



## SAFETY DATA SHEET

### POTASSIUM (E,E) HEXA2,4 DIENOATE

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

##### 1.1. Product identifier

<b>Product name</b>	POTASSIUM (E,E) HEXA2,4 DIENOATE
<b>Product number</b>	21653
<b>Synonyms; trade names</b>	2,4 HEXADIENOIC ACID, POTASSIUM SALT, POTASSIUM SORBATE, POT SORBATE E202 GRAN NT, POT SORBATE E202, POT SORBATE EP, POT SORBATE E202 GRAN CLE, POT SORBATE E202 JBN, NUTRINOVA POTASSIUM SORBATE, POT SORBATE PDR NT, POT SORBATE GRAN NAA JBN, NUTRINOVA POTASSIUM SORBATE BFX GRANULES, NUTRINOVA POTASSIUM SORBATE NXT GRANULES, POT SORBATE GRAN NT
<b>REACH registration number</b>	01-2119950315-41-XXXX
<b>CAS number</b>	24634-61-5
<b>EU index number</b>	019-003-00-3
<b>EC number</b>	246-376-1

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

<b>Identified uses</b>	Food / Feed additive Cosmetics Chemical Intermediate Personal Care Industrial application For further information, see attached Exposure Scenario.
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##### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b>	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com
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##### 1.4. Emergency telephone number

<b>Emergency telephone</b>	SGS - +32 (0)3 575 55 55 (24h)
<b>Sds No.</b>	21653

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

<b>Physical hazards</b>	Not Classified
<b>Health hazards</b>	Eye Irrit. 2 - H319
<b>Environmental hazards</b>	Not Classified

##### 2.2. Label elements

## POTASSIUM (E,E) HEXA2,4 DIENOATE

EC number 246-376-1

### Hazard pictograms



Signal word Warning

Hazard statements H319 Causes serious eye irritation.

Precautionary statements P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P264 Wash skin thoroughly after handling.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/ attention.

### 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Product name POTASSIUM (E,E) HEXA2,4 DIENOATE  
REACH registration number 01-2119950315-41-XXXX  
EU index number 019-003-00-3  
CAS number 24634-61-5  
EC number 246-376-1  
Composition comments The data shown are in accordance with the latest EC Directives.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

**Ingestion** Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.

**Skin contact** Remove affected person from source of contamination. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention if any discomfort continues.

**Eye contact** Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention.

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

**Eye contact** Causes serious eye irritation. Irritation of eyes and mucous membranes.

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

**Notes for the doctor** No specific recommendations. If in doubt, get medical attention promptly.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

## POTASSIUM (E,E) HEXA2,4 DIENOATE

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** When heated and in case of fire, toxic vapours/gases may be formed.

**Hazardous combustion products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Evacuate area. Move containers from fire area if it can be done without risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Provide adequate ventilation.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

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

**Personal precautions** Evacuate area. Avoid heat, flames and other sources of ignition. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin, eyes and clothing. Avoid generation and spreading of dust. Avoid inhalation of dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

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

**Methods for cleaning up** Avoid generation and spreading of dust. Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Observe good chemical hygiene practices. Avoid contact with skin, eyes and clothing. Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharges. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Provide adequate ventilation. Avoid handling which leads to dust formation. Avoid breathing dust.

**Advice on general occupational hygiene** Avoid contact with skin and eyes. When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet.

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

## POTASSIUM (E,E) HEXA2,4 DIENOATE

### Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Protect from sunlight. Keep away from food, drink and animal feeding stuffs. Store away from the following materials: Strong oxidising agents.

### 7.3. Specific end use(s)

#### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Ingredient comments

No exposure limits known for ingredient(s).

#### DNEL

Workers - Dermal; Long term systemic effects: 40 mg/kg  
 Workers - Inhalation; Long term systemic effects: 17.63 mg/m<sup>3</sup>  
 General population - Oral; Long term systemic effects: 2 mg/kg  
 General population - Dermal; Long term systemic effects: 20 mg/kg  
 General population - Inhalation; Long term systemic effects: 52.17 mg/m<sup>3</sup>  
 Workers - Oral; Long term local effects: 0.17 mg/cm<sup>2</sup>  
 General population - Inhalation; Long term local effects: 26.08 mg/m<sup>3</sup>

#### PNEC

- Fresh water; 1 mg/l  
 marine water; 0.1 mg/l  
 Intermittent release; 4.8 mg/l  
 - Sediment (Freshwater); 3.6 mg/kg  
 Sediment (Marinewater); 0.36 mg/kg  
 - STP; 10 mg/l  
 - Soil; 1.67 mg/kg

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Provide eyewash station and safety shower. Eliminate all sources of ignition.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

#### Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. Nitrile rubber. glove thickness 1.5mm Butyl rubber. glove thickness 0.3mm To protect hands from chemicals, gloves should comply with European Standard EN374.

