



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: SafeWork Australia Approved Code of Practice about the preparation of safety data sheets for hazardous chemicals (July 2020), which is an approved code of practice under section 274 of the Work Health and Safety Act

Issuing Date 15-Oct-2021

Revision date 04-Dec-2024

Revision Number 3

Section 1: Identification

Product identifier

Product Name Hybridisation Solution
Product Code(s) HA **** / HB **** / HI ****

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals
For professional use only
Uses advised against None known

Illicit Drug Precursors/Reagents This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling, and storing these substances.

Details of manufacturer or importer

Importer

Sysmex Australia Pty Ltd
Suite 3, Level 5
15 Talavera Rd
Macquarie Park
NSW 2113
Telephone no. +61 2 9016 3040

Manufacturer

CytoCell Ltd., Oxford Gene Technology
418 Cambridge Science Park, Milton Road,
Cambridge
CB4 0PZ, United Kingdom
T: +44 (0)1223 294048
F: +44 (0)1223 294986
probes@cytoCell.com
<http://www.ogt.com>

For further information, please contact

Emergency telephone number

Emergency telephone number For medical advice (English): 13 11 26 (NSW Poisons Information Centre)

Section 2: Hazard(s) identification

Classification of the substance or mixture

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Reproductive toxicity	Category 1B

Label elements

Exclamation mark
Health hazard



Signal word
DANGER

Hazard statements
Causes skin irritation
Causes serious eye irritation
May damage fertility or the unborn child

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/clothing and eye/face protection
Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of water and soap
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification

The product does not contain any substance(s) classified as PBT or vPvB.

Section 3: Composition/information on ingredients

Chemical name	CAS No.	Weight-%
Formamide	75-12-7	<70
Dextran sulfate sodium	9011-18-1	10 - <15
Sodium chloride	7647-14-5	<1
Non-hazardous ingredients	Proprietary	Balance

Section 4: First aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Emergency telephone number Poisons Information Centre, Australia: 13 11 26

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur. Remove person to fresh air and keep comfortable for breathing.

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms	Skin irritation. May cause redness and tearing of the eyes. Burning sensation.
Effects of Exposure	Contains a known or suspected reproductive toxin. May damage the unborn child. May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility.

Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
------------------------	------------------------

Section 5: Firefighting measures**Suitable Extinguishing Media**

Suitable extinguishing equipment	Dry chemical, CO ₂ , water spray or alcohol-resistant foam.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the chemical	No information available.
Hazardous combustion products	Thermal decomposition can lead to release of irritating and toxic gases and vapours, Carbon oxides, Sodium oxides, Nitrogen oxides (NO _x), Hydrogen cyanide, Ammonia.

Special protective actions for firefighters

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

Section 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. See section 8 for more information. Avoid breathing vapours or mists. Do not touch or walk through spilled material.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Methods for cleaning up Pick up and transfer to properly labelled containers. After cleaning, flush away traces with water. Wash thoroughly after handling.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 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. Take off contaminated clothing and wash before re-use. Wear personal protective equipment. Wash hands thoroughly after handling.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from Incompatible materials.

Incompatible materials Strong acids, Strong bases, Strong oxidising agents, Metals, Sulphur trioxide.

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits

Chemical name	Australia	New Zealand	ACGIH TLV
Formamide 75-12-7	TWA: 10 ppm TWA: 18 mg/m ³	TWA: 10 ppm TWA: 18 mg/m ³ Sk*	TWA: 1 ppm Sk*

Chemical name	European Union	United Kingdom	Germany DFG
Formamide 75-12-7	-	TWA: 20 ppm TWA: 37 mg/m ³ STEL: 30 ppm STEL: 56 mg/m ³	Sk*

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
----------------------	---

Individual protection measures, such as personal protective equipment

Eye/face protection	If splashes are likely to occur, wear safety glasses with side-shields.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.
Hand protection	Wear suitable gloves. Impervious gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.
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.
Environmental exposure controls	No information available.
Thermal hazards	No information available.

Section 9: Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

Physical state	Liquid
Colour	Varies
Odour	Odourless
Odour threshold	No information available

Property**Values****Remarks • Method**

Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		Not applicable
Lower flammability or explosive limits		Not applicable
Flash point	154 °C	
Auto-ignition temperature		No data available
Decomposition temperature		No data available
SADT (°C)		No data available
pH		Not applicable
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Vapour pressure		No data available
Relative density		No data available
Bulk density		No data available
Liquid Density		No data available
Relative vapour density		No data available

Particle characteristics	No information available
Particle Size	No data available
Particle Size Distribution	No data available

Other information

Molecular weight	No information available
VOC content	No information available
Softening point	No information available

Information with regard to physical hazard classes**Explosives**

Explosive properties	No information available
Not applicable	

Oxidising properties	No information available
-----------------------------	--------------------------

