

# *Chem-Impex International Inc.*

---

Tel: (630) 766-2112  
E-mail: [sales@chemimpex.com](mailto:sales@chemimpex.com)  
**Shipping and Correspondence:**  
935 Dillon Drive  
Wood Dale, IL 60191 USA

Fax: (630) 766-2218  
Web site: [www.chemimpex.com](http://www.chemimpex.com)  
**Manufacturing site:**  
825 Dillon Drive  
Wood Dale, IL 60191 USA

## SAFETY DATA SHEET

---

### SECTION 1. CHEMICAL IDENTIFICATION

---

CATALOG #:	38465
NAME:	Potassium <i>tert</i> -butoxide, 20 wt.% solution in THF
SYNONYMS:	2-Methyl-2-propano potassium salt, 20 wt.% solution in THF Potassium <i>tert</i> -butylate, 20 wt.% solution in THF
24 HOUR EMERGENCY TELEPHONE:	(800) 535-5053(USA) 352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS:	(800) 869-9290
CUSTOMER SERVICE:	(630) 766-2112

### SECTION 2. HAZARDS IDENTIFICATION

---

#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

**GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)**  
FLAMMABLE LIQUIDS (CATEGORY 2), H225  
ACUTE TOXICITY, ORAL (CATEGORY 4), H302

SKIN CORROSION/IRRITATION (CATEGORY 1A), H314  
SERIOUS EYE DAMAGE/EYE IRRITATION (CATEGORY 2), H319  
CARCINOGENICITY (CATEGORY 2), H351  
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3),  
RESPIRATORY SYSTEM, H335  
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3),  
RESPIRATORY SYSTEM, H336

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

**GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS  
PICTOGRAM**



SIGNAL WORD 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.  
H336 MAY CAUSE DROWSINESS OR DIZZINESS.  
H351 SUSPECTED OF CAUSING CANCER.

**PRECAUTIONARY STATEMENT(S)**

P202 DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. NO SMOKING.

P240 GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.  
P241 USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ LIGHTING/ EQUIPMENT.

P242 USE ONLY NON-SPARKING TOOLS.  
P243 TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE.

P260 DO NOT BREATHE DUSTS OR MISTS.  
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 + 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/SHOWER.

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.

P310 IMMEDIATELY CALL A POISON CENTER/DOCTOR.  
P321 SPECIFIC TREATMENT (SEE ON THIS LABEL).  
P363 WASH CONTAMINATED CLOTHING BEFORE REUSE.  
P370 + P378 IN CASE OF FIRE: USE SAND, CARBON DIOXIDE OR POWDER EXTINGUISHER 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/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

**HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS** MAY FORM EXPLOSIVE PEROXIDES.

HAZARDOUS INGREDIENTS FOR LABELLING TETRAHYDROFURAN, POTASSIUM TERT-BUTANOLATE

---

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

---

MF: C<sub>4</sub>H<sub>9</sub>OK

MW: 112.21

PURITY: 19.5 - 20.5% (Assay by titration, total base calculated as KTB)

**HAZARDOUS COMPONENTS**

COMPONENT	CLASSIFICATION	CONCENTRATION
<b>TETRAHYDROFURAN</b>		
	ACUTE TOX. 4 / H302 EYE DAM. 1 / H318 CARC. 2 / H351 STOT SE 3 / H335 STOT SE 3 / H336 FLAM. LIQ. 2 / H225	≥ 79.5 ≤ 80.5
<b>POTASSIUM TERT-BUTANOLATE</b>		
	ACUTE TOX. 4 / H302 SKIN CORR. 1A / H314 EYE DAM. 1 / H318 FLAM. SOL. 1 / H228 SELF-HEAT. 2 / H252 CD / OSHA003	≥ 19.5 ≤ 20.5