#### Other skin and body protection

Provide eyewash station and safety shower. Wear apron or protective clothing in case of contact.

#### Hygiene measures

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated.

## POTASSIUM (E,E) HEXA2,4 DIENOATE

**Respiratory protection** Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m<sup>3</sup>. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. Particulate filter, type P2. EN 136/140/141/145/143/149

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Dusty powder. Granules. Crystalline solid. Solid
<b>Colour</b>	White.
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	No information available.
<b>pH</b>	pH (diluted solution): 7 @ 5%
<b>Melting point</b>	250°C
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	178°C
<b>Evaporation rate</b>	No information available.
<b>Evaporation factor</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Other flammability</b>	No information available.
<b>Vapour pressure</b>	0 - 1.0 hPa @ x 10-7°C OECD 104
<b>Vapour density</b>	No information available.
<b>Relative density</b>	1.36 @ 20°C OECD 109
<b>Bulk density</b>	No information available.
<b>Solubility(ies)</b>	Soluble in water.
<b>Partition coefficient</b>	log Pow: -1.72 OECD 117
<b>Auto-ignition temperature</b>	178°C
<b>Decomposition Temperature</b>	>210°C
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Explosive under the influence of a flame</b>	No information available.
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising.

#### 9.2. Other information

<b>Refractive index</b>	No information available.
<b>Particle size</b>	No information available.

## POTASSIUM (E,E) HEXA2,4 DIENOATE

<b>Molecular weight</b>	150.22
<b>Volatility</b>	No information available.
<b>Saturation concentration</b>	No information available.
<b>Critical temperature</b>	No information available.
<b>Volatile organic compound</b>	No information available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures. Will decompose at temperatures exceeding 210°C.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Will not polymerise.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid excessive heat for prolonged periods of time. Avoid handling which leads to dust formation.

#### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> 10500 mg/kg, Oral, Rat

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 2,000.0

**Species** Rat

**Notes (dermal LD<sub>50</sub>)** OECD 402

##### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l)** 5.15

**Notes (inhalation LC<sub>50</sub>)** OECD 403

##### Skin corrosion/irritation

**Animal data** Not irritating. Rabbit OECD 404

##### Serious eye damage/irritation

**Serious eye damage/irritation** Causes serious eye irritation. Rabbit OECD 405

##### Respiratory sensitisation

## POTASSIUM (E,E) HEXA2,4 DIENOATE

<b>Respiratory sensitisation</b>	Not sensitising.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Not sensitising. Guinea pig
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Ames test: Negative. Does not contain any substances known to be mutagenic.
<b>Genotoxicity - in vivo</b>	Not available.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	No evidence of carcinogenicity in animal studies.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	No information available.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	Not classified as a specific target organ toxicant after a single exposure.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	Not classified as a specific target organ toxicant after repeated exposure.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Based on available data the classification criteria are not met.
<b><u>Inhalation</u></b>	
<b>Inhalation</b>	Dust in high concentrations may irritate the respiratory system.
<b><u>Ingestion</u></b>	
<b>Ingestion</b>	May cause discomfort if swallowed.
<b><u>Skin contact</u></b>	
<b>Skin contact</b>	Slightly irritating.
<b><u>Eye contact</u></b>	
<b>Eye contact</b>	Causes serious eye irritation.

### SECTION 12: Ecological information

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

#### 12.1. Toxicity

**Toxicity** Not considered toxic to fish.

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: > 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)  
OECD 203

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 982 mg/l, Daphnia magna  
OECD 202

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 48 hours: 480 mg/l, Algae

**Acute toxicity - microorganisms** EC<sub>50</sub>, 3 hours: > 100 mg/l, Activated sludge  
OECD 209

#### 12.2. Persistence and degradability

**Persistence and degradability** The product is readily biodegradable.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** log Pow: -1.72 OECD 117

## POTASSIUM (E,E) HEXA2,4 DIENOATE

### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

**Surface tension** 72.6 mN/m @ 20°C

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Other adverse effects** Not determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78  
and the IBC Code**

## SECTION 15: Regulatory information

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



## POTASSIUM (E,E) HEXA2,4 DIENOATE

### EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

### Inventories

#### EU - EINECS/ELINCS

All the ingredients are listed or exempt.

