

MATERIAL SAFETY DATA SHEET

SECTION 1 - Product and Company Information

Product name: FISH Hybridization Buffer (Catalog # : U0029)
Company: Abnova (Taiwan) Corporation
Address: 9th Fl., No.108, Jhouzih St., Neihu District, Taipei City, 114 Taiwan.
Telephone: +886-2-87511888
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SECTION 2 - Composition/Information on Ingredient

Distinction compound of unification study material and compound

CAS#	Chemical Name	Percent (w/v)	EINECS/ELINCS
75-12-7	Formamide (CH ₃ NO)	40-60%	200-842-0

SECTION 3 - Hazards Identification

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation. May cause gastric disturbances and electrolytic imbalance. Ingestion of large amounts of sodium chloride may cause nausea, and vomiting, rigidity or convulsions. Continued exposure can produce coma, dehydration and internal organ congestion.

Inhalation: May cause respiratory tract irritation.

Chronic: No information found. None

SECTION 4 - First Aid Measures

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

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

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

Notes to Physician: Treat symptomatically and supportively.

SECTION 5 - Fire Fighting Measures

Fire Extinguisher Type: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Fire Fighting Procedure: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible.

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

SECTION 6 - Accidental Release Measures

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

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

SECTION 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

SECTION 8 - Exposure Controls

Eyes: 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.

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

Appearance: liquid

pH: 7.0 at 20°C

Boiling point:	Not available
Vapor density:	Not available
Vapor pressure:	Not available
Density (g cm-3):	1.247 g/cm3 (20°C)
Flash point:	Not available
Explosion limits:	Not available
Auto ignition temperature:	Not available

SECTION 10 - Stability and Reactivity

Chemical Stability:	Stable.
Incompatibilities with Other	Strong oxidizing agents, acids, bases.
Materials:	
Hazardous Polymerization:	Will not occur.

SECTION 11 - Toxicological Information

Epidemiology:	No information found
Teratogenicity:	No information found
Reproductive Effects:	Formamide has shown teratogenic effects in laboratory animals. May cause harm to the unborn child.
Mutagenicity:	No information found
Neurotoxicity:	No information found

SECTION 12 - Ecological Information

Do not infiltrate the product which has not been diluted or neutralized.

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.

SECTION 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:	Not regulated as a hazardous material	No information available.
UN Number:	Not regulated as a hazardous material	No information available.
Packing Group:	Not regulated as a hazardous material	No information available.

SECTION 15 - Regulatory Information

US Federal and State Regulations:

CAS# 75-12-7 can be found on the following state right to know lists: Minnesota, New Jersey, Pennsylvania, Illinois, Massachusetts

TSCA

CAS# 75-12-7 is listed on TSCA 8(b) inventory

CAS# 75-12-7 is listed on TSCA 8(a) PAIR

CAS# 75-12-7 is listed on TSCA 8(d) H and S data reporting

CAS# 75-12-7 is listed on the TSCA Inventory.

European/International Regulations

CAS# 75-12-7 is listed on European Labeling in Accordance with EC Directives:

Hazard Symbols: T

Risk Phrases:

R 61 May cause harm to the unborn child.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

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

WGK (Water Danger/Protection)

CAS# 75-12-7: 1

HMIS (U.S.A.):

CAS# 75-12-7:

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

CAS# 75-12-7:

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Other Regulations:**Canada - DSL/NDSL**

CAS# 75-12-7 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2A, D2B

CAS# 75-12-7 is listed on Canada's Ingredient Disclosure List

OSHA: CAS# 75-12-7 is listed on Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: CAS# 75-12-7 is listed on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CAS# 75-12-7 is listed on CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC): CAS# 75-12-7 is listed on R61- May cause harm to the unborn child. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S53- Avoid exposure - obtain special instructions before use.

Protective Equipment:

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

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. Abnova shall not be held liable for any damage resulting from handling or from contact with the above product.