---

---

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

---

## **SECTION 4. FIRST-AID MEASURES**

---

### **DESCRIPTION OF FIRST AID MEASURES**

<b>GENERAL ADVICE</b>	DO NOT LEAVE AFFECTED PERSON UNATTENDED. REMOVE VICTIM OUT OF THE DANGER AREA. KEEP AFFECTED PERSON WARM, STILL AND COVERED. TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. IN ALL CASES OF DOUBT, OR WHEN SYMPTOMS PERSIST, SEEK MEDICAL ADVICE. IN CASE OF UNCONSCIOUSNESS PLACE PERSON IN THE RECOVERY POSITION. NEVER GIVE ANYTHING BY MOUTH.
<b>IF INHALED</b>	IF BREATHING IS IRREGULAR OR STOPPED, IMMEDIATELY SEEK MEDICAL ASSISTANCE AND START FIRST AID ACTIONS. IN CASE OF RESPIRATORY TRACT IRRITATION, CONSULT A PHYSICIAN. PROVIDE FRESH AIR.
<b>IN CASE OF SKIN CONTACT</b>	GENTLY WASH WITH PLENTY OF SOAP AND WATER. TAKE OFF CONTAMINATED CLOTHING. AFTER CONTACT WITH SKIN, TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING, AND WASH IMMEDIATELY WITH ACETIC ACID 3 % AND PLENTY OF WATER.
<b>IN CASE OF EYE CONTACT</b>	REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IRRIGATE COPIOUSLY WITH CLEAN, FRESH WATER FOR AT LEAST 10 MINUTES, HOLDING THE EYELIDS APART.
<b>IF SWALLOWED</b>	RINSE MOUTH WITH WATER (ONLY IF THE PERSON IS CONSCIOUS). DO NOT INDUCE VOMITING. IF SWALLOWED IMMEDIATELY DRINK WATER, MILK
<b>MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED</b>	NARCOTIC EFFECTS. PULMONARY IRRITATION. HEADACHES AND DIZZINESS MAY OCCUR. PRODUCTION OF TISSUE DAMAGE IN THE EYE. PULMONARY OEDEMA.
<b>INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED</b>	NO DATA AVAILABLE

---

**SECTION 5. FIRE AND EXPLOSION DATA**

---

**EXTINGUISHING MEDIA****SUITABLE  
EXTINGUISHING MEDIA**

SUITABLE EXTINGUISHING MEDIA  
EXCESS OF WATER, ALCOHOL RESISTANT FOAM, BC-  
POWDER, CARBON DIOXIDE (CO<sub>2</sub>), SAND, DRY SAND

UNSUITABLE EXTINGUISHING MEDIA  
CHLORINATED HYDROCARBONS

**SPECIAL HAZARDS  
ARISING FROM THE  
SUBSTANCE OR MIXTURE**

IN CASE OF INSUFFICIENT VENTILATION AND/OR IN  
USE, MAY FORM FLAMMABLE/EXPLOSIVE VAPOR-AIR  
MIXTURE. SOLVENT VAPORS ARE HEAVIER THAN AIR  
AND MAY SPREAD ALONG FLOORS. PLACES WHICH  
ARE NOT VENTILATED, E.G. UNVENTILATED BELOW  
GROUND LEVEL AREAS SUCH AS TRENCHES,  
CONDUITS AND SHAFTS, ARE PARTICULARLY PRONE  
TO THE PRESENCE OF FLAMMABLE SUBSTANCES OR  
MIXTURES.

HAZARDOUS COMBUSTION PRODUCTS  
NITROGEN OXIDES (NO<sub>x</sub>), CARBON MONOXIDE (CO),  
CARBON DIOXIDE (CO<sub>2</sub>), SODIUM AND POTASSIUM  
HYDROXIDE

**ADVICE FOR  
FIREFIGHTERS**

IN CASE OF FIRE AND/OR EXPLOSION DO NOT  
BREATHE FUMES. COORDINATE FIREFIGHTING  
MEASURES TO THE FIRE SURROUNDINGS.  
FIREFIGHTING  
WATER FORMS CORROSIVE ALKALINE SOLUTIONS -  
SLIP HAZARD. DO NOT ALLOW FIREFIGHTING WATER  
TO ENTER DRAINS OR WATER COURSES. COLLECT  
CONTAMINATED FIREFIGHTING WATER SEPARATELY.  
FIGHT FIRE WITH NORMAL PRECAUTIONS FROM A  
REASONABLE DISTANCE.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS  
FOOTWEAR PROTECTING AGAINST CHEMICALS,  
PROTECTIVE CLOTHING AGAINST LIQUID AND  
GASEOUS CHEMICALS, INCLUDING LIQUID AEROSOLS  
AND SOLID PARTICLES, SELF-CONTAINED BREATHING  
APPARATUS (SCBA)