#### Canada - DSL/NDSL

All the ingredients are listed or exempt.  
DSL

#### US - TSCA

All the ingredients are listed or exempt.

#### Australia - AICS

All the ingredients are listed or exempt.

#### Japan - ENCS

All the ingredients are listed or exempt.

#### Korea - KECI

All the ingredients are listed or exempt.

#### China - IECSC

All the ingredients are listed or exempt.

#### Philippines – PICCS

All the ingredients are listed or exempt.

#### New Zealand - NZIOC

All the ingredients are listed or exempt.

### SECTION 16: Other information

## POTASSIUM (E,E) HEXA2,4 DIENOATE

### Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.  
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
 CAS: Chemical Abstracts Service.  
 DNEL: Derived No Effect Level.  
 IATA: International Air Transport Association.  
 IMDG: International Maritime Dangerous Goods.  
 Kow: Octanol-water partition coefficient.  
 LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.  
 LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).  
 PBT: Persistent, Bioaccumulative and Toxic substance.  
 PNEC: Predicted No Effect Concentration.  
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.  
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.  
 vPvB: Very Persistent and Very Bioaccumulative.  
 IARC: International Agency for Research on Cancer.  
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.  
 cATpE: Converted Acute Toxicity Point Estimate.  
 BCF: Bioconcentration Factor.  
 BOD: Biochemical Oxygen Demand.  
 EC<sub>50</sub>: 50% of maximal Effective Concentration.  
 LOAEC: Lowest Observed Adverse Effect Concentration.  
 LOAEL: Lowest Observed Adverse Effect Level.  
 NOAEC: No Observed Adverse Effect Concentration.  
 NOAEL: No Observed Adverse Effect Level.  
 NOEC: No Observed Effect Concentration.  
 LOEC: Lowest Observed Effect Concentration.  
 DMEL: Derived Minimal Effect Level.  
 EL50: Exposure Limit 50  
 hPa: Hectopascal  
 LL50: Lethal Loading fifty  
 OECD: Organisation for Economic Co-operation and Development  
 POW: Octanol-water partition coefficient  
 SCBA: self-contained breathing apparatus  
 STP: Sewage Treatment Plant  
 VOC: Volatile Organic Compounds

### Classification abbreviations and acronyms

Acute Tox. = Acute toxicity  
 Aquatic Acute = Hazardous to the aquatic environment (acute)  
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

### Key literature references and sources for data

Supplier's information.

### Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

23/08/2019

Version number

6.000

Supersedes date

21/06/2019

SDS number

21653

## POTASSIUM (E,E) HEXA2,4 DIENOATE

**SDS status**

Approved.

**Hazard statements in full**

H319 Causes serious eye irritation.

**Signature**

Jacq Pattinson



## Exposure scenario Formulation

### Identification

<b>Product name</b>	POTASSIUM (E,E) HEXA2,4 DIENOATE
<b>REACH registration number</b>	01-2119950315-41-XXXX
<b>CAS number</b>	24634-61-5
<b>EC number</b>	246-376-1
<b>Supplier</b>	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com

### 1. Title of exposure scenario

<b>Main title</b>	Formulation
<b>Main sector</b>	SU3 Industrial uses

#### Environment

<b>Environmental release category</b>	ERC2 Formulation into mixture
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#### Worker

<b>Process category</b>	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC14 Tableting, compression, extrusion, pelletisation, granulation</p> <p>PROC15 Use as laboratory reagent.</p>
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### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

## Formulation

**Concentration details** Covers concentrations up to 100 %.

### Amounts used

Daily amount per site: 3.5 tonnes

Annual site tonnage: 700 tonnes

### Environmental factors not influenced by risk management measures

**Dilution** Receiving surface water flow: 18000 m<sup>3</sup>/day

### Risk management measures

**STP type** Municipal STP.

**STP details** Assumed domestic sewage treatment plant flow: 2000 m<sup>3</sup>/day  
Estimated substance removal from wastewater via domestic sewage treatment: 87.3%

### Conditions and measures related to external treatment of waste for disposal

**Disposal method** Dispose of waste or used sacks/containers according to local regulations.

## 2. Conditions of use affecting exposure (Workers - Health 1)

### Product characteristics

**Concentration details** Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Setting** Indoor.

**Temperature** Assumes activities are at ambient temperature (unless stated differently).

**Ventilation rate** Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc.  
Controlled ventilation means air is supplied or removed by a powered fan.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Provide extract ventilation to points where emissions occur.  
PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC14 Tableting, compression, extrusion, pelletisation, granulation Local exhaust ventilation - efficiency of at least [%]: 80

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Assumes a good basic standard of occupational hygiene is implemented.

