

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/25/2015

Reviewed on 04/27/2015

*** 1 Identification**

- **Product identifier**
- **Trade name: Modified K600 Potassium Eluant for Invitrogen Life Technologies**
- **Product number:** IVGN-K600
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Product description** Modified K600 Potassium Eluant
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Pickering Laboratories, Inc.
1280 Space Park Way
Mountain View, CA 94043
Phone: (650) 694-6700
Fax: (650) 968-0749
www.pickeringlabs.com
support@pickeringlabs.com
- **Emergency telephone number:**
Clean Harbors Environmental Services
1-800-645-8265

*** 2 Hazard(s) identification**

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Warning
- **Hazard statements**
Flammable liquid and vapor.
Causes serious eye irritation.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves / eye protection / face protection.
Wear eye protection / face protection.
Ground/bond container and receiving equipment.

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Keep container tightly closed.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
 Wash thoroughly after handling.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMS-ratings (scale 0 - 4)**



- **Hazard(s) not otherwise classified (HNOC):** None

* 3 Composition/information on ingredients

7732-18-5	Water, distilled water, deionized water	60-90%
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- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous Components:		
CAS: 67-63-0	Isopropyl alcohol	5-12%
RTECS: NT 8050000	⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 7758-11-4	Dipotassium Hydrogenorthophosphate	≤ 1.0%
CAS: 64-19-7	Acetic Acid	≤ 0.5%
RTECS: AF 1225000	⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	

* 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Not anticipated under normal use.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
 Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- **After swallowing:**
 Rinse mouth with water ensuring that rinse is not swallowed. Drink 2 glasses of water to dilute and induce vomiting by touching finger to the back of the victims throat. Get medical assistance immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Combustible liquid. Vapors can travel to a source of ignition and flash back.
Explosive mixtures may occur at temperatures at or above flashpoint.
- **Advice for firefighters**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Use neutralizing agent.
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with skin, eyes and clothing
Avoid breathing fumes.
Use personal protection equipment as outlined in section 8.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in dry conditions at a temperature range of 8°C - 25°C.
Keep away from any sources of heat or flame.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

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* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

- **Control parameters**

- **Components with occupational exposure limits:**

67-63-0 Isopropyl alcohol

PEL	Long-term value: 980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm BEI

- **Ingredients with biological limit values:**

67-63-0 Isopropyl alcohol

BEI	40 mg/L urine end of shift at end of workweek Acetone (background, nonspecific)
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- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Use adequate exhaust ventilation to prevent inhalation of product vapors.

Do not eat or drink while handling product.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing and wash before reuse.

- **Breathing equipment:**

Respiratory protection is not required unless handling of the material produces nuisance airborne concentrations.

- **Protection of hands:**



Protective gloves

- **Material of gloves** Rubber, latex or vinyl.

- **Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Lab coat

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* 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.
pH-value:	6.3 ± 0.05 @25 ± 0.4°C

· **Change in condition**

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	83 °C (181 °F)

· **Flash point:** 41 °C (106 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 456 °C (853 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

Lower:	0.0 Vol %
Upper:	12.0 Vol %

· **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)

· **Density @ 20 °C (68 °F):** 0.978 g/cm³ (8.161 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

Water: Aqueous solution

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

· **Solvent content:**

Organic solvents: 11.3 %

VOC content: 11.3 %

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability** Stable under normal conditions.

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

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- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

*** 11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Mild irritant effect.
- **on the eye:**
Irritating effect.
Causes serious eye irritation.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)	
67-63-0 Isopropyl alcohol	3

- **NTP (National Toxicology Program)**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

*** 12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

*** 13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**
Do not allow product to reach sewage system.
This product may be mixed with a combustible solvent and burned in a chemical incinerator equipped with an after burner and scrubber. This product can also be sent to an EPA approved waste disposal facility.
Observe all federal, state and local environmental regulations when disposing of this material.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

*** 14 Transport information**

- **UN-Number** UN1993
- **DOT, ADR, IMDG, IATA** UN1993
- **UN proper shipping name** Flammable liquids, n.o.s. (Isopropanol)
- **DOT** UN1993 Flammable liquids, n.o.s. (Isopropanol)
- **ADR** FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))
- **IMDG, IATA** FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))

· **Transport hazard class(es)**

· **DOT**



Consumer Commodity

- **Class** 3 Flammable liquids
- **Label** 3

· **ADR**



Consumer Commodity

- **Class** 3 (F1) Flammable liquids
- **Label** 3

· **IMDG, IATA**



Consumer Commodity

- **Class** 3 Flammable liquids
- **Label** 3

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- **Packing group**
 - **DOT, ADR, IMDG, IATA** III
 - **Environmental hazards:** Not applicable.
 - **Special precautions for user** Warning: Flammable liquids
 - **Danger code (Kemler):** 33
 - **EMS Number:** F-E, S-E
 - **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
 - **Transport/Additional information:**
 - **DOT**
 - **Quantity limitations** On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L
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- **ADR**
 - **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
-
- **IMDG**
 - **Limited quantities (LQ)** 5L
 - **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
 - **UN "Model Regulation":** UN1993, Flammable liquids, n.o.s. (Isopropanol), 3, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

<ul style="list-style-type: none"> · Section 355 (extremely hazardous substances): 	None of the ingredients are listed.
<ul style="list-style-type: none"> · Section 313 (Specific toxic chemical listings): 	67-63-0 Isopropyl alcohol
<ul style="list-style-type: none"> · TSCA (Toxic Substances Control Act): 	All ingredients are listed.
<ul style="list-style-type: none"> · California Proposition 65 	
<ul style="list-style-type: none"> · Chemicals known to cause cancer: 	None of the ingredients are listed.
<ul style="list-style-type: none"> · Chemicals known to cause reproductive toxicity for females: 	None of the ingredients are listed.
<ul style="list-style-type: none"> · Chemicals known to cause reproductive toxicity for males: 	None of the ingredients are listed.
<ul style="list-style-type: none"> · Chemicals known to cause developmental toxicity: 	None of the ingredients are listed.
<ul style="list-style-type: none"> · Carcinogenic categories 	
<ul style="list-style-type: none"> · EPA (Environmental Protection Agency) 	None of the ingredients are listed.

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· TLV (Threshold Limit Value established by ACGIH)	
67-63-0 Isopropyl alcohol	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients are listed.	

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms


GHS02 GHS07

Signal word Warning

Hazard statements

 Flammable liquid and vapor.
 Causes serious eye irritation.

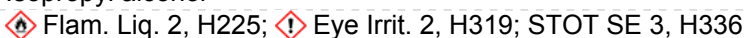
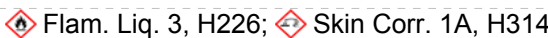
Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Use explosion-proof electrical/ventilating/lighting/equipment.
 Wear protective gloves / eye protection / face protection.
 Wear eye protection / face protection.
 Ground/bond container and receiving equipment.
 Keep container tightly closed.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
 Wash thoroughly after handling.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

State Right to Know

CAS: 67-63-0	Isopropyl alcohol	5-12%
RTECS: NT 8050000		
CAS: 7758-11-4	Dipotassium Hydrogenorthophosphate	≤ 1.0%
CAS: 64-19-7	Acetic Acid	≤ 0.5%
RTECS: AF 1225000		
CAS: 7732-18-5	Water, distilled water, deionized water	60-90%
All ingredients are listed.		

 · **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not

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establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision** 06/25/2015 / 9

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

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

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

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

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· *** Data compared to the previous version altered.**

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