

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: High Efficiency Hybridization System (with or without formamide).
Cat. No: HS 114, HS 114F

Molecular Research Center, Inc.
5645 Montgomery Rd.
Cincinnati, Ohio 45212
USA 1-888-841-0900

Product Name: High Efficiency Hybridization System
Chemical Formula: A formulation.
Molecular Weight: N/A

HMIS Rating (scale 0-4) Health=2 Fire=1 Reactivity=0 PPE=C

CHEMTREC EMERGENCY NUMBER: Only in the event of an emergency involving a spill, leak, fire exposure or accident. USA: 1-800-424-9300; International: 1-703-527-3887

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Percent
High Efficiency Hyb Solution	N/A	Proprietary Information
Formamide	75-12-7	< 50 % (Note: Ingredient of HS-114F only)

3. HAZARD IDENTIFICATION

ROUTES OF EXPOSURE:	Skin	Yes
	Ingestion	Yes
	Inhalation	Yes

ACUTE EFFECTS: Causes eye and skin irritation. Exposure may cause irritation to mucous membranes and upper respiratory tract. Harmful if swallowed.

CHRONIC EFFECTS: Prolonged or repeated exposure to reagents containing formamide may cause adverse reproductive effects. May cause fetal effects. See FORMAZOL MSDS for more detailed information relating to formamide.

4. FIRST AID

In case of contact, immediately flush eyes or skin with water for at least 15 min while removing contaminated clothing and shoes. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, wash out mouth with water provided person is conscious. Seek medical attention. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Wash contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

Negligible fire hazard when exposed to heat or flame. Extinguishing media: water spray, carbon dioxide, dry chemical powder or appropriate foam. Fires involving formamide will likely produce very toxic gases that should not be inhaled. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Evacuate unnecessary personnel from area. Provide adequate general or local exhaust ventilation. If adequate ventilation is unavailable, wear self-contained breathing apparatus. Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective gloves and protective clothing to prevent skin exposure. Absorb on sand or vermiculite and place in containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Irritant. Keep container closed. Store in a cool dry place. Wear lab coat, gloves and eye protection and provide adequate ventilation. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

For routine operations wear lab coat, gloves and safety glasses to avoid contact with eyes, skin and clothing. Ensure availability of eyewash and safety shower. Avoid prolonged or repeated inhalation and skin exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, light orange liquid.
Assay: >99 %
Solubility: Water, ethanol.

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures and pressures.

INCOMPATIBILITIES: Strong oxidizing agents, bromine trifluoride, iodine heptafluoride and potassium chlorate. In addition, HS-114F (with formamide) is incompatible with aluminum, acids, bases, calcium nitrate, pyridine, iodine and sulfur trioxide.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides, ammonia and chlorine.

11. TOXICOLOGICAL INFORMATION

May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation. Material is irritating to mucous membranes and upper respiratory tract. To the best of our knowledge, the chemical, physical, and toxicological properties of this formulation have not been thoroughly investigated. HS-114F containing formamide may pose a potential birth defect hazard.