Section 10: Stability and reactivity**Reactivity**

Reactivity	None under normal use conditions.
-------------------	-----------------------------------

Chemical stability

Stability	Stable under normal conditions.
------------------	---------------------------------

Explosion data

Sensitivity to mechanical impact	None.
---	-------

Sensitivity to static discharge	None.
--	-------

Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.
---	-------------------------------

Conditions to avoid

Conditions to avoid	Extremes of temperature and direct sunlight.
----------------------------	--

Incompatible materials

Incompatible materials	Strong acids, Strong bases, Strong oxidising agents, Metals, Sulphur trioxide.
-------------------------------	--

Hazardous decomposition products

Hazardous decomposition products	Carbon oxides, Nitrogen oxides (NO _x), Silicon oxides, Hydrogen cyanide, Ammonia.
---	---

Section 11: Toxicological information**Information on likely routes of exposure****Product Information**

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
-------------------	--

Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
--------------------	---

Skin contact Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms Skin irritation. Redness. May cause redness and tearing of the eyes.

Acute toxicity No information available.

Numerical measures of toxicity - Product Information

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Formamide	= 5577 mg/kg (Rat)	= 6 g/kg (Rabbit)	> 21 mg/L (Rat) 4 h
Dextran sulfate sodium	= 20600 mg/kg (Rat)	-	-
Sodium chloride	= 3550 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat) 1 h

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity May damage the unborn child. 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.

Aspiration hazard No information available.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea

Formamide	EC50: >500mg/L (72h, <i>Desmodesmus subspicatus</i>) EC50: >500mg/L (96h, <i>Desmodesmus subspicatus</i>)	LC50: =9135mg/L (96h, <i>Brachydanio rerio</i>)	-	EC50: >500mg/L (48h, <i>Daphnia magna</i>)
Sodium chloride	-	LC50: 5560 - 6080mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =12946mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 6020 - 7070mg/L (96h, <i>Pimephales promelas</i>) LC50: =7050mg/L (96h, <i>Pimephales promelas</i>) LC50: 6420 - 6700mg/L (96h, <i>Pimephales promelas</i>) LC50: 4747 - 7824mg/L (96h, <i>Oncorhynchus mykiss</i>)	-	EC50: =1000mg/L (48h, <i>Daphnia magna</i>) EC50: 340.7 - 469.2mg/L (48h, <i>Daphnia magna</i>)

Terrestrial ecotoxicity There is no data for this product.

Chemical name	Earthworm	Avian	Honeybees
Sodium chloride	Acute Toxicity: LC50 0.1 - 1 mg/cm2 (<i>Eisenia foetida</i> 48 h filter paper) Source: IUCLID	-	-

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Formamide	-0.82

Mobility

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations

Disposal 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 re-use empty containers.

See section 8 for more information

Section 14: Transport information

ADG Not regulated

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number Not applicable 5

Australian Industrial Chemicals Introduction Scheme (AICIS)

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Formamide - 75-12-7	Present	-
Dextran sulfate sodium - 9011-18-1	Present	-
Sodium chloride - 7647-14-5	Contact supplier for inventory compliance status Present	-

Illicit Drug Precursors/Reagents

This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling, and storing these substances.

Chemical name	Illicit Drug Precursors/Reagents
---------------	----------------------------------

Chemical name	Illicit Drug Precursors/Reagents
Formamide - 75-12-7	Category 2

Legend

Category 2 - Chemicals and apparatus that require an End User Declaration when sold to non-account customers.

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Formamide - 75-12-7	20 MW Threshold category 2b as Total Volatile Organic Compounds: the sum, by mass, of individual VOC, including non-NPI VOC 60000 MWH Threshold category 2b as Total Volatile Organic Compounds: the sum, by mass, of individual VOC, including non-NPI VOC 1 tonne/h Threshold category 2a as Total Volatile Organic Compounds: the sum, by mass, of individual VOC, including non-NPI VOC 25 tonne/yr Threshold category 1a as Total Volatile Organic Compounds: the sum, by mass, of individual VOC, including non-NPI VOC 400 tonne/yr Threshold category 2a as Total Volatile Organic Compounds: the sum, by mass, of individual VOC, including non-NPI VOC 2000 tonne/yr Threshold category 2b as Total Volatile Organic Compounds: the sum, by mass, of individual VOC, including non-NPI VOC

International Inventories

Contact supplier for inventory compliance status

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: Other information

Issuing Date 15-Oct-2021

Revision date 04-Dec-2024

Revision Note Updated format.

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

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)

ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	Environmental Protection Agency
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organisation
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organisation for Standardisation
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL	International Convention for the Prevention of Pollution from Ships
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile

Sen+	Sensitiser
Sk*	Skin designation
**	Hazard 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)
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)
Australian Industrial Chemicals Introduction Scheme (AICIS)
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)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Program
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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