**FURTHER INFORMATION** NO DATA AVAILABLE

---

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

---

**PERSONAL  
PRECAUTIONS,  
PROTECTIVE  
EQUIPMENT AND  
EMERGENCY  
PROCEDURES**

FOR NON-EMERGENCY PERSONNEL  
FOLLOW EMERGENCY PROCEDURES SUCH AS THE  
NEED TO EVACUATE THE DANGER AREA OR TO  
CONSULT AN EXPERT. PREVENT SKIN CONTACT.  
AVOID INHALING SPRAYED PRODUCT.

FOR EMERGENCY RESPONDERS  
WEAR BREATHING APPARATUS IF EXPOSED TO  
VAPORS/DUST/AEROSOLS/GASES.  
FOR PERSONAL PROTECTION SEE SECTION 8.

**ENVIRONMENTAL  
PRECAUTIONS**

KEEP AWAY FROM DRAINS, SURFACE AND GROUND  
WATER. RETAIN CONTAMINATED WASHING WATER  
AND DISPOSE OF IT.

**METHODS AND  
MATERIALS FOR  
CONTAINMENT AND  
CLEANING UP**

ADVICE ON HOW TO CONTAIN A SPILL  
SET UP BARRIERS, COVERING OF DRAINS, TAKE UP  
MECHANICALLY

ADVICE ON HOW TO CLEAN UP A SPILL  
WIPE UP WITH ABSORBENT MATERIAL (E.G. CLOTH,  
FLEECE). TAKE UP MECHANICALLY. COLLECT  
SPILLAGE: SAWDUST, KIESELGUR (DIATOMITE),  
SAND, UNIVERSAL BINDER, ABSORBENT MATERIAL  
(E.G. SAND, DIATOMACEOUS EARTH, ACID BINDER,  
UNIVERSAL BINDER, SAWDUST,  
ETC.)

APPROPRIATE CONTAINMENT TECHNIQUES  
USE OF ADSORBENT MATERIALS.

SUITABLE MATERIAL FOR CLEANING/FOR TAKING UP  
KIESELGUR (DIATOMITE), SAWDUST, SAND, DRY SAND

OTHER INFORMATION RELATING TO SPILLS AND  
RELEASES  
PLACE IN APPROPRIATE CONTAINERS FOR DISPOSAL.  
VENTILATE AFFECTED AREA.

**REFERENCE TO OTHER  
SECTIONS**

HAZARDOUS COMBUSTION PRODUCTS: SEE SECTION  
5. PERSONAL PROTECTIVE EQUIPMENT: SEE SECTION 8.  
INCOMPATIBLE MATERIALS: SEE SECTION 10.  
DISPOSAL CONSIDERATIONS: SEE SECTION 13.

---

**SECTION 7. HANDLING AND STORAGE**

---

**PRECAUTIONS FOR  
SAFE HANDLING**

-MEASURES TO PREVENT FIRE AS WELL AS AEROSOL  
AND DUST GENERATION  
USE LOCAL AND GENERAL VENTILATION. AVOIDANCE  
OF IGNITION SOURCES. KEEP AWAY FROM SOURCES OF

IGNITION - NO SMOKING. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. USE ONLY IN WELL-VENTILATED AREAS. DUE TO DANGER OF EXPLOSION, PREVENT LEAKAGE OF VAPOURS INTO CELLARS, FLUES AND DITCHES. KEEP AWAY FROM HEAT, HOT SURFACES, SPARKS, OPEN FLAMES AND OTHER IGNITION SOURCES. NO SMOKING. GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT. USE EXPLOSION-PROOF ELECTRICAL/VENTILATING/LIGHTING/EQUIPMENT. USE ONLY NON-SPARKING TOOLS.

