



SAFETY DATA SHEET
POTASSIUM CARBONATE SOLUTION > 20%

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

1.1. Product identifier

Product name	POTASSIUM CARBONATE SOLUTION > 20%
Product number	11627
Synonyms; trade names	POT CARBONATE 50% SOL, POTASSIUM CARBONATE 50% FCC ED 7, POTASSIUM CARBONATE 20% SOLUTION, POTASSIUM CARBONATE 50% SOLUTION, POT CARBONATE 39% SOL, POTASSIUM CARBONATE 40% SOLUTION

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

Identified uses	Chemical Intermediate
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	11627

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335
Environmental hazards	Not Classified

2.2. Label elements

Hazard pictograms



Signal word	Warning
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

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Precautionary statements

P261 Avoid breathing vapour/ spray.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

POTASSIUM CARBONATE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

POTASSIUM CARBONATE			> 20
CAS number: 584-08-7	EC number: 209-529-3	REACH registration number: 01-2119532646-36-XXXX	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335			

The full text for all hazard statements is displayed in Section 16.

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. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
Skin contact	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	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation	May cause respiratory irritation.
Ingestion	May cause discomfort if swallowed.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation. Irritation of eyes and mucous membranes.

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

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Notes for the doctor Treat symptomatically. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

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

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 Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Keep unnecessary and unprotected personnel away from the spillage.

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 Stop leak if safe to do so. Absorb spillage with non-combustible, absorbent material. 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. Avoid the spillage or runoff entering drains, sewers or watercourses.

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 Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours/spray and contact with skin and eyes.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Provide eyewash station and safety shower. Take off contaminated clothing and wash it before reuse. Wash after use and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

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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).

POTASSIUM CARBONATE (CAS: 584-08-7)

DNEL

Consumer - Inhalation; Long term local effects: 10 mg/m³
 Workers - Inhalation; Long term local effects: 10 mg/m³
 Workers - Dermal; Long term local effects: 16 mg/cm²
 Consumer - Dermal; Long term local effects: 8 mg/cm²

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

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: Wear chemical splash goggles. 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. Rubber (natural, latex). Protective gloves should have a minimum thickness of 0.6 mm. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. 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. Gas filter, type B. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless. to Straw.
Odour	Almost odourless.
Odour threshold	No information available.
pH	pH (concentrated solution): > 10

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Melting point	No information available.
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.19 - 1.54 @ 20°C
Bulk density	No information available.
Solubility(ies)	Completely soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	No information available.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Reactions with the following materials may generate heat: Strong acids.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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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.

10.5. Incompatible materials

Materials to avoid Strong acids.

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

Skin corrosion/irritation

Animal data Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation

May cause respiratory system irritation.

Ingestion

May cause discomfort if swallowed. Gastrointestinal symptoms, including upset stomach. Nausea, vomiting.

Skin contact

Causes skin irritation.

Eye contact

Causes serious eye irritation.

Toxicological information on ingredients.

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POTASSIUM CARBONATE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, Rat OECD 401 Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rabbit Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LD₅₀ > 4.9 mg/l, Inhalation, Rat Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. OECD 471 Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL 2667 mg/kg, Oral, Rat Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development Teratogenicity: - NOAEL: 180 mg/kg, Oral, Rat OECD 414 Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 2667 mg/kg, Oral, Rat Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard No information available.

Inhalation May cause respiratory system irritation. Sore throat. Coughing.

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Ingestion	May cause discomfort if swallowed. Burning sensation in mouth.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.

SECTION 12: Ecological information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.
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Ecological information on ingredients.

POTASSIUM CARBONATE

Ecotoxicity	The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.
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12.1. Toxicity

Toxicity	No information available.
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Ecological information on ingredients.

