg/L
12.2 Persistence and degradability	Non-biodegradable – inorganic substance .
12.3 Bioaccumulative potential	None.
12.4 Mobility in soil	Soluble in water
12.5 Results of PBT and vPvB assessment	The substance is not PBT not vPvB.
12.6 Other adverse effects	No know significant effects or critical hazards.





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SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contactor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional authority requirements.

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

	ADR/RID	AND/ADNR	IMDG	IATA
14.1 UN number	Not applicable	Not applicable	Not applicable	Not applicable
14.2 UN proper shipping name	Not applicable	Not applicable	Not applicable	Not applicable
14.3 Transport hazard class(es)	Not applicable	Not applicable	Not applicable	Not applicable
14.4 Packing group	Not applicable	Not applicable	Not applicable	Not applicable
14.5 Environmental haz- ard s	Not applicable	Not applicable	Not applicable	Not applicable
14.6 Special precautions	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 14: Transport information

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

EU Regulation (EC) No. 1272.2008 (CLP) Substance is not SVHC, neither listed in Annex XIV or XVII of REACH Regulation

15.2 Chemical safety assessment

Chemical safety assessment has been carried out.



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SECTION 16: Other information

List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements Full text of abbreviated H statements: Not applicable.			
Full text o	f classifications CLP/GHS: Not applicable.		
A key or	legend to abbreviations and acronyms used		
REACH	H Registration, Evaluation, Authorisation and restriction of CHemicals		
DNEL	Derived No Effect Level		
PNEC	Predicted No Effect Concentration		
LC50	Lethal Concentration 50%		
EC50 PBT	Effective Concentration 50% Persistent, Bioaccumulative and Toxic		
VPvB	Very Persistent and Very Bioaccumulative		
SVHC	Substances of Very High Concern		
Version 1	.0		

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is mean to be a description of the safety requirements for our product. It is not to be considered a guarantee of of the product's properties.





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