### Risk management measures

PROC10 Roller application or brushing

Wear suitable gloves tested to EN374.

## 3. Exposure estimation (Environment 1)

**Assessment method** Used EUSES model.

## Formulation

### Environmental exposure

Fresh water: Exposure 0.444 mg/l, PNEC 0.48 mg/l, RCR 0.926  
freshwater sediment: Exposure 1.601 mg/kg, PNEC 1.73 mg/kg, RCR 0.925  
Marine water: Exposure 0.044 mg/l, PNEC 0.048 mg/l, RCR 0.926  
marine sediment: Exposure 0.16 mg/kg, PNEC 0.173 mg/kg, RCR 0.925  
STP: Exposure 4.43 mg/l, PNEC 10 mg/l, RCR 0.443  
Soil: Exposure 0.006 mg/kg, PNEC 1.67 mg/kg, RCR <0.01

### 3. Exposure estimation (Health 1)

### Assessment method

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

## Formulation

### Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.1 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.034 mg/kg/day, DNEL 40 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.034

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284

Worker - dermal, long-term - systemic: Exposure 0.69 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.017

PROC4 Chemical production where opportunity for exposure arises

Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.172

PROC5 Mixing or blending in batch processes

Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

Worker - inhalation, long-term - systemic: Exposure 14 mg/kg/day, DNEL 17.63 mg/kg/day, RCR 0.794

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.172

PROC10 Roller application or brushing

Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567

Worker - dermal, long-term - systemic: Exposure 5.486 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.137

PROC14 Tableting, compression, extrusion, pelletisation, granulation

Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567

Worker - dermal, long-term - systemic: Exposure 3.43 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.086

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284

## Formulation

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 40 mg/kg/day, RCR <0.01





## Exposure scenario Formulation of cosmetic products

### Identification

<b>Product name</b>	POTASSIUM (E,E) HEXA2,4 DIENOATE
<b>REACH registration number</b>	01-2119950315-41-XXXX
<b>CAS number</b>	24634-61-5
<b>EC number</b>	246-376-1
<b>Supplier</b>	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com

### 1. Title of exposure scenario

<b>Main title</b>	Formulation of cosmetic products
<b>Main sector</b>	SU3 Industrial uses

#### Environment

<b>Environmental release category</b>	ERC2 Formulation into mixture
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#### Worker

<b>Process category</b>	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC14 Tableting, compression, extrusion, pelletisation, granulation</p> <p>PROC15 Use as laboratory reagent.</p>
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### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

<b>Concentration details</b>	Covers concentrations up to 100 %.
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## Formulation of cosmetic products

### Amounts used

Daily amount per site: 3.5 tonnes  
Annual site tonnage: 600 tonnes

### Environmental factors not influenced by risk management measures

**Dilution** Receiving surface water flow: 18000 m<sup>3</sup>/day

### Risk management measures

**STP type** Municipal STP.

**STP details** Assumed domestic sewage treatment plant flow: 2000 m<sup>3</sup>/day  
Estimated substance removal from wastewater via domestic sewage treatment: 87.3%

### Conditions and measures related to external treatment of waste for disposal

**Disposal method** Dispose of waste or used sacks/containers according to local regulations.

## 2. Conditions of use affecting exposure (Workers - Health 1)

### Product characteristics

**Concentration details** Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Setting** Indoor.

**Temperature** Assumes activities are at ambient temperature (unless stated differently).

**Ventilation rate** Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc.  
Controlled ventilation means air is supplied or removed by a powered fan.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Provide extract ventilation to points where emissions occur.  
PROC5 Mixing or blending in batch processes PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC14 Tableting, compression, extrusion, pelletisation, granulation Local exhaust ventilation - efficiency of at least [%]: 80

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Assumes a good basic standard of occupational hygiene is implemented.

