

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Reference number: 05333

Issue date: 15-02-2022 Revision date: 15-02-2022 Supersedes version of: 09-04-2015 Version: 1.0

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

1.1. Product identifier

Product form : Substance

Trade name : POTASSIUM TERT-BUTOXIDE EXTRA PURE

 EC-No.
 : 212-740-3

 CAS-No.
 : 865-47-4

 Product code
 : 05333

 Formula
 : C4H9KO

Chemical structure

H₃C CH₃ H₃C OK

Synonyms : Potassium tert-butylate, Potassium-t-butoxide

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.

107 Wode House Road, Jehangir Villa, Colaba

400005 Mumbai - INDIA

T +91 22 6663 6663 - F +91 22 6663 6699

info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable solids, Category 1 H228
Self-Heating Substances and Mixtures, Category 2 H252
Skin corrosion/irritation, Category 1, Sub-Category 1A H314

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

Flammable solid. Self-heating in large quantities; may catch fire. Causes severe skin burns and eye damage.

2.2. Label elements

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Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02 GHS05

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Signal word (CLP) : Danger

Hazard statements (CLP) : H228 - Flammable solid.

H252 - Self-heating in large quantities; may catch fire. H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P280 - Wear protective clothing, eye protection, face protection, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a doctor. P410 - Protect from sunlight.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name : POTASSIUM TERT-BUTOXIDE

CAS-No. : 865-47-4 EC-No. : 212-740-3

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air

and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately

call a POISON CENTER/doctor. Call a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician

immediately.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Do not

induce vomiting. Call a physician immediately.

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

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry

powder. Foam.

Unsuitable extinguishing media : Do not use extinguishing media containing water.

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5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable solid. Self-heating in large quantities; may catch fire.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames.

No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and

no smoking. Avoid contact with skin and eyes. Do not breathe

dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective

equipment as required. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Stop release.

6.2. Environmental precautions

Avoid release to the environment. Do not allow water (or moist air) contact with this material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Clear up rapidly by scoop or vacuum. Notify authorities if

product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Ensure good ventilation of the work station. No open flames. No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing. Keep

away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Wear personal protective equipment.

Avoid contact with skin and eyes.

Hygiene measures : Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after

handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Comply with applicable regulations. Maintain air gap between stacks/pallets.

Storage conditions : Heat sources. Direct sunlight. Keep in fireproof place. Store in dry protected location to prevent any moisture contact. Keep cool. Protect from sunlight. Keep away from ignition sources. Store away from other materials. Store locked up. Store in a well-ventilated place.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder.

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Molecular mass : 112.22 g/mol Colour : White.

Odour : No data available Odour threshold No data available No data available рΗ Relative evaporation rate (butylacetate=1) No data available 240 - 258 °C Melting point Freezing point Not applicable : 275 °C Boiling point 256 °C Flash point 360 °C Auto-ignition temperature : 300 °C Decomposition temperature

Flammability (solid, gas) : Flammable solid. Vapour pressure : No data available

Relative vapour density at 20 °C : 3.9

Relative density : No data available Solubility : Ether: Soluble Partition coefficient n-octanol/water (Log Pow) : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic : No data available Explosive properties : No data available : No data available Oxidising properties **Explosive limits** : Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours. Reacts violently with water. Flammable solid. Self-heating in large quantities; may catch fire.

10.2. Chemical stability

Flammable solid. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Highly reactive material. Reacts violently with water.

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks. Moisture. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases. Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Causes severe skin burns.

Serious eye damage/irritation : Assumed to cause serious eye damage

Respiratory or skin sensitisation : Not classified

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Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard Not classified

POTASSIUM TERT-BUTOXIDE EXTRA PURE (865-47-4)

Viscosity, kinematic Not applicable

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

: Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Product/Packaging disposal recommendations

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

: Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation.

: Handle empty containers with care because residual vapours are flammable. Do not allow water (or moist air) contact with this material.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number

Additional information

UN-No. (ADR) : UN 3206 UN-No. (IMDG) : UN 3206 UN-No. (IATA) : UN 3206 UN-No. (ADN) : UN 3206 UN-No. (RID) : UN 3206

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14.2. UN proper shipping name

Proper Shipping Name (ADR) : ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. Proper Shipping Name (IMDG) : ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S.

Proper Shipping Name (IATA) : Alkali metal alcoholates, self-heating, corrosive, n.o.s.