POTASSIUM CARBONATE

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 68 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 96 hours: 33 mg/l, Oncorhynchus mykiss (Rainbow trout)
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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 200 mg/l, Daphnia magna NOEC, 48 hours: 120 mg/l, Daphnia magna
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Chronic aquatic toxicity

Chronic toxicity - fish early life stage	Long-term testing not required, based on Chemical Safety Assessment results. The product is degraded completely by hydrolysis.
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12.2. Persistence and degradability

Persistence and degradability	The product contains inorganic substances which are not biodegradable.
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Ecological information on ingredients.

POTASSIUM CARBONATE

Persistence and degradability	The product is degraded completely by hydrolysis.
Phototransformation	Scientifically unjustified.
Biodegradation	The product contains only inorganic substances which are not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	No information available.

Ecological information on ingredients.

POTASSIUM CARBONATE

POTASSIUM CARBONATE SOLUTION > 20%

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

POTASSIUM CARBONATE

Mobility The product is soluble in water. The product is degraded completely by hydrolysis.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

POTASSIUM CARBONATE

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 No information available.

Ecological information on ingredients.

POTASSIUM CARBONATE

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

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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

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

No chemical safety assessment has been carried out.

SECTION 16: Other information

POTASSIUM CARBONATE SOLUTION > 20%

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.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: 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.
 EC₅₀: 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.

Classification procedures according to Regulation (EC) 1272/2008

Skin Irrit. 2 - H315: Calculation method. Eye Irrit. 2 - H319: Calculation method. STOT SE 3 - H335: Calculation method.

Revision comments

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

Revision date

03/12/2020

POTASSIUM CARBONATE SOLUTION > 20%

Version number	3.000
Supersedes date	01/12/2017
SDS number	11627
SDS status	Approved.
Hazard statements in full	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Signature	Lisa Bland

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



Exposure scenario Formulation

Identification

Product name	Potassium Carbonate
REACH registration number	01-2119532646-36-XXXX
CAS number	584-08-7
EC number	209-529-3
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Formulation
Process scope	Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC2 Formulation into mixture
<u>Worker</u>	

Formulation

Process category	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 PROC7 Industrial spraying 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) PROC14 Tabletting, compression, extrusion, pelletisation, granulation PROC15 Use as laboratory reagent. PROC19 Manual activities involving hand contact
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Risk management measures

Good practice	Dispose of waste product or used containers according to local regulations Prevent leaks and prevent soil/water pollution caused by leaks.
Technical measures	Prevent environmental discharge consistent with regulatory requirements.
STP type	Municipal STP.

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Water	pH adjustment Prevent discharge of undissolved substance to or recover from onsite waste water.
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Conditions and measures related to external treatment of waste for disposal

Waste treatment	External treatment and disposal of waste should comply with applicable local and/or national regulations.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Concentration details	Concentration of substance in product: 100%
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Frequency and duration of use

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

Other given operational conditions affecting workers exposure

Ventilation rate	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).
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Technical conditions and measures at process level (source) to prevent release

Technical protective measures	Ensure material transfers are under containment or extract ventilation. Transfer via enclosed lines.
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Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures	Automate activity where possible. Ensure operatives are trained to minimise exposures. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
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Risk management measures

Formulation

Wear suitable gloves (tested to EN374), coverall and eye protection.
 PROC7 Industrial spraying
 Wear a respirator conforming to EN140 with Type A/P2 filter or better.
 , or:
 Provide extract ventilation to points where emissions occur.

Additional advice Avoid splashing.

3. Exposure estimation (Environment 1)

Low environmental release Qualitative approach used to conclude safe use. Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
Exposure	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions Worker - inhalation, long-term - local: Exposure 0.01 mg/m³, DNEL 10 mg/m³, RCR 0.001 PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Worker - inhalation, long-term - local: Exposure 0.01 mg/m³, DNEL 10 mg/m³, RCR 0.001 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 - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01 PROC4 Chemical production where opportunity for exposure arises Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05 PROC5 Mixing or blending in batch processes Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05 PROC7 Industrial spraying With local exhaust ventilation Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1 PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05 PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05 PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01 PROC14 Tableting, compression, extrusion, pelletisation, granulation Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01 PROC15 Use as laboratory reagent. Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01 PROC19 Manual activities involving hand contact Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05 Worker - dermal, long-term - local Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

