

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	KTB in THF
Trade Name	KTB in THF
Chemical Name	Potassium tert butoxide 20% solution in tetrahydrofuran
CAS No.	Not applicable.
EC No.	Not applicable.
REACH Registration No.	Not known.

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

Identified Use(s)	PC19 Intermediate
Uses Advised Against	Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer	
Company Identification	Syntor Fine Chemicals Ltd
Address of Manufacturer	Unit11 Boleyn Court Manor Park
Postal code	WA7 1SR
Telephone:	+441928579865
Fax	+441928579734
E-mail	colin.lee@syntor.co.uk
Office hours	08:00 - 17:00
Supplier	
Company Identification	Syntor Fine Chemicals Ltd
Address of Supplier	Unit11 Boleyn Court Manor Park
Postal code	WA7 1SR
Telephone:	+441928579865
Fax	+441928579734
E-mail	colin.lee@syntor.co.uk
Office hours	08:00 - 17:00

1.4 Emergency telephone number

Emergency Phone No.	+441928579865
Contact	Colin Lee
National response center	
Address	NHS Direct
Emergency Phone No.	+44 (0) 111

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP)	Flam. Liq. 2 :Highly flammable liquid and vapour. Acute Tox. 4 :Harmful if swallowed. Skin Corr. 1 :Causes severe skin burns and eye damage. Eye Dam. 1 :Causes serious eye damage. STOT SE 3 :May cause respiratory irritation. Carc. 2 :Suspected of causing cancer.
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2.2 Label elements

	According to Regulation (EC) No. 1272/2008 (CLP)
Product Name	KTB in THF

Hazard Pictogram(s)



GHS02



GHS05



GHS08



GHS07

Signal Word(s)

Danger

Hazard Statement(s)

H225: Highly flammable liquid and vapour.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H335: May cause respiratory irritation.

H351: Suspected of causing cancer.

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash hands and exposed skin thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

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/doctor.

P370+P378: In case of fire: Use EUH014: Reacts violently with water. Do not use water. Extinguish preferably with dry chemical, sand or carbon dioxide. to extinguish.

P403+P235: Store in a well-ventilated place. Keep cool.

P407: Maintain air gap between stacks or pallets.

P413: Store bulk masses greater than kg/ lbs at temperatures not exceeding °C/°F.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
tetrahydrofuran	109-99-9	203-726-8 01-2119444314-46-XXXX	80	Flam. Liq. 2 H225 Acute Tox. 4 H302 Eye Irrit. 2 H319 STOT SE 3 H335 Carc. 2 H351	GHS02 GHS08 GHS07
potassium tert-butanolate	865-47-4	212-740-3	20	Flam. Sol. 1 H228	GHS02

		01-2119971575-26-0005		Self-heat. 1 H251 Skin Corr. 1A H314	GHS05
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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin Contact	Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a POISON CENTER/doctor.
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.
Ingestion	Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

4.2 Most important symptoms and effects, both acute and delayed

Causes burns.

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment (see Medical Advice on this label). Immediately call a POISON CENTER/doctor. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media	Use EUH014: Reacts violently with water. Do not use water. Extinguish preferably with dry chemical, sand or carbon dioxide. to extinguish.
Unsuitable extinguishing media	Water jet spray

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. May decompose in a fire, giving off toxic and irritant vapours.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure full personal protection (including respiratory protection) during removal of spillages.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Containers must not be punctured or destroyed by burning, even when empty.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting/equipment. Use non-sparking tools. Take action to prevent static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Storage temperature: Ambient.
Storage life: Stable under normal conditions.
Incompatible materials: None known.

7.3 Specific end use(s)

PC19 Intermediate

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Tetrahydrofuran	109-99-9	50	150	100	300	Sk
Tetrahydrofuran	109-99-9	50	150	100	300	IOELV, Skin

Region	Source
EU	EU Occupational Exposure Limits
United Kingdom	UK Workplace Exposure Limits EH40/2005 (Third edition, published 2018)

Remark	Notes
Sk	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.
IOELV	Indicative Occupational Exposure Limit Values.
Skin	The possibility of significant uptake through the skin.

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection Wear eye protection with side protection (EN166).



Skin protection Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards None known.

8.2.3. Environmental Exposure Controls Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid. Colour : Not known.
Odour	Not known.
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	Not known.
Initial boiling point and boiling range	Not known.
Flash Point	-20 °C -21.5°C
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	-0.914g/ml
Solubility(ies)	Solubility (Water) : EUH014: Reacts violently with water. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Avoid friction, sparks, or other means of ignition.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Calculation method : Harmful if swallowed. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 625.00000
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Calculation method : Causes severe skin burns and eye damage.
Serious eye damage/irritation	Calculation method : Causes serious eye damage.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified. H336: May cause drowsiness or dizziness.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Calculation method : Suspected of causing cancer.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	Calculation method : May cause respiratory irritation. H336: May cause drowsiness or dizziness.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

11.2 Other information

Not known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and Degradation

Not known.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

Not known.

