

Material Safety Data Sheet

Potassium tert-butoxide, 1.0m solution in tetrahydrofuran

ACC# 09239

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium tert-butoxide, 1.0m solution in tetrahydrofuran
Catalog Numbers: AC371220000, AC371220010, AC371221000, AC371222500
Synonyms: Potassium tert-butyrate
Company Identification:
Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410
For information in North America, call: 800-ACROS-01
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
109-99-9	Tetrahydrofuran	ca. 89%	203-726-8
865-47-4	Potassium tert-butoxide		212-740-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available. Appearance: light yellow liquid. Flash Point: -19 deg C.

Not available.

Target Organs: Kidneys, central nervous system, liver, respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes severe eye burns.

Skin: Causes skin burns. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis.

Ingestion: Causes gastrointestinal tract burns.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes chemical burns to the respiratory tract. May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

Chronic: Prolonged or repeated eye contact may cause conjunctivitis. Prolonged or repeated skin contact may cause defatting and dermatitis. May cause liver and kidney damage.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Forms peroxides of unknown stability. Flammable liquid and vapor.

Extinguishing Media: Do NOT use water, carbon dioxide, or foam. Use dry sand, dry chemical, soda ash or lime.

Flash Point: -19 deg C (-2.20 deg F)

Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: 2 - health, 3 - flammability, 1 - instability

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of

ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Use spark-proof tools and explosion proof equipment. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. Prevent build up of vapors to explosive concentration.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Keep from contact with oxidizing materials. Flammables-area. Corrosives area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Tetrahydrofuran	50 ppm TWA; 100 ppm STEL; Skin - potential significant contribution to overall exposure by the cutaneous route	200 ppm TWA; 590 mg/m ³ TWA 2000 ppm IDLH	200 ppm TWA; 590 mg/m ³ TWA
Potassium tert-butoxide	none listed	none listed	none listed

OSHA Vacated PELs: Tetrahydrofuran: 200 ppm TWA; 590 mg/m³ TWA Potassium tert-butoxide: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Not available.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: light yellow

Odor: Not available.

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Not available.

Specific Gravity/Density: 0.902

Molecular Formula: C₄H₉KO

Molecular Weight: 112.21

Section 10 - Stability and Reactivity

Chemical Stability: Hygroscopic: absorbs moisture or water from the air. Reacts with water.

Conditions to Avoid: Incompatible materials, light, ignition sources, exposure to moist air or water.

Incompatibilities with Other Materials: Oxidizing materials, water, acids, sodium hydroxide, potassium hydroxide, bromine, lithium tetrahydroaluminate, metal halides.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of potassium.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 109-99-9: LU5950000

CAS# 865-47-4 unlisted.

LD50/LC50:

CAS# 109-99-9:

Inhalation, rat: LC50 = 21000 ppm/3H;

Oral, rat: LD50 = 1650 mg/kg;

CAS# 865-47-4:

Carcinogenicity:

CAS# 109-99-9:

- **ACGIH:** A3 - Confirmed animal carcinogen with unknown relevance to humans
- **California:** Not listed.
- **NTP:** Not listed.
- **IARC:** Not listed.

CAS# 865-47-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.**Teratogenicity:** No data available.**Reproductive Effects:** No data available.**Mutagenicity:** No data available.**Neurotoxicity:** No data available.**Other Studies:****Section 12 - Ecological Information****Ecotoxicity:** No data available. No information available.**Environmental:** No information available.**Physical:** No information available.**Other:** Do not empty into drains.**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.**RCRA U-Series:**

CAS# 109-99-9: waste number U213 (Ignitable waste).

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	CORROSIVE LIQUID, WATER-REACTIVE, N.O.S. *	No information available.
Hazard Class:	8	
UN Number:	UN3094	
Packing Group:	I	

Section 15 - Regulatory Information**US FEDERAL****TSCA**

CAS# 109-99-9 is listed on the TSCA inventory.

CAS# 865-47-4 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

CAS# 109-99-9: Testing required by manufacturers, processors; Test for Health Effects

Section 12b

CAS# 109-99-9: Section 4

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 109-99-9: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 109-99-9: immediate, fire, reactive.

Section 313 No chemicals are reportable under Section 313.**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 109-99-9 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota,

Massachusetts.

CAS# 865-47-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

F C

Risk Phrases:

R 11 Highly flammable.

R 14 Reacts violently with water.

R 19 May form explosive peroxides.

R 35 Causes severe burns.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 8 Keep container dry.

WGK (Water Danger/Protection)

CAS# 109-99-9: 1

CAS# 865-47-4: 1

Canada - DSL/NDSL

CAS# 109-99-9 is listed on Canada's DSL List.

CAS# 865-47-4 is listed on Canada's DSL List.

Canada - WHMIS

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 109-99-9 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 6/14/2005

Revision #0 Date: Original.

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 Fisher 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 Fisher has been advised of the possibility of such damages.