### Risk management measures

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities  
Wear a respirator providing a minimum efficiency of (%): 90

## 3. Exposure estimation (Environment 1)

**Assessment method** Used EUSES model.

**Environmental exposure** Fresh water: Exposure 0.444 mg/l, PNEC 0.48 mg/l, RCR 0.926  
freshwater sediment: Exposure 1.601 mg/kg, PNEC 1.73 mg/kg, RCR 0.925  
Marine water: Exposure 0.044 mg/l, PNEC 0.048 mg/l, RCR 0.926  
marine sediment: Exposure 0.16 mg/kg, PNEC 0.173 mg/kg, RCR 0.925  
STP: Exposure 4.43 mg/l, PNEC 10 mg/l, RCR 0.443  
Soil: Exposure 0.006 mg/kg, PNEC 1.67 mg/kg, RCR <0.01

## Formulation of cosmetic products

### 3. Exposure estimation (Health 1)

<b>Assessment method</b>	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
<b>Exposure</b>	<p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions  Worker - inhalation, long-term - systemic: Exposure 0.1 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR &lt;0.01  Worker - dermal, long-term - systemic: Exposure 0.034 mg/kg/day, DNEL 40 mg/kg/day, RCR &lt;0.01</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions  Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284  Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.034</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition  Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284  Worker - dermal, long-term - systemic: Exposure 0.69 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.017</p> <p>PROC5 Mixing or blending in batch processes  Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567  Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities  Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567  Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities  Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567  Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)  Worker - inhalation, long-term - systemic: Exposure 14 mg/kg/day, DNEL 17.63 mg/kg/day, RCR 0.794  Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.172</p> <p>PROC14 Tableting, compression, extrusion, pelletisation, granulation  Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567  Worker - dermal, long-term - systemic: Exposure 3.43 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.086</p> <p>PROC15 Use as laboratory reagent.  Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284  Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 40 mg/kg/day, RCR &lt;0.01</p>



## Exposure scenario Industrial use as a processing aid

### Identification

<b>Product name</b>	POTASSIUM (E,E) HEXA2,4 DIENOATE
<b>REACH registration number</b>	01-2119950315-41-XXXX
<b>CAS number</b>	24634-61-5
<b>EC number</b>	246-376-1
<b>Supplier</b>	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com

### 1. Title of exposure scenario

<b>Main title</b>	Industrial use as a processing aid
<b>Main sector</b>	SU3 Industrial uses
<b>Sector of use</b>	SU9 Manufacture of fine chemicals SU10 Formulation [mixing] of preparations and/or re-packaging

#### Environment

<b>Environmental release category</b>	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article) ERC6a Use of intermediate ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)
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#### Worker

<b>Process category</b>	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC10 Roller application or brushing PROC14 Tableting, compression, extrusion, pelletisation, granulation PROC15 Use as laboratory reagent.
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## Industrial use as a processing aid

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

**Concentration details** Covers concentrations up to 100 %.

#### Amounts used

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

Daily amount per site: 1 tonnes

Annual site tonnage: 60 tonnes

ERC6a Use of intermediate

Daily amount per site: 3 tonnes

Annual site tonnage: 60 tonnes

ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)

Daily amount per site: 3 tonnes

Annual site tonnage: 600 tonnes

#### Environmental factors not influenced by risk management measures

**Dilution** Receiving surface water flow: 18000 m<sup>3</sup>/day

#### Risk management measures

**STP type** Municipal STP.

**STP details** Assumed domestic sewage treatment plant flow: 2000 m<sup>3</sup>/day  
Estimated substance removal from wastewater via domestic sewage treatment: 87.3%

#### Conditions and measures related to external treatment of waste for disposal

**Disposal method** Dispose of waste or used sacks/containers according to local regulations.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Setting** Indoor.

**Temperature** Assumes activities are at ambient temperature (unless stated differently).

**Ventilation rate** Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc.  
Controlled ventilation means air is supplied or removed by a powered fan.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Provide extract ventilation to points where emissions occur.  
PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC10 Roller application or brushing PROC14 Tableting, compression, extrusion, pelletisation, granulation Local exhaust ventilation - efficiency of at least [%]: 90  
PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities  
Local exhaust ventilation - efficiency of at least [%]: 95

#### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Assumes a good basic standard of occupational hygiene is implemented.

#### Risk management measures

## Industrial use as a processing aid

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC10 Roller application or brushing

Wear a respirator providing a minimum efficiency of (%): 90

PROC10 Roller application or brushing

Wear suitable gloves tested to EN374.

