



CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

Product name: Hybridization Mix

Issue date: 20-July-2021

Revision date: -

Version #: 01

SECTION 1 Chemical product and company identification

Chinese name of chemical	杂交混合液
English name of chemical	Hybridization Mix
Product code	CP2-HYB-001
Company Name	UltraVision Technology Limited
Address	Room 1210, Unit 3, Long De Zi Jin mansion, No. 186 Li Tang Road, Changping district, Beijing ,PR China
Telephone	17717469190
Website	dovetailgenomics.com
Emergency phone number	+86 4001 2001 74
Access code	334943
Recommended use and Limitations on use	
Recommended use	Molecular Biology Kit.
Issue date	20-July-2021
Revision date	-
Supersedes date	-

SECTION 2 Hazards identification

Emergency overview	Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure. Causes mild skin irritation. Dangerous for the environment if discharged into watercourses.	
GHS hazard categories		
Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 3
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
Label elements		
Pictograms		
Signal word	Danger	
Hazard statement		
H318	Causes serious eye damage.	
H316	Causes mild skin irritation.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H401	Toxic to aquatic life.	
Precautionary statement		
Prevention		
P260	Do not breathe mist/vapors.	
P273	Avoid release to the environment.	
P280	Wear eye protection/face protection.	
Response		
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.	
P332 + P313	If skin irritation occurs: Get medical advice/attention.	

Safety storage	Store away from incompatible materials.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Physical and chemical hazards	The product is stable and non-reactive under normal conditions of use, storage and transport. No unusual fire or explosion hazards noted.
Health hazards	Causes serious eye damage. Causes mild skin irritation. Expected to be a low ingestion hazard.
Environmental hazards	Toxic to aquatic life.
Supplemental information	None.

SECTION 3 Composition/information on ingredients

Substance/mixture	Mixture	
Chemical name	Concentration (%)	CAS Number
十二烷基硫酸钠 Sodium dodecyl sulfate	0.1 - 5	151-21-3
乙二胺四乙酸, 二钠盐 Ethylenediaminetetraacetate, di sodium salt	0.1 - 3	139-33-3
Composition comments	All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.	

SECTION 4 First aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms and health effects	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Mild skin irritation. Prolonged exposure may cause chronic effects.
Personal protection for first-aid responders	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5 Fire-fighting measures

Extinguishing media	Water fog. Foam. Powder. Carbon dioxide (CO2).
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protection of fire-fighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
General fire hazards	No unusual fire or explosion hazards noted.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Wear appropriate personal protective equipment.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Clean-up methods and materials and containment measures	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Prevention of secondary hazards	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. None known.

SECTION 7 Handling and storage

Handling	Do not breathe mist/vapors. Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
Storage	Store in tightly closed container. Recommended storage temperature: -20°C. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8 Exposure controls/personal protection

Exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Monitoring methods	Follow standard monitoring procedures.
Engineering measures	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.
Personal protective equipment	
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Eye protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear suitable protective clothing.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9 Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Clear. Colorless.
Odor	Odorless.
pH	6.5 - 8.5
Melting point/freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Flammability (solid, gas)	Not applicable.
Other data	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

SECTION 10 Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
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Stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Alkaline metals. Isocyanates.
Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11 Toxicological information

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
Sodium dodecyl sulfate (CAS 151-21-3)		
<u>Acute</u>		
Oral		
LD50	Rat	1200 mg/kg
Routes of exposure	Skin contact. Eye contact.	
Symptoms	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Mild skin irritation.	
Skin corrosion/irritation	Causes mild skin irritation.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitizer	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
Toxic to reproduction	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity following single exposure	Not classified.	
Specific target organ toxicity following repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	May cause damage to organs through prolonged or repeated exposure.	
Other information	The toxicological properties of this material have not been fully investigated.	

SECTION 12 Ecological information

Ecotoxicological data			
Components		Species	Test Results
Ethylenediaminetetraacetate, di sodium salt (CAS 139-33-3)			
Aquatic			
Acute			
Fish	LC50	Guppy (Poecilia reticulata)	320 mg/l, 96 Hours
Sodium dodecyl sulfate (CAS 151-21-3)			
Aquatic			
Acute			
Algae	EC50	Scenedesmus subspicatus	36.5 mg/l, 72 Hours
Crustacea	EC50	Ceriodaphnia dubia	5.55 mg/l, 48 Hours
Fish	LC50	Lepomis macrochirus	4.5 mg/l, 96 Hours
Ecotoxicity	Toxic to aquatic life.		
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulation			

Bioaccumulative potential**Octanol/water partition coefficient log K_{ow}**

Sodium dodecyl sulfate (CAS 151-21-3) 1.6

Mobility in soil No data available for this product.**Other hazardous effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.**SECTION 13 Disposal considerations****Residual waste** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.**Local disposal regulations** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.**SECTION 14 Transport information****CNDG**

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.**SECTION 15 Regulatory information****Law of the People's Republic of China on Prevention and Control of Occupational Diseases**

Not regulated.

Regulations on the Control over Safety of Dangerous Chemicals

Not regulated.

Provision on the Environmental Administration of New Chemical Substances**China Inventory of Existing Chemical Substances**

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Other regulations

This safety data sheet conforms to the following laws, regulations and standards:
Measures for the Safe Use of Chemicals in Workplaces
General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009)
Regulations on Labor Protection in Workplaces Where Toxic Products Are Used
Packing Symbol of Dangerous Goods(GB190-2009)
Regulations on the Control over Safety of Dangerous Chemicals
Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)
Packing - Pictorial Marking for Handling of Goods (GB/T191-2009)

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

SECTION 16 Other information**References**

EPA: AQUIRE database
GB6944-2012: Classification and Code of Dangerous Goods.
GB12268-2012: List of Dangerous Goods.
IARC Monographs. Overall Evaluation of Carcinogenicity
NLM: Hazardous Substances Data Base

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