

1 Identification

GHS Product Identifier

QBeads Evaluation Kit, Derivatized

Contains: phosphate buffered saline (sodium phosphate dibasic, potassium phosphate monobasic, water), sodium azide 0.09%

Other means of identification

Product numbers: 91242-91271

Recommended use of the chemical and restriction on use

SU24 scientific research and development.

This product is manufactured and sold by IntelliCyt Corporation for research use only. The kit and components are not intended for diagnostic or therapeutic use.

Supplier's details

IntelliCyt Corporation
9620 San Mateo Blvd. NE
Albuquerque, NM 87113
USA

Emergency phone number

+1 505-345-9075

2 Hazard(s) identification

Classification of the substance or mixture

Health Hazard

Category	Hazard
4	harmful if swallowed
2	causes skin irritation
2B	causes eye irritation
4	harmful if inhaled

Environmental Hazard

3	harmful to aquatic life with long lasting effects
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GHS label elements

Danger



Fatal if swallowed

May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Very toxic to aquatic life with long lasting effects

Avoid release to the environment.

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

IF SWALLOWED: Immediately call a POISON CENTER/doctor/emergency responders

Gently wash with plenty of soap and water.

Store in a dry place. Store in a closed container.

3 Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
sodium phosphate dibasic	7558-79-4	231-448-7	0	
potassium diphosphate	7778-77-0	230-785-7	0	
sodium azide	26628-22-8	262-822-8	0.09	

4 First-aid measures

Description of necessary first-aid measures

Eye Exposure: Hold eye open and rinse slowly and gently flush with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Clothing and/or Skin Exposure: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice

If Inhaled: Move person to fresh air. Call a poison control center or doctor for further treatment advice.

If Swallowed: Call a poison control center or physician immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Symptoms and effects unlikely to be acute or delayed.

Indication of immediate medical attention and special treatment needed, if necessary

No additional special treatment.

5 Fire-fighting measures

Suitable extinguishing media

Extinguishing media: Use water spray (fog), foam, dry powder, or carbon dioxide, as appropriate for surrounding fire and materials.

Unsuitable extinguishing media: Strong water jet.

Special protective actions for fire-fighters

As with any fire, fire fighters wear self-contained breathing apparatus and full protective gear to prevent contact with skin and eyes.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

If product is released or spilled, take proper precautions to minimize exposure by using appropriate personal protective equipment (see Section 8). Area should be adequately ventilated. Do not breathe mist/vapors/spray.

Environmental precautions

Do not empty into drains. Avoid release to the environment.

Methods and materials for containment and cleaning up

Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.

7 Handling and storage

Precautions for safe handling

Use only in well-ventilated areas. Handle and open container with care. Always close containers tightly after removal of product.

Follow recommendations for handling pharmaceutical agents (i.e., use of engineering controls and/or other personal protective equipment if needed). Avoid contact with skin, eyes and clothing. Provide eye shower and label its location conspicuously. Wash hands and face before breaks and after working with product. When using product, do not eat, drink, smoke, sniff.

Conditions for safe storage, including any incompatibilities

Contact with acids liberates very toxic gas.

8 Exposure controls/personal protection

Control parameters

Facilities storing or using this material should be equipped with eyewash facility and a safety shower. Use process enclosures and local exhaust ventilation.

Appropriate engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

Individual protection measures

Respiratory protection: Respiratory protection is not required.

Hand protection: Handle with gloves. Inspect gloves prior to use.

Gloves: Natural latex, Natural rubber, Nitrile.

Use proper glove removal technique (without touching glove's surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Skin protection: Choose skin protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. For this product wear lab coat.

Eye/face protection: Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available.

Environmental Exposure Controls: Avoid release to the environment and operate within closed systems wherever practicable. Air and liquid emissions should be directed to appropriate pollution control devices. In case of spill, do not release to drains. Implement appropriate and effective emergency response procedures to prevent release or spread of contamination and to prevent inadvertent contact by personnel.

Other protective measures: Wash hands in the event of contact with this product/mixture, especially before eating, drinking or smoking. Protective equipment is not to be worn outside the work area (e.g., in common areas or out-of-doors).

