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DOCUMENT #: F/RPI/QC 7.7.3-02	PRODUCT NAME: EKONO Hybridization Buffer		RPI ITEM NO: 248800

SECTION 1 - CHEMICAL IDENTIFICATION

PRODUCT NAME: EKONO Hybridization Buffer
 RPI CATALOG #: 248800
 SUPPLIER'S NAME: Research Products International Corp.
 SUPPLIERS ADDRESS: 410 N Business Center Drive Mount Prospect, IL 60056
 EMERGENCY CONTACT: 1-800-424-9300
 OTHER INFORMATION: 847-635-7330

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

GHS-US classification: Not classified

Other hazards which do not result in classification: No labeling applicable

Other hazards which do not result in classification: No additional information available

Unknown acute toxicity (GHS US): Not applicable

Signal word: None

Precautionary statements:

P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	%age	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	7732-18-5	Q.S	Not classified
Sodium Lauryl Sulfate	151-21-3	< 45	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Sodium phosphate (Dibasic)	7558-79-4	10 - 50	Not classified

SECTION 4 - FIRST-AID MEASURES

4.1 Description of first aid measures

General advice: Consult a doctor and show this safety data sheet.

- i. **If inhaled:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

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- ii. **In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.
- iii. **In case of eye contact:** Flush with copious amounts of water for at least 15 minutes. Consult a doctor.
- iv. **If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water spray. Dry powder. Foam. Carbon dioxide.

5.2 Special hazards arising from the substance or mixture: Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3 Precautions for fire-fighters: Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

5.4 Further information: No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections: For required PPE see section 8. For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling: Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Keep in a dry place. Store at room temperature.

7.3 Specific end use(s): Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

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8.2 Exposure Controls

- i. **Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Personal protective equipment

- i. **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).
- ii. **Skin protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166
- iii. **Body Protection:** Wear appropriate protective clothing. 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.
- iv. **Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
- v. **Control of environmental exposure:** Do not let product enter drains

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid	Vapor Pressure	No Data Available
Odor	No Data Available	Vapor Density	No Data Available
Odor Threshold	No Data Available	Relative Density	No Data Available
pH	No Data Available	Water Solubility	No Data Available
Melting / Freezing Point	No Data Available	Partition Coefficient	No Data Available
Initial Boiling Point Range	No Data Available	Auto-Ignition Temperature	No Data Available
Flash Point	No Data Available	Decomposition Temperature	No Data Available
Evaporation Rate	No Data Available	Viscosity	No Data Available
Flammability (Solid, Gas)	No Data Available	Explosive Properties	No Data Available
Upper / Lower Flammability Or Explosive Limits	No Data Available	Oxidizing Properties	No Data Available

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Hazardous Decomposition Products/ Hazardous Polymerization: No Data Available.

Incompatibilities: Strong Oxidizing Agent.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

Component: Sodium Dodecyl Sulfate		CAS Number : 151-21-3
LD50 Oral	LD50 Dermal	LC50 inhalation
1,200 mg/kg (Rat)	580 mg/kg (Rabbit)	> 3,900 mg/m ³ (Rat) – 1Hr

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SECTION 12 - ECOLOGICAL INFORMATION

Eco Toxicity: The environmental impact of this product has not been fully investigated

Component: Sodium Dodecyl Sulfate	CAS Number 151-21-3
Toxicity to fish	Toxicity to Algae
LC50 15-18.9 mg/L Pimephales promelas 96 h	EC50 3.59 - 15.6 mg/L 96 h
LC50 4.06-5.75 mg/L Lepomis macrochirus 96 h	
LC50 4.2-4.8 mg/L Lepomis macrochirus 96 h	EC50 = 117 mg/L 96 h
LC50 6.2-9.6 mg/L Pimephales promelas 96 h	
LC50= 4.2 mg/L Oncorhynchus mykiss 96 h	EC50 = 53 mg/L 72 h
LC50 13.5-18.3 mg/L Poe cilia reticulate 96 h	
LC50 5.8-7.5 mg/L Pimephales promelas 96 h	EC50 30 - 100 mg/L 96 h
LC50 9.9-20.1 mg/L Brachydanio rerio 96 h	
LC50 10.2-22.5 mg/L Pimephales promelas 96 h	
LC50 8-12.5 mg/L Pimephales promelas 96 h	
LC50= 4.5 mg/L Lepomis macrochirus 96 h	
LC50= 4.62 mg/L Oncorhynchus mykiss 96 h	
LC50 10.8-16.6 mg/L Poe cilia reticulate 96 h	
LC50 22.1-22.8 mg/L Pimephales promelas 96 h	
LC50 4.3-8.5 mg/L Oncorhynchus mykiss 96 h	
LC50= 1.31 mg/L Cyprinus carpio 96 h	
LC50= 7.97 mg/L Brachydanio rerio 96 h	

Persistence and Degradability:

Biodegradability (Sodium Dodecyl Sulfate): aerobic - Exposure time 28 d
Result: 95 % - Readily biodegradable (OECD Test Guideline 301B)
Ratio BOD/ThBOD 95.9 %

Bioaccumulative Potential:

Bioaccumulation (Sodium Dodecyl Sulfate) Cyprinus carpio (Carp) - 72 h
Bioconcentration factor (BCF): 3.9 - 5.3

Mobility in soil: No data available

Results of PBT and vPvB assessment: No data available

Other adverse effects: No data available

Chronic Toxicity: There are no known carcinogenic chemicals in this product

SECTION 13 - DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local

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disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 - TRANSPORT INFORMATION

DOT	TDG	IATA	IMDG/IMO
Not regulated	Not regulated	Not regulated	Not regulated

SECTION 15 - REGULATORY INFORMATION

USA Federal Regulation

Component: Sodium Dodecyl Sulfate	CAS Number 151-21-3
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	

SARA 313/SARA 311/312 HAZARDOUS CATEGORIZATION: Not Applicable

Clean Water Act/ Clean Air Act: No Data Available

TSCA 12(b)/ OSHA/ CERCLA: Not Applicable

California Proposition 65: This product does not contain any Proposition 65 chemicals.

HMIS Rating

Health hazard	Chronic Health Hazard	Flammability	Physical Hazard
0		0	0

NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
0	0	0

US DEPARTMENT OF TRANSPORTATION

REPORTABLE QUANTITY (RQ)	DOT MARINE POLLUTANT	DOT SEVER MARINE POLLUTANT
No	No	No

U.S. DEPARTMENT OF HOMELAND SECURITY: This product does not contain any DHS chemicals.

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

This SDS complies with the requirements of Regulation (EC).

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Research Products International Corp. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. This product is sold for laboratory research and development purposes use only.

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Full text of H-phrases

H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Harmful in contact with skin
H319	Causes serious eye irritation