### 3. Exposure estimation (Environment 1)

<b>Assessment method</b>	Used EUSES model.
<b>Environmental exposure</b>	<p>ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)</p> <p>Fresh water: Exposure 0.318 mg/l, PNEC 0.48 mg/l, RCR 0.662</p> <p>freshwater sediment: Exposure 1.145 mg/kg, PNEC 1.73 mg/kg, RCR 0.662</p> <p>Marine water: Exposure 0.032 mg/l, PNEC 0.048 mg/l, RCR 0.662</p> <p>marine sediment: Exposure 0.114 mg/kg, PNEC 0.173 mg/kg, RCR 0.662</p> <p>STP: Exposure 3.165 mg/l, PNEC 10 mg/l, RCR 0.316</p> <p>Soil: Exposure 0.002 mg/kg, PNEC 1.67 mg/kg, RCR &lt;0.01</p> <p>ERC6a Use of intermediate</p> <p>Fresh water: Exposure 0.381 mg/l, PNEC 0.48 mg/l, RCR 0.794</p> <p>freshwater sediment: Exposure 1.373 mg/kg, PNEC 1.73 mg/kg, RCR 0.794</p> <p>Marine water: Exposure 0.038 mg/l, PNEC 0.048 mg/l, RCR 0.794</p> <p>marine sediment: Exposure 0.137 mg/kg, PNEC 0.173 mg/kg, RCR 0.793</p> <p>STP: Exposure 3.797 mg/l, PNEC 10 mg/l, RCR 0.38</p> <p>Soil: Exposure 0.002 mg/kg, PNEC 1.67 mg/kg, RCR &lt;0.01</p> <p>ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)</p> <p>Fresh water: Exposure 0.381 mg/l, PNEC 0.48 mg/l, RCR 0.794</p> <p>freshwater sediment: Exposure 1.373 mg/kg, PNEC 1.73 mg/kg, RCR 0.794</p> <p>Marine water: Exposure 0.038 mg/l, PNEC 0.048 mg/l, RCR 0.794</p> <p>marine sediment: Exposure 0.137 mg/kg, PNEC 0.173 mg/kg, RCR 0.793</p> <p>STP: Exposure 3.797 mg/l, PNEC 10 mg/l, RCR 0.38</p> <p>Soil: Exposure 0.0008746 mg/kg, PNEC 1.67 mg/kg, RCR &lt;0.01</p>

### 3. Exposure estimation (Health 1)

<b>Assessment method</b>	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
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## Industrial use as a processing aid

### Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.1 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.034 mg/kg/day, DNEL 40 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 1 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.057

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.034

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - inhalation, long-term - systemic: Exposure 1 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.057

Worker - dermal, long-term - systemic: Exposure 0.69 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.017

PROC4 Chemical production where opportunity for exposure arises

Worker - inhalation, long-term - systemic: Exposure 2.5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.142

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.172

PROC5 Mixing or blending in batch processes

Worker - inhalation, long-term - systemic: Exposure 2.5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.142

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 1.25 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.071

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.343

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

Worker - inhalation, long-term - systemic: Exposure 14 mg/kg/day, DNEL 17.63 mg/kg/day, RCR 0.794

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.172

PROC10 Roller application or brushing

Worker - inhalation, long-term - systemic: Exposure 1 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.057

Worker - dermal, long-term - systemic: Exposure 5.486 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.137

PROC14 Tableting, compression, extrusion, pelletisation, granulation

Worker - inhalation, long-term - systemic: Exposure 10 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.567

Worker - dermal, long-term - systemic: Exposure 3.43 mg/kg/day, DNEL 40 mg/kg/day, RCR 0.086

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 40 mg/kg/day, RCR <0.01

## **Industrial use as a processing aid**





## Exposure scenario Use as a laboratory reagent

### Identification

<b>Product name</b>	POTASSIUM (E,E) HEXA2,4 DIENOATE
<b>REACH registration number</b>	01-2119950315-41-XXXX
<b>CAS number</b>	24634-61-5
<b>EC number</b>	246-376-1
<b>Supplier</b>	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com

### 1. Title of exposure scenario

<b>Main title</b>	Use as a laboratory reagent
<b>Main sector</b>	SU3 Industrial uses SU22 Professional uses

#### Environment

<b>Environmental release category</b>	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
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#### Worker

<b>Process category</b>	PROC15 Use as laboratory reagent.
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### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

