



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US - OSHA Hazard Communication Standard (29 CFR 1910.1200)

Issuing Date 28-Feb-2022

Revision Date 28-Feb-2022

Revision Number 1

1. Identification

Product identifier

Product Name Universal H&W Kit - Formamide

Other means of identification

Product Code(s) 770400-24,770500-24,770400-96,770500-96

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Additive
For research use only

Restrictions on use None known

Details of the supplier of the safety data sheet

Supplier Address

Oxford Gene Technology Inc.
(North America office)
520 White Plains Road, Suite 500
Tarrytown, NY 10591
USA

E-mail support@ogt.com

Emergency telephone number

Emergency telephone 914 467 5285

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Reproductive toxicity	Category 1B
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Hazards not otherwise classified (HNOC)

Not applicable.

Label elements

Danger

Hazard statements

May damage fertility or the unborn child.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical, CO2, alcohol-resistant foam or water spray.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical No information available.

Hazardous combustion products Toxic gases or vapors: Ammonia. Hydrogen cyanide. Carbon monoxide. Nitrogen oxides (NOx).

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Store at ambient conditions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Formamide	TWA: 1 ppm	(vacated) TWA: 20 ppm	TWA: 10 ppm

75-12-7	S*	(vacated) TWA: 30 mg/m ³ (vacated) STEL: 30 ppm (vacated) STEL: 45 mg/m ³	TWA: 15 mg/m ³
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Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Colorless liquid
 Physical state Liquid
 Color Colorless
Odor Odorless
Odor threshold No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No data available
Melting point / freezing point	26 °C / 78.8 °F	
Initial boiling point and boiling range	218.3 °C / 424.9 °F	
Flash point	152 °C / 305.6 °F	
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure	0.06 hPa	@ 20 °C
Vapor density		No data available
Relative density		No data available
Water solubility	Miscible in water	
Solubility(ies)		No data available
Partition coefficient	Log Kow: -0.82	@ 25 °C
Autoignition temperature	> 500 °C / > 932 °F	
Decomposition temperature	> 140 °C / > 284 °F	
Kinematic viscosity		No data available
Dynamic viscosity	3.764 mPa s	@ 20 °C

Other information

Explosive properties	Not an explosive
Oxidizing properties	Not an oxidizer
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	1.13 g/cm ³ @ 20°C
Bulk density	No information available

10. Stability and reactivity

Reactivity	None under normal use conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Excessive heat. Extremes of temperature and direct sunlight.
Incompatible materials	Oxidizing agent. Acids. Aluminum. Iron. Copper. Alkali. Iodine. Pyridine. Sulfur trioxide. Natural rubber.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	May be harmful if inhaled.
Eye contact	Not expected to cause eye irritation.
Skin contact	Non-irritating during normal use.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	5,605.00 mg/kg
ATEmix (dermal)	6,030.20 mg/kg
ATEmix (inhalation-dust/mist)	21.10 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Formamide 75-12-7	= 5577 mg/kg (Rat)	= 6 g/kg (Rabbit)	> 21 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Skin corrosion/irritation** No information available.
- Serious eye damage/eye irritation** No information available.
- Respiratory or skin sensitization** No information available.
- Germ cell mutagenicity** No information available.
- Carcinogenicity** No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Formamide 75-12-7	A3	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

- Reproductive toxicity** Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.
- STOT - single exposure** No information available.
- STOT - repeated exposure** No information available.
- Target organ effects** Respiratory system. Reproductive system.
- Aspiration hazard** No information available.
- Other adverse effects** No information available.
- Interactive effects** No information available.

12. Ecological information

Ecotoxicity Low toxicity to aquatic organisms.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Formamide 75-12-7	EC50: >500mg/L (72h, Desmodesmus subspicatus) EC50: >500mg/L (96h, Desmodesmus subspicatus)	LC50: =9135mg/L (96h, Brachydanio rerio)	-	EC50: >500mg/L (48h, Daphnia magna)

Persistence and degradability Readily biodegradable.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Formamide 75-12-7	-0.82

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Formamide 75-12-7	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 1	Flammability 1	Instability 0	Special hazards -
HMIS	Health hazards * 2	Flammability 1	Physical hazards 0	Personal protection X

Chronic Hazard Star Legend * = Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

- Agency for Toxic Substances and Disease Registry (ATSDR)
- U.S. Environmental Protection Agency ChemView Database
- European Food Safety Authority (EFSA)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AEGl(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
- U.S. Environmental Protection Agency High Production Volume Chemicals
- Food Research Journal
- Hazardous Substance Database
- International Uniform Chemical Information Database (IUCLID)
- Japan GHS Classification
- Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
- NIOSH (National Institute for Occupational Safety and Health)
- National Library of Medicine's ChemID Plus (NLM CIP)
- National Library of Medicine's PubMed database (NLM PUBMED)
- National Toxicology Program (NTP)
- New Zealand's Chemical Classification and Information Database (CCID)
- Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
- Organization for Economic Co-operation and Development High Production Volume Chemicals Program
- Organization for Economic Co-operation and Development Screening Information Data Set
- World Health Organization

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

End of Safety Data Sheet