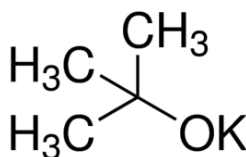


MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance
:
CAS No : 865-47-4
Product code : 05333
Chemical structure :



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

Full text of classification categories and H statements : see section 16

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Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11

C; R35

R14

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



GHS02

GHS05

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/sparks/open flames/hot surfaces. - No smoking
P235 - Keep cool
P280 - Wear protective gloves/protective clothing/eye protection/face protection
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 POISON CENTER or doctor/physician
P420 - Store away from other materials
P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : POTASSIUM TERT-BUTOXIDE Extra Pure

CAS No : 865-47-4

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

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SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
- 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 or doctor/physician.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries : Causes severe skin burns and eye damage.

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

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 naked lights. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.
- Emergency procedures : Stop release.

6.2. Environmental precautions

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 : Clear up rapidly by scoop or vacuum.

6.4. Reference to other sections

No additional information available

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 : No naked lights. No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.
- Hygiene measures : Wash ... thoroughly after handling.

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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.
Storage conditions	: Heat sources. Direct sunlight. Keep in fireproof place. Store in dry protected location to prevent any moisture contact.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection	: protective gloves
Eye protection	: Chemical goggles or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Molecular mass	: 112.22 g/mol
Colour	: White powder.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 256 - 258
Freezing point	: No data available
Boiling point	: 2750 °C
Flash point	: 2560 °C
Auto-ignition temperature	: 3600 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable solid
Vapour pressure	: No data available
Relative vapour density at 20 °C	: 3.9

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Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

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.

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.

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	: Not classified
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified

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Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

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

Product/Packaging disposal recommendations : Dispose of contents/container to ...

Additional information : 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 / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 3206

UN-No. (IMDG) : 3206

UN-No.(IATA) : 3206

UN-No.(ADN) : 3206

UN-No. (RID) : 3206

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.

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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., 4.2 (8), II, (D/E)
Transport document description (IMDG)	: UN 3206 ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S., 4.2 (8), II
Transport document description (IATA)	: UN 3206 ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S., 4.2, II
Transport document description (ADN)	: UN 3206 ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S., 4.2 (8), II
Transport document description (RID)	: UN 3206 ALKALI METAL ALCOHOLATES, SELF- HEATING, CORROSIVE, N.O.S., 4.2 (8), II

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)
Hazard 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)	: II
Packing group (IMDG)	: II
Packing group (IATA)	: II
Packing group (ADN)	: II
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 provision (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 (ADR)	: TP33
Tank code (ADR)	: SGAN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V1
Hazard identification number (Kemler No.)	: 48
Orange plates	:  
Tunnel restriction code (ADR)	: D/E
EAC code	: 1W

- Transport by sea

Special provision (IMDG)	: 182, 274
Limited quantities (IMDG)	: 0
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P410
Packing provisions (IMDG)	: PP31
IBC packing instructions (IMDG)	: IBC05
IBC special provisions (IMDG)	: B2
Tank instructions (IMDG)	: T3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-J

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Stowage category (IMDG) : B
MFAG-No : 136

- Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity (IATA) : Forbidden
PCA packing instructions (IATA) : 466
PCA max net quantity (IATA) : 15kg
CAO packing instructions (IATA) : 470
CAO max net quantity (IATA) : 50kg
Special provision (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 provision (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 (RID) : TP33
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 73/78 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

No REACH Annex XVII restrictions

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

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15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (Classification according to VwVwS, Annex 3; WGK No 3366)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Denmark

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

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Flam. Sol. 1	Flammable solids, Category 1
Self-heat. 2	Self-Heating Substances and Mixtures, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H228	Flammable solid
H252	Self-heating in large quantities; may catch fire
H314	Causes severe skin burns and eye damage
R11	Highly flammable
R14	Reacts violently with water
R35	Causes severe burns
C	Corrosive
F	Highly flammable

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