<b>Concentration details</b>	Covers concentrations up to 100 %.
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#### Amounts used

Small scale

#### Environmental factors not influenced by risk management measures

<b>Dilution</b>	Receiving surface water flow: 18000 m <sup>3</sup> /day
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#### Risk management measures

<b>STP type</b>	Municipal STP.
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<b>STP details</b>	Assumed domestic sewage treatment plant flow: 2000 m <sup>3</sup> /day Estimated substance removal from wastewater via domestic sewage treatment: 87.3%
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## Use as a laboratory reagent

### Conditions and measures related to external treatment of waste for disposal

**Disposal method** Dispose of waste or used sacks/containers according to local regulations.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Setting** Indoor.

**Temperature** Assumes activities are at ambient temperature (unless stated differently).

**Ventilation rate** Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** No specific risk management measure identified beyond those operational conditions stated.

#### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Assumes a good basic standard of occupational hygiene is implemented.

### 3. Exposure estimation (Environment 1)

**Assessment method** Used EUSES model.

**Environmental exposure**  
 Fresh water: Exposure 0.002 mg/l, PNEC 0.48 mg/l, RCR <0.01  
 freshwater sediment: Exposure 0.009 mg/kg, PNEC 1.73 mg/kg, RCR <0.01  
 Marine water: Exposure 0.0002364 mg/l, PNEC 0.048 mg/l, RCR <0.01  
 marine sediment: Exposure 0.0008514 mg/kg, PNEC 0.173 mg/kg, RCR <0.01  
 STP: Exposure 0.01 mg/l, PNEC 10 mg/l, RCR <0.01  
 Soil: Exposure 0.000711 mg/kg, PNEC 1.67 mg/kg, RCR <0.01

### 3. Exposure estimation (Health 1)

**Assessment method** The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

**Exposure**  
 Worker - inhalation, long-term - systemic: Exposure 5 mg/m<sup>3</sup>, DNEL 17.63 mg/m<sup>3</sup>, RCR 0.284  
 Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 40 mg/kg/day, RCR <0.01



## Exposure scenario Consumer use of cosmetic products

### Identification

<b>Product name</b>	POTASSIUM (E,E) HEXA2,4 DIENOATE
<b>REACH registration number</b>	01-2119950315-41-XXXX
<b>CAS number</b>	24634-61-5
<b>EC number</b>	246-376-1
<b>Supplier</b>	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com

### 1. Title of exposure scenario

<b>Main title</b>	Consumer use of cosmetic products
<b>Product category</b>	PC39 Cosmetics, personal care.
<b>Main sector</b>	SU21 Consumer uses
<b><u>Environment</u></b>	
<b>Environmental release category</b>	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

#### Product characteristics

**Concentration details** Covers concentrations up to 100 %.

#### Amounts used

Small scale

#### Risk management measures

**Good practice** Dispose of waste or used sacks/containers according to local regulations.

**STP type** Municipal STP.

**STP details** Assumed domestic sewage treatment plant flow: 2000 m<sup>3</sup>/day

### 2. Conditions of use affecting exposure (Non-industrial - Health 1)

#### Product characteristics

## Consumer use of cosmetic products

Consumer uses e.g. as a carrier in cosmetics/personal care products, perfumes and fragrances. Note: for cosmetic and personal care products, risk assessment only required for the environment under REACH as human health is covered by alternative legislation.

### 3. Exposure estimation (Environment 1)

<b>Assessment method</b>	Used EUSES model.
<b>Environmental exposure</b>	Fresh water: Exposure 0.002 mg/l, PNEC 0.48 mg/l, RCR <0.01 freshwater sediment: Exposure 0.007 mg/kg, PNEC 1.73 mg/kg, RCR <0.01 Marine water: Exposure 0.0001981 mg/l, PNEC 0.048 mg/l, RCR <0.01 marine sediment: Exposure 0.0007135 mg/kg, PNEC 0.173 mg/kg, RCR <0.01 STP: Exposure 0.007 mg/l, PNEC 10 mg/l, RCR <0.01 Soil: Exposure 0.0007109 mg/kg, PNEC 1.67 mg/kg, RCR <0.01

### 3. Exposure estimation (Health 1)

In accordance to the Article 14 (5b) of the REACH Regulation (EC) No 1907/2006, exposure estimation and risk characterisation for human health does not need to be performed for end uses in cosmetic products within the scope of Directive 76/768/EEC.