- SPECIFIC NOTES/DETAILS

PLACES WHICH ARE NOT VENTILATED, E.G. UNVENTILATED BELOW GROUND LEVEL AREAS SUCH AS TRENCHES, CONDUITS AND SHAFTS, ARE PARTICULARLY PRONE TO THE PRESENCE OF FLAMMABLE SUBSTANCES OR MIXTURES. VAPORS ARE HEAVIER THAN AIR, SPREAD ALONG FLOORS AND FORM EXPLOSIVE MIXTURES WITH AIR. VAPORS MAY FORM EXPLOSIVE MIXTURES WITH AIR.

- MEASURES TO PROTECT THE ENVIRONMENT

AVOID RELEASE TO THE ENVIRONMENT. DISPOSE OF CONTENTS/CONTAINER TO INDUSTRIAL COMBUSTION PLANT. DISPOSE OF CONTENTS/CONTAINER TO RECOVERY OR DISPOSAL FACILITIES. DISPOSE OF THIS MATERIAL AND ITS CONTAINER TO HAZARDOUS OR SPECIAL WASTE COLLECTION POINT. THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE. DO NOT EMPTY INTO DRAINS; DISPOSE OF THIS MATERIAL AND ITS CONTAINER AT HAZARDOUS OR SPECIAL WASTE COLLECTION POINT.

-ADVICE ON GENERAL OCCUPATIONAL HYGIENE

WASH HANDS AFTER USE. DO NOT EAT, DRINK AND SMOKE IN WORK AREAS. REMOVE CONTAMINATED CLOTHING AND PROTECTIVE EQUIPMENT BEFORE ENTERING EATING AREAS. NEVER KEEP FOOD OR DRINK IN THE VICINITY OF CHEMICALS. NEVER PLACE CHEMICALS IN CONTAINERS THAT ARE NORMALLY USED FOR FOOD OR DRINK. KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

MANAGING OF ASSOCIATED RISKS

-EXPLOSIVE ATMOSPHERES

KEEP CONTAINER TIGHTLY CLOSED. STORE IN A CLOSED CONTAINER. KEEP CONTAINER TIGHTLY CLOSED AND IN A WELL-VENTILATED PLACE. USE LOCAL AND GENERAL VENTILATION. USE ONLY IN WELL-VENTILATED AREAS. PROTECT FROM SUNLIGHT.

-FLAMMABILITY HAZARDS

KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.  
 KEEP AWAY FROM HEAT, HOT SURFACES, SPARKS, OPEN  
 FLAMES AND OTHER  
 IGNITION SOURCES. NO SMOKING. USE ONLY NON-  
 SPARKING TOOLS. TAKE PRECAUTIONARY MEASURES  
 AGAINST STATIC DISCHARGE.GROUND/BOND  
 CONTAINER AND RECEIVING EQUIPMENT. PROTECT  
 FROM SUNLIGHT.

-INCOMPATIBLE SUBSTANCES OR MIXTURES  
 OBSERVE COMPATIBLE STORAGE OF CHEMICALS. STORE  
 AWAY FROM OTHER MATERIALS.

-DO NOT MIX WITH  
 ACIDS, STRONG OXIDIZERS, OXIDIZERS

-EVAPORATIVE CONDITIONS  
 KEEP CONTAINER TIGHTLY CLOSED AND IN A WELL-  
 VENTILATED PLACE. KEEP UNDER INERT GAS.

-VENTILATION REQUIREMENTS  
 USE LOCAL AND GENERAL VENTILATION.  
 GROUND/BOND CONTAINER AND RECEIVING  
 EQUIPMENT.

-PACKAGING COMPATIBILITIES  
 ONLY PACKAGINGS WHICH ARE APPROVED (E.G. ACC. TO  
 THE DANGEROUS GOODS REGULATIONS) MAY BE USED.  
 METALLIC PACKAGING.  
 GLASS PACKAGING.