Proper Shipping Name (ADN) : ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. Proper Shipping Name (RID) : ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S.

Transport document description (ADR) : UN 3206 ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S.

(Potassium tert-butoxide), 4.2 (8), II, (D/E)

Transport document description (IMDG) : UN 3206 ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S.

(Potassium tert-butoxide), 4.2 (8), II

Transport document description (IATA) : UN 3206 Alkali metal alcoholates, self-heating, corrosive, n.o.s., 4.2 (8), II

Transport document description (ADN) : UN 3206 ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S., 4.2 (8),

Ш

Transport document description (RID) : UN 3206 ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S., 4.2 (8),

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14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 4.2 (8)
Danger labels (ADR) : 4.2, 8



IMDG

Transport hazard class(es) (IMDG) : 4.2 (8)
Danger labels (IMDG) : 4.2, 8



IATA

Transport hazard class(es) (IATA) : 4.2 (8)
Danger labels (IATA) : 4.2, 8



ADN

Transport hazard class(es) (ADN) : 4.2 (8)
Danger labels (ADN) : 4.2, 8



RID

Transport hazard class(es) (RID) : 4.2 (8)
Danger labels (RID) : 4.2, 8

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14.4. Packing group

Packing group (ADR) : 11 Packing group (IMDG) : 11 Packing group (IATA) : 11 Ш Packing group (ADN) Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant No

Other information No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : SC4 Special provisions (ADR) : 182, 274 Limited quantities (ADR) : 0 Excepted quantities (ADR) : E2 Packing instructions (ADR) : P410, IBC05 Mixed packing provisions (ADR) : MP14

Portable tank and bulk container instructions (ADR) : T3 Portable tank and bulk container special provisions : TP33

(ADR)

Tank code (ADR) : SGAN Vehicle for tank carriage : AT Transport category (ADR) : 2 Special provisions for carriage - Packages (ADR) V1 48

Hazard identification number (Kemler No.)

Orange plates

48 3206

Tunnel restriction code (ADR) : D/E EAC code : 1W

Transport by sea

: 182, 274 Special provisions (IMDG) 0 Limited quantities (IMDG) Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P410 : PP31 Special packing provisions (IMDG) : IBC05 IBC packing instructions (IMDG) : B21 IBC special provisions (IMDG) Tank instructions (IMDG) Т3 TP33 Tank special provisions (IMDG) EmS-No. (Fire) : F-A : S-J EmS-No. (Spillage) Stowage category (IMDG) : B

Properties and observations (IMDG) : Free-flowing hygroscopic powder. Cause burns to skin, eyes and mucous membranes.

MFAG-No 136

Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Forbidden : Forbidden PCA limited quantity max net quantity (IATA)

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PCA packing instructions (IATA) : 466
PCA max net quantity (IATA) : 15kg
CAO packing instructions (IATA) : 470
CAO max net quantity (IATA) : 50kg
Special provisions (IATA) : A3, A84
ERG code (IATA) : 4C

Inland waterway transport

Classification code (ADN) : SC4
Special provisions (ADN) : 182, 274
Limited quantities (ADN) : 0
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : SC4
Special provisions (RID) : 182, 274
Limited quantities (RID) : 0
Excepted quantities (RID) : E2
Packing instructions (RID) : P410, IBC05

Mixed packing provisions (RID) : MP14

Portable tank and bulk container instructions (RID) : T3

Portable tank and bulk container special provisions : TP33

(RID)

Tank codes for RID tanks (RID) : SGAN
Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W1
Colis express (express parcels) (RID) : CE10
Hazard identification number (RID) : 48

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
40.	POTASSIUM TERT-BUTOXIDE EXTRA PURE	

POTASSIUM TERT-BUTOXIDE EXTRA PURE is not on the REACH Candidate List

POTASSIUM TERT-BUTOXIDE EXTRA PURE is not on the REACH Annex XIV List

POTASSIUM TERT-BUTOXIDE EXTRA PURE is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POTASSIUM TERT-BUTOXIDE EXTRA PURE is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 3366)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen – Borstvoeding

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NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Vruchtbaarheid

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Ontwikkeling

: The substance is not listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	

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Abbreviations and acronyms		
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements		
Flam. Sol. 1	Flammable solids, Category 1	
Self-heat. 2	Self-Heating Substances and Mixtures, Category 2	
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A	
H228	Flammable solid.	
H252	Self-heating in large quantities; may catch fire.	
H314	Causes severe skin burns and eye damage.	

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.