12.6 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of contents in accordance with local, state or national legislation. Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Do not allow to enter drains, sewers or watercourses. Do NOT landfill. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimer or incinerator. Dispose of this material and its container to hazardous or special waste collection point. Dispose at suitable refuse site.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 2920

14.2 UN proper shipping name

UN proper shipping name CORROSIVE LIQUID, FLAMMABLE, N.O.S.

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 8

ADR Classification Code CF1

Special Provisions 274

Limited Quantities

Excepted Quantities E0

Emergency Action Code •3W

Mixed Packing Instructions for Packages P001

Special Packing Provisions for Packages

Mixed Packing Instructions for Packages MP8 MP17

Packing Instructions for Portable Tanks T14

Special Provisions for Portable Tanks TP2 TP27

Tank Code for Tanks L10BH

Special Provisions for Tanks

Vehicle for Tank Carriage FL

ADR Transport Category 1

Tunnel Restriction Code D/E

Special Provisions for Carriage -
Packages

Special Provisions for Carriage - Bulk

Special Provisions for Carriage - Loading,
Unloading and Handling

Special Provisions for Carriage -
Operation S2 S14

ADR HIN 883

IMDG

IMDG Class 8

Special Provisions 274

Limited Quantities

Excepted Quantities E0

Mixed Packing Instructions for Packages P001

Special Packing Provisions for Packages

Packing Instructions for Portable Tanks T14

Special Provisions for Portable Tanks TP2 TP27

IMDG EMS F-E, S-C

Stowage and Handling	Category C SW1 SW2
Segregation	
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	CORROSIVE LIQUID, FLAMMABLE, N.O.S.
Excepted Quantities	E0
Passenger and Cargo Aircraft Limited	Forbidden for transport by air.
Quantities Packing Instructions	
Passenger and Cargo Aircraft Limited	Forbidden for transport by air.
Quantities Max net Qty	
Passenger and Cargo Aircraft Packing	850
Instructions	
Passenger and Cargo Aircraft Max net Qty	0.5L
Cargo Aircraft Packing Instructions	854
Cargo Aircraft Max net Qty	2.5L
Special Provisions	
Emergency Response Guidebook (ERG) Code	8F
Labels	
Labels	8 +3



14.4 Packing group

Packing group I

14.5 Environmental hazards

Environmental hazards Not classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

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

No information available

SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

REACH: ANNEX XIV list of substances subject to authorisation Not listed

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not listed

Community Rolling Action Plan (CoRAP) Not listed

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the Not listed

European Parliament and of the Council
concerning the export and import of
hazardous chemicals

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS02



GHS05



GHS08



GHS07

GHS02: GHS: flame

GHS05: GHS: corrosive

GHS08: GHS: health hazard

GHS07: GHS: exclamation mark

Hazard classification

Flam. Liq. 2 : Flammable liquid, Category 2

Flam. Sol. 1 : Flammable solid, Category 1

Self-heat. 1 : Self-heating substance or mixture, Category 1

Acute Tox. 4 : Acute toxicity, Category 4

Skin Corr. 1 : Skin corrosion/irritation, Category 1

Skin Corr. 1A : Skin corrosion/irritation, Category 1A

Eye Dam. 1 : Serious eye damage/irritation, Category 1

Eye Irrit. 2 : Serious eye damage/irritation, Category 2

STOT SE 3_H335 : Specific target organ toxicity — single exposure, Category 3

Carc. 2 : Carcinogenicity, Category 2

Hazard Statement(s)

H225: Highly flammable liquid and vapour.

H228: Flammable solid.

H251: Self-heating: may catch fire.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H351: Suspected of causing cancer.

Precautionary Statement(s)

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/equipment.

P242: Use non-sparking tools.

P243: Take action to prevent static discharges.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands and exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P310: Immediately call a POISON CENTER/doctor.

P312: Call a POISON CENTER/doctor if you feel unwell.

P321: Specific treatment (see Medical Advice on this label).

P330: Rinse mouth.

P363: Wash contaminated clothing before reuse.

P370+P378: In case of fire: Use EUH014: Reacts violently with water. Do not use water. Extinguish preferably with dry chemical, sand or carbon dioxide. to extinguish.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

P501: Dispose of contents in accordance with local, state or national legislation.

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

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

IATA : International Air Transport Association

IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

vPvB : very Persistent and very Bioaccumulative

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