For scaling see <http://www.ecetoc.org/tra>



Exposure scenario Industrial Use

Identification

Product name	Potassium Carbonate
REACH registration number	01-2119532646-36-XXXX
CAS number	584-08-7
EC number	209-529-3
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Industrial Use
Main sector	SU3 Industrial uses

Environment

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

Industrial Use

Process category	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 PROC6 Calendering operations. PROC7 Industrial spraying 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 PROC13 Treatment of articles by dipping and pouring. PROC14 Tableting, compression, extrusion, pelletisation, granulation PROC15 Use as laboratory reagent. PROC19 Manual activities involving hand contact PROC21 Low energy manipulation and handling of substances bound in/on materials or articles PROC22 Manufacturing and processing of minerals and/or metals at substantially elevated temperature PROC23 Open processing and transfer operations at substantially elevated temperature PROC24 High (mechanical) energy work-up of substances bound in/on materials and/or articles
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Risk management measures

Good practice	Dispose of waste product or used containers according to local regulations Prevent leaks and prevent soil/water pollution caused by leaks.
Technical measures	Prevent environmental discharge consistent with regulatory requirements.
STP type	Municipal STP.

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Water	pH adjustment Prevent discharge of undissolved substance to or recover from onsite waste water.
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Conditions and measures related to external treatment of waste for disposal

Waste treatment	External treatment and disposal of waste should comply with applicable local and/or national regulations.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Concentration details	Concentration of substance in product: 100%
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Frequency and duration of use

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

Other given operational conditions affecting workers exposure

Ventilation rate	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).
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Industrial Use

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

Technical protective measures Ensure material transfers are under containment or extract ventilation. Transfer via enclosed lines.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Automate activity where possible. Ensure operatives are trained to minimise exposures. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.

Risk management measures

Wear suitable gloves (tested to EN374), coverall and eye protection.
PROC7 Industrial spraying
Wear a respirator conforming to EN140 with Type A/P2 filter or better.
, or:
Provide extract ventilation to points where emissions occur.

Additional advice Avoid splashing.

3. Exposure estimation (Environment 1)

Low environmental release Qualitative approach used to conclude safe use. Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation (Health 1)

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

Industrial Use

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
 Worker - inhalation, long-term - local: Exposure 0.01 mg/m³, DNEL 10 mg/m³, RCR 0.001

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
 Worker - inhalation, long-term - local: Exposure 0.01 mg/m³, DNEL 10 mg/m³, RCR 0.001

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 - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01

PROC4 Chemical production where opportunity for exposure arises
 Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC5 Mixing or blending in batch processes
 Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC6 Calendering operations.
 Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01

PROC7 Industrial spraying
 With local exhaust ventilation
 Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
 Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
 Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
 Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01

PROC10 Roller application or brushing
 Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC13 Treatment of articles by dipping and pouring.
 Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01

PROC14 Tableting, compression, extrusion, pelletisation, granulation
 Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01

PROC15 Use as laboratory reagent.
 Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01

PROC19 Manual activities involving hand contact
 Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC21 Low energy manipulation and handling of substances bound in/on materials or articles
 Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1

PROC22 Manufacturing and processing of minerals and/or metals at substantially elevated temperature
 Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1

PROC23 Open processing and transfer operations at substantially elevated temperature
 Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1

PROC24 High (mechanical) energy work-up of substances bound in/on materials and/or articles
 Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1

Worker - dermal, long-term - local Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

For scaling see <http://www.ecetoc.org/tra>



Exposure scenario Professional Use

Identification

Product name	Potassium Carbonate
REACH registration number	01-2119532646-36-XXXX
CAS number	584-08-7
EC number	209-529-3
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Professional Use
Main sector	SU22 Professional uses

Environment

Environmental release category	ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor) ERC8e Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)
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Worker

Process category	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 PROC11 Non industrial spraying PROC13 Treatment of articles by dipping and pouring. PROC14 Tableting, compression, extrusion, pelletisation, granulation PROC15 Use as laboratory reagent. PROC16 Use of fuels PROC19 Manual activities involving hand contact
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Risk management measures

Good practice	Dispose of waste product or used containers according to local regulations Prevent leaks and prevent soil/water pollution caused by leaks.
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Professional Use

Technical measures Prevent environmental discharge consistent with regulatory requirements.