Store at RT

**SPECIFIC END USE(S)** APART FROM THE USES MENTIONED IN SECTION 1.2 NO  
 OTHER SPECIFIC USES ARE STIPULATED

---

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**CONTROL PARAMETERS**

**COMPONENTS WITH WORKPLACE CONTROL PARAMETERS**

COMPONENT	CAS- NO.	VALUE	CONTROL PARAMETERS	BASIS
TETRAHYDROFURAN	109- 99-9	TWA	50 PPM	USA. ACGIH THRESHOLD LIMIT VALUES (TLV)
		STEL	100 PPM	USA. ACGIH THRESHOLD LIMIT VALUES (TLV)



		TWA	200 PPM	1910.1000 USA. PERMISSIBLE EXPOSURE LIMITS (PEL)
		TWA	590 MG/M3	1910.1000 USA. PERMISSIBLE EXPOSURE LIMITS (PEL)

HAZARDOUS COMPONENTS WITHOUT WORKPLACE CONTROL PARAMETERS

**BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS**

COMPONENT	CAS-NO.	PARAMETERS	VALUE	BASIS
TETRAHYDROFURAN	109-99-9	TETRAHYDROFURAN	2 MG/L	ACGIH - BIOLOGICAL EXPOSURE INDICES (BEI)

**RELEVANT DNELS OF COMPONENTS OF THE MIXTURE**

COMPONENT	CAS-NO.	END POINT	THRESHOLD LEVEL	PROTECTION GOAL, ROUTE OF EXPOSURE	USED IN	EXPOSURE TIME
TETRAHYDROFURAN	109-99-9	DNEL	150 MG/M	HUMAN, INHALATORY	WORKER (INDUSTRY)	CHRONIC - SYSTEMIC EFFECTS
TETRAHYDROFURAN	109-99-9	DNEL	300 MG/M	HUMAN, INHALATORY	WORKER (INDUSTRY)	ACUTE - SYSTEMIC EFFECTS
TETRAHYDROFURAN	109-99-9	DNEL	150 MG/M	HUMAN, INHALATORY	WORKER (INDUSTRY)	CHRONIC - LOCAL EFFECTS
TETRAHYDROFURAN	109-99-9	DNEL	300 MG/M	HUMAN, INHALATORY	WORKER (INDUSTRY)	ACUTE - LOCAL EFFECTS
TETRAHYDROFURAN	109-99-9	DNEL	25 MG/KG BW/DAY	HUMAN, DERMAL	WORKER (INDUSTRY)	CHRONIC - SYSTEMIC EFFECTS
POTASSIUM TERT-BUTANOLATE	865-47-4	DNEL	1 MG/M	HUMAN, INHALATORY	WORKER (INDUSTRY)	CHRONIC - SYSTEMIC EFFECTS
POTASSIUM TERT-BUTANOLATE	865-47-4	DNEL	1 MG/M	HUMAN, INHALATORY	WORKER (INDUSTRY)	ACUTE - SYSTEMIC EFFECTS
POTASSIUM TERT-BUTANOLATE	865-47-4	DNEL	1 MG/M	HUMAN, INHALATORY	WORKER (INDUSTRY)	CHRONIC - LOCAL EFFECTS
POTASSIUM TERT-BUTANOLATE	865-47-4	DNEL	1 MG/M	HUMAN, INHALATORY	WORKER (INDUSTRY)	ACUTE - LOCAL EFFECTS