9 Physical and chemical properties

Physical and chemical properties

Sodium Azide

Physical State	Liquid
Appearance	Clear
Odor	none
pH	7.4
Melting Point/Range	275°C
Boiling Point/Range	300°C
Flash Point	N/A
Evaporation Rate	N/A
Flammability (solid,gas)	Not flammable
Vapor Pressure	N/A
Vapor Density	(air = 1.0): at 20° C, not applicable
Specific Gravity	1.846 (Water = 1)
Solubility	soluble in water
Partition coefficient; n-octanol/water	N/A
Autoignition Temperature	N/A
Decomposition Temperature	N/A
Viscosity	N/A

Potassium diphosphate

Physical State	solid
Appearance	colorless
Odor	odorless
Odor Threshold	N/A
pH	4,2 - 4,6 in 20 g/l water at 20 °
Melting Point/Range	253 °C
Boiling Point/Range	Information not available
Flash Point	N/A

Evaporation Rate	Information not available
Flammability (solid,gas)	Non-flammable
Flammability/explosive limits	
Upper	Information not available
Lower	Information not available
Vapor Pressure	Information not available
Vapor Density	Information not available
Specific Gravity	Information not available
Solubility	water 208 g/l at 20 °C
Partition coefficient; n-octanol/water	Information not available
Autoignition Temperature	Information not available
Decomposition Temperature	Information not available
Viscosity	Information not available

Sodium Phosphate Monobasic

Physical State	Powder Solid
Appearance	white
Odor	odorless
Odor Threshold	N/A
pH	4.1 - 4.7
Melting Point/Range	100 °C
Boiling Point/Range	No Information Available
Flash Point	N/A
Evaporation Rate	No Information Available
Flammability (solid,gas)	N/A
Flammability/explosive limits	
Upper	
Lower	
Vapor Pressure	negligible
Vapor Density	N/A
Specific Gravity	N/A
Solubility	Soluble in water
Partition coefficient; n-octanol/water	N/A
Autoignition Temperature	N/A
Decomposition Temperature	> 100°C
Viscosity	N/A

10 Stability and reactivity

Reactivity

This product contains low concentrations of Sodium Azide <0.1%. Sodium Azide can form explosive compounds with heavy metals which, with repeated contact with lead and copper commonly found in plumbing drains may result in the buildup of shock sensitive compounds.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Sodium azide is present in this product. Contact with acidic solutions and metal compounds over time may form potentially explosive metal azides. An accumulation of sodium azide may result in a reaction with lead or copper plumbing to form explosive metal azide complex. If drain disposed, dilute and flush with copious amount of running water to prevent azide build-up. Sodium Azide is dangerous when in contact with acid.

Conditions to avoid

oxidizing agents

Incompatible materials

Heavy metals may form extremely explosive azides.

Hazardous decomposition products

Sodium azide is known to form explosive compounds when it is combined with metal halides and many heavy metals such as, lead, copper, gold and silver.

11 Toxicological information

Toxicological (health) effects

See Section 2.

Information on the likely routes of exposure

Skin, eyes, inhalation, swallowing.

Symptoms related to the physical, chemical and toxicological characteristics

Skin: May cause skin irritation.

Eyes: Eye irritant.

Respiratory System: May be irritating to the respiratory system if inhaled.

Delayed and immediate effects and also chronic effects from short and long term exposure

No data available.

Numerical measures of toxicity (such as acute toxicity estimates)

Sodium Azide

Acute toxicity: LD50 oral – Rabbit - 10mg/kg

LC50 inhalation – Rat – 37mg/m³

LD50 Dermal – Rabbit – 20mg/kg

Lowest Observed Adverse Effect Level (LOAEL) – 1.25mg/kg body weight

Interactive effects

No data available.

12 Ecological information

Toxicity

To Daphnia and other aquatic invertebrates
EC50 – Daphnia pulex (Water flea) – 4.2mg/l – 48h

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

13 Disposal considerations

Disposal methods

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

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14 Transport information

UN Number

1687

UN Proper Shipping Name

QBeads Evaluation Kit, Derivatized

Transport hazard class(es)

6.1

Packing group, if applicable

II

Environmental hazards

See section 12

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

EU Regulation (EC) No. 1907/2006 (REACH):

Annex XIV - List of substances subject to authorization:

Substances of very high concern: None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market, and use of certain dangerous substances, mixtures, and articles: Not applicable.

Other information

The statements contained herein are offered for informational purposes only and are based upon technical data. IntelliCyt Corporation believes them to be accurate at the date of publication, but does not purport to be all-inclusive. The above-stated product is intended for use only by persons having the necessary technical skills and facilities for handling the product at their discretion and risk. Since conditions and manner of use are outside our control, we (IntelliCyt Corporation) make no warranty of merchantability or any such warranty, express or implied with respect to information and we assume no liability resulting from the above product or its use. Users should perform their own investigations to determine suitability of information and product for their particular purposes.