STP type Municipal STP.

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Water pH adjustment Prevent discharge of undissolved substance to or recover from onsite waste water.

Conditions and measures related to external treatment of waste for disposal

Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.

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

Product characteristics

Concentration details Concentration of substance in product: 100%

Frequency and duration of use

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

Other given operational conditions affecting workers exposure

Ventilation rate Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

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

Technical protective measures Ensure material transfers are under containment or extract ventilation. Transfer via enclosed lines.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Automate activity where possible. Ensure operatives are trained to minimise exposures. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.

Risk management measures

Wear suitable gloves (tested to EN374), coverall and eye protection.
PROC11 Non industrial spraying
Wear a respirator conforming to EN140 with Type A/P2 filter or better.
, or:
Provide extract ventilation to points where emissions occur.

Additional advice Avoid splashing.

3. Exposure estimation (Environment 1)

Low environmental release Qualitative approach used to conclude safe use. Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation (Health 1)

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

Professional Use

Exposure

PROC5 Mixing or blending in batch processes

Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1

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

Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

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

Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

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

Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC10 Roller application or brushing

Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC11 Non industrial spraying

With local exhaust ventilation

Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1

PROC13 Treatment of articles by dipping and pouring.

Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

PROC14 Tableting, compression, extrusion, pelletisation, granulation

Worker - inhalation, long-term - local: Exposure 1 mg/m³, DNEL 10 mg/m³, RCR 0.1

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - local: Exposure 0.1 mg/m³, DNEL 10 mg/m³, RCR 0.01

PROC16 Use of fuels

Worker - inhalation, long-term - local: Exposure 5 mg/m³, DNEL 10 mg/m³, RCR 0.5

PROC19 Manual activities involving hand contact

Worker - inhalation, long-term - local: Exposure 0.5 mg/m³, DNEL 10 mg/m³, RCR 0.05

Worker - dermal, long-term - local Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

For scaling see <http://www.ecetoc.org/tra>



Exposure scenario Consumer Uses

Identification

Product name	Potassium Carbonate
REACH registration number	01-2119532646-36-XXXX
CAS number	584-08-7
EC number	209-529-3
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Consumer Uses
Product category	PC4 Anti-freeze and de-icing products. PC9a Coatings and paints, thinners, paint removers. PC18 Ink and toners. PC30 Photochemicals. PC35 Washing and cleaning products
Main sector	SU21 Consumer uses

Environment

Environmental release category	ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor) ERC8e Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)
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2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Concentration details	Covers concentrations up to 3 %.
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Other given operational conditions affecting environmental exposure

Low environmental release

Risk management measures

Good practice	Carefully handle the substance to minimise releases. Clear up spills immediately and dispose of waste safely.
STP type	Municipal STP.

Conditions and measures related to external treatment of waste for disposal

Consumer Uses

Waste treatment	pH adjustment
Disposal method	Product residual disposal complies with applicable regulations.

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

Product characteristics

Physical state	Solid in solution
Concentration details	Covers concentrations up to 3 %.

Amounts used

Small scale

Other given operational conditions affecting Non-industrial exposure

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

Other given operational conditions affecting Non-industrial exposure

Consumer information	Avoid splashing. Clear up spills immediately and dispose of waste safely. Follow advice on use, storage, maintenance and replacement.
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3. Exposure estimation (Environment 1)

Low environmental release Qualitative approach used to conclude safe use. Risk Management Measures are based on qualitative risk characterisation.

3. Exposure estimation (Health 1)

Qualitative approach used to conclude safe use.

4. Guidance to check compliance with the exposure scenario (Health 1)

For scaling see <http://www.ecetoc.org/tra>