RELEVANT PNECS OF COMPONENTS OF THE MIXTURE

COMPONENT	CAS-NO.	END POINT	THRESHOLD LEVEL	PROTECTION GOAL, ROUTE OF EXPOSURE	USED IN	EXPOSURE TIME
TETRAHYDROFURAN	109-99-9	PNEC	4.32 MG/L	AQUATIC ORGANISMS	FRESHWATER	SHORT-TERM (SINGLE INSTANCE)
TETRAHYDROFURAN	109-99-9	PNEC	0.432 MG/L	AQUATIC ORGANISMS	MARINE WATER	SHORT-TERM (SINGLE INSTANCE)
TETRAHYDROFURAN	109-99-9	PNEC	4.6 MG/L	AQUATIC ORGANISMS	SEWAGE TREATMENT PLANT (STP)	SHORT-TERM (SINGLE INSTANCE)
TETRAHYDROFURAN	109-99-9	PNEC	23.3 MG/KG	AQUATIC ORGANISMS	FRESHWATER SEDIMENT	SHORT-TERM (SINGLE INSTANCE)
TETRAHYDROFURAN	109-99-9	PNEC	2.33 MG/KG	AQUATIC ORGANISMS	MARINE SEDIMENT	SHORT-TERM (SINGLE INSTANCE)
TETRAHYDROFURAN	109-99-9	PNEC	2.13 MG/KG	TERRESTRIAL ORGANISMS	SOIL	SHORT-TERM (SINGLE INSTANCE)
POTASSIUM TERT-BUTANOLATE	865-47-4	PNEC	0.11 MG/L	AQUATIC ORGANISMS	FRESHWATER	SHORT-TERM (SINGLE INSTANCE)
POTASSIUM TERT-BUTANOLATE	865-47-4	PNEC	0.011 MG/L	AQUATIC ORGANISMS	MARINE WATER	SHORT-TERM (SINGLE INSTANCE)
POTASSIUM TERT-BUTANOLATE	865-47-4	PNEC	10 MG/L	AQUATIC ORGANISMS	SEWAGE TREATMENT PLANT (STP)	SHORT-TERM (SINGLE INSTANCE)
POTASSIUM TERT-BUTANOLATE	865-47-4	PNEC	0.419 MG/KG	AQUATIC ORGANISMS	FRESHWATER SEDIMENT	SHORT-TERM (SINGLE INSTANCE)
POTASSIUM TERT-BUTANOLATE	865-47-4	PNEC	0.042 MG/KG	AQUATIC ORGANISMS	MARINE SEDIMENT	SHORT-TERM (SINGLE INSTANCE)
POTASSIUM TERT-BUTANOLATE	865-47-4	PNEC	0.019 MG/KG	TERRESTRIAL ORGANISMS	SOIL	SHORT-TERM (SINGLE INSTANCE)

## **EXPOSURE CONTROLS**

**APPROPRIATE ENGINEERING CONTROLS** EXHAUST VENTILATION.HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

## **PERSONAL PROTECTIVE EQUIPMENT**

**EYE/FACE PROTECTION** FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).

**SKIN PROTECTION** HAND PROTECTION  
WEAR SUITABLE GLOVES. CHEMICAL PROTECTION GLOVES ARE SUITABLE, WHICH ARE TESTED ACCORDING TO EN 374. CHECK LEAKTIGHTNESS/ IMPERMEABILITY PRIOR TO USE. IN THE CASE OF WANTING TO USE THE GLOVES AGAIN, CLEAN THEM BEFORE TAKING OFF AND AIR THEM WELL. FOR SPECIAL PURPOSES, IT IS RECOMMENDED TO CHECK THE RESISTANCE TO CHEMICALS OF THE PROTECTIVE GLOVES MENTIONED ABOVE TOGETHER WITH THE SUPPLIER OF THESE GLOVES.

TYPE OF MATERIAL  
NBR: ACRYLONITRILE-BUTADIENE RUBBER, IIR:  
ISOBUTENE-ISOPRENE (BUTYL) RUBBER, FKM: FLUORO-ELASTOMER, NITRILE

PROTECTIVE GLOVES - SPLASH PROTECTION  
TYPE OF MATERIAL NBR: ACRYLONITRILE-BUTADIENE RUBBER  
IIR: ISOBUTENE-ISOPRENE (BUTYL) RUBBER  
FKM: FLUORO-ELASTOMER  
NITRILE

OTHER PROTECTION MEASURES  
WASH HANDS THOROUGHLY AFTER HANDLING.  
PROTECTIVE CLOTHING AGAINST LIQUID CHEMICALS.  
FOOTWEAR PROTECTING AGAINST CHEMICALS.

**BODY PROTECTION** COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

**RESPIRATORY PROTECTION**

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

**CONTROL OF ENVIRONMENTAL EXPOSURE**

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

---

**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Colorless to amber liquid
ODOUR	LIKE ETHER
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING POINT/FREEZING POINT	
INITIAL BOILING POINT AND BOILING RANGE	65°C
FLASH POINT	-17.7 °C (closed cup)
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	NOT RELEVANT, (FLUID)
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NO DATA AVAILABLE
VAPOUR PRESSURE	17 KPA AT 20 C
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	0.91
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT: N- OCTANOL/WATER	NO DATA AVAILABLE
AUTO-IGNITION TEMPERATURE	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE	288.8 C
VISCOSITY	KINEMATIC VISCOSITY - 1.1 CST AT 20 C
EXPLOSIVE PROPERTIES	EXPLOSIVE
OXIDIZING PROPERTIES	NO DATA AVAILABLE
<b>OTHER SAFETY INFORMATION</b>	NO DATA AVAILABLE

---

**SECTION 10. STABILITY AND REACTIVITY**

---

<b>REACTIVITY</b>	IF HEATED: RISK OF IGNITION
<b>CHEMICAL STABILITY</b>	THE MATERIAL IS STABLE UNDER NORMAL AMBIENT AND ANTICIPATED STORAGE AND HANDLING CONDITIONS OF TEMPERATURE AND PRESSURE.
<b>POSSIBILITY OF HAZARDOUS REACTIONS</b>	REACTS WITH WATER, RELEASING EXCESS PRESSURE OR HEAT.
<b>CONDITIONS TO AVOID</b>	KEEP AWAY FROM HEAT, HOT SURFACES, SPARKS, OPEN FLAMES AND OTHER IGNITION SOURCES. NO SMOKING.  HINTS TO PREVENT FIRE OR EXPLOSION USE EXPLOSION-PROOF ELECTRICAL/VENTILATING/LIGHTING/EQUIPMENT. USE ONLY NON-SPARKING TOOLS. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE.
<b>INCOMPATIBLE MATERIALS</b>	WATER, ACIDS, OXIDIZERS
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	SODIUM AND POTASSIUM HYDROXIDE. HAZARDOUS COMBUSTION PRODUCTS: SEE SECTION 5.

---

**SECTION 11. TOXICOLOGICAL INFORMATION**

---

**INFORMATION ON TOXICOLOGICAL EFFECTS**

**ACUTE TOXICITY** HARMFUL IF SWALLOWED.

**ACUTE TOXICITY ESTIMATE (ATE) OF COMPONENTS OF THE MIXTURE**

<b>NAME OF SUBSTANCE</b>	<b>CAS NO</b>	<b>EXPOSURE ROUTE</b>	<b>ATE</b>
POTASSIUM TERT-BUTANOLATE	865-47-4	ORAL	690 MG/KG

**SKIN CORROSION/IRRITATION** CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. SKIN CORROSION PRODUCES AN IRREVERSIBLE DAMAGE TO THE SKIN; NAMELY, VISIBLE NECROSIS THROUGH THE EPIDERMIS AND INTO THE DERMIS. THE PRODUCT IS COMBUSTIBLE AND CAN BE IGNITED BY POTENTIAL IGNITION SOURCES.

<b>SERIOUS EYE DAMAGE/EYE IRRITATION</b>	CAUSES SERIOUS EYE DAMAGE. CAUSES SERIOUS EYE IRRITATION.
<b>RESPIRATORY OR SKIN SENSITISATION</b>	NO DATA AVAILABLE
<b>GERM CELL MUTAGENICITY</b>	NO DATA AVAILABLE
<b>CARCINOGENICITY</b>	SUSPECTED OF CAUSING CANCER.
<b>REPRODUCTIVE TOXICITY</b>	NO DATA AVAILABLE
<b>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</b>	MAY CAUSE RESPIRATORY IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS.
<b>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</b>	NO DATA AVAILABLE
<b>ASPIRATION HAZARD</b>	NO DATA AVAILABLE
<b>ADDITIONAL INFORMATION</b>	RTECS: NOT AVAILABLE TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL AND TOXICOLOGICAL PROPERTIES OF THIS SUBSTANCE HAVE NOT BEEN THOROUGHLY INVESTIGATED.

---

**SECTION 12. ECOLOGICAL INFORMATION**

---

<b>TOXICITY</b>	NO DATA AVAILABLE
<b>PERSISTENCE AND DEGRADABILITY</b>	NO DATA AVAILABLE
<b>BIOACCUMULATIVE POTENTIAL</b>	NO DATA AVAILABLE
<b>MOBILITY IN SOIL</b>	NO DATA AVAILABLE
<b>RESULTS OF PBT AND VPVB ASSESSMENT</b>	PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED
<b>OTHER ADVERSE EFFECTS</b>	NO DATA AVAILABLE

---

**SECTION 13. DISPOSAL CONSIDERATIONS**

---

**WASTE TREATMENT METHODS****PRODUCT**

DISPOSE OF CONTENTS/CONTAINER TO INDUSTRIAL COMBUSTION PLANT. DISPOSE OF CONTENTS/CONTAINER TO RECOVERY OR DISPOSAL FACILITIES. DISPOSE OF THIS MATERIAL AND ITS CONTAINER TO HAZARDOUS OR SPECIAL WASTE COLLECTION POINT. THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE.

-WASTE TREATMENT-RELEVANT INFORMATION  
INCINERATION. PHYSICO-CHEMICAL TREATMENT.

-SEWAGE DISPOSAL-RELEVANT INFORMATION  
DO NOT EMPTY INTO DRAINS. AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEETS.

-WASTE TREATMENT OF CONTAINERS/PACKAGES  
ONLY PACKAGINGS WHICH ARE APPROVED (E.G. ACC. TO DOT) MAY BE USED. COMPLETELY EMPTIED PACKAGES CAN BE RECYCLED.  
HANDLE CONTAMINATED PACKAGES IN THE SAME WAY AS THE SUBSTANCE ITSELF.

PLEASE CONSIDER THE RELEVANT NATIONAL OR REGIONAL PROVISIONS. WASTE SHALL BE SEPARATED INTO THE CATEGORIES THAT CAN BE HANDLED SEPARATELY BY THE LOCAL OR NATIONAL WASTE MANAGEMENT FACILITIES.

**CONTAMINATED PACKAGING**

DISPOSE OF AS UNUSED PRODUCT.

---

**SECTION 14. TRANSPORT INFORMATION**

---

**DOT (US)**

PROPER SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE, N.O.S. ( Potassium *tert*-butoxide, 20 wt.% solution in THF )  
UN NUMBER: 2920  
CLASS: 8 (3)  
PACKING GROUP: I

**IMDG**

PROPER SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE, N.O.S. ( Potassium *tert*-butoxide, 20 wt.% solution in THF )  
UN NUMBER: 2920  
CLASS: 8 (3)  
PACKING GROUP: I  
EMS-NO: F-E, S-C

**IATA**

PROPER SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE, N.O.S. ( Potassium *tert*-butoxide, 20 wt.% solution in THF )  
UN NUMBER: 2920  
CLASS: 8 (3)  
PACKING GROUP: I

---

**SECTION 15. REGULATORY INFORMATION**

---

**SARA 302 COMPONENTS** NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

**SARA 313 COMPONENTS** THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

**SARA 311/312 HAZARDS** ACUTE HEALTH HAZARD

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS**

	CAS-NO.	REVISION DATE
Potassium <i>tert</i> -butoxide, 20 wt.% solution in THF	865-47-4	

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS**

	CAS-NO.	REVISION DATE
Potassium <i>tert</i> -butoxide, 20 wt.% solution in THF	865-47-4	

**NEW JERSEY RIGHT TO KNOW COMPONENTS**

	CAS-NO.	REVISION DATE
Potassium <i>tert</i> -butoxide, 20 wt.% solution in THF	865-47-4	

**CALIFORNIA PROP. 65 COMPONENTS** THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

---

**SECTION 16. OTHER INFORMATION**

---



**FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.**

H225	HIGHLY FLAMMABLE LIQUID AND VAPOUR.
H302	HARMFUL IF SWALLOWED.
H314	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
H335	MAY CAUSE RESPIRATORY IRRITATION.
H336	MAY CAUSE DROWSINESS OR DIZZINESS.
H351	SUSPECTED OF CAUSING CANCER.

**HMIS RATING**

HEALTH HAZARD:	3
CHRONIC HEALTH HAZARD:	*
FLAMMABILITY:	3
PHYSICAL HAZARD	0

**NFPA RATING**

HEALTH HAZARD:	3
FIRE HAZARD:	3
REACTIVITY HAZARD:	0

**MSDS LEGEND**

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGINISTS
CAS:	CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)

**IMPORTANT:**

*THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES. IN NO EVENT SHALL **CII** BE LIABLE FOR ANY CLAIMS, LOSSES, OR DAMAGES OF ANY THIRD PARTY OR FOR LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF **CII** HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.*

VERSION: 3.1

REVISION DATE: 01/27/2017