

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Hazardous Substances (Safety Data Sheets) Notice 2017. This notice is issued by the Environmental Protection Authority under sections 75 and 76(1)(b), (f), (g) and (h) of the Hazardous Substances and New Organisms Act 1996

Issuing Date 15-Oct-2021 Revision date 04-Dec-2024 **Revision Number** 2

### Section 1: Identification

Product identifier

**Product Name** Hybridisation Solution

HA \*\*\*\* / HB \*\*\*\* / HI \*\*\*\* Product Code(s)

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

For professional use only

Uses advised against None known

### Details of the supplier of the safety data sheet

Manufacturer Importer

Sysmex New Zealand Limited Cytocell Ltd., Oxford Gene Technology Level 3, 103 Carlton Gore Rd 418 Cambridge Science Park, Milton Road,

**New Market** Cambridge

Auckland 1023, New Zealand CB4 0PZ, United Kingdom T: +44 (0)1223 294048 +64-9-630-3554/0800797639 F: +44 (0)1223 294986 probes@cytocell.com

http://www.ogt.com

E-mail address regulatory@sysmex.co.nz

Emergency telephone number

**Emergency telephone** For Sysmex Supply Chain support or Product Related Enquiries: +64 9 6303554 /

0800797639 (Mon to Fri – 8.30 am to 5.00 pm)

For any spillage or clean up issues: CHEMCALL 0800 243 622 (24 hours – 365 days)

National Poison Centre 0800 764 766 (0800 POISON)

### Section 2: Hazard identification

### Classification of the substance or mixture

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

#### Label elements

(M)SDS Number UL-OGT-020



#### 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

**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: Fire-fighting measures

Suitable Extinguishing Media

**Suitable Extinguishing Media** Dry chemical, CO2, 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 (NOx), 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/personal protection

#### Control parameters

### **Exposure Limits**

|   | Chemical name | New Zealand               | Australia                 | ACGIH TLV  | United Kingdom             |
|---|---------------|---------------------------|---------------------------|------------|----------------------------|
|   | Formamide     | TWA: 10 ppm               | TWA: 10 ppm               | TWA: 1 ppm | TWA: 20 ppm                |
|   | 75-12-7       | TWA: 18 mg/m <sup>3</sup> | TWA: 18 mg/m <sup>3</sup> | Sk*        | TWA: 37 mg/m <sup>3</sup>  |
|   |               | Sk*                       | · ·                       |            | STEL: 30 ppm               |
| L |               |                           |                           |            | STEL: 56 mg/m <sup>3</sup> |

**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.

Revision date: 04-Dec-2024 **Hybridisation Solution** 

### Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

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.

Skin and body protection Wear suitable protective clothing. Long sleeved 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.

**Environmental exposure controls** 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

Not applicable pH (as aqueous solution) No data available Melting point / freezing point No data available No data available Initial boiling point and boiling

range

154 °C Flash point

**Flammability** No data available

Flammability Limit in Air

Upper flammability or explosive Not applicable limits

Lower flammability or explosive Not applicable

limits

Vapour pressure No data available Relative vapour density No data available Relative density No data available **Bulk density** No data available No data available **Liquid Density** Solubility(ies) No data available Water solubility No data available **Partition Coefficient** No data available

(n-octanol/water)

**Auto-ignition temperature** No data available **Decomposition temperature** No data available SADT (°C) No data available Kinematic viscosity No data available **Dynamic viscosity** No data available

**Particle characteristics** 

**Particle Size** No data available **Particle Size Distribution** No data available

**Explosive properties** No information available. No information available. **Oxidising properties** 

Other information

Molecular weightNo information availableVOC contentNo information availableSoftening pointNo 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 (NOx), Silicon oxides, Hydrogen cyanide, Ammonia.

# Section 11: Toxicological information

#### **Acute toxicity**

#### 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**

Based on available data, the classification criteria are not met.

**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
STOT - repeated exposure
No information available.
No information available.

**Aspiration hazard** No information available.

Data used to identify the health

effects

Refer to Section 16 for Key literature references and sources for data used to compile the

SDS

# Section 12: Ecological information

#### **Ecotoxicity**

#### **Ecotoxicity**

### **Aquatic ecotoxicity**

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

### **Terrestrial ecotoxicity**

There is no data for this product.

| Chemical name   | Earthworm                     | Avian | Honeybees |
|-----------------|-------------------------------|-------|-----------|
| Sodium chloride | Acute Toxicity: LC50 0.1 - 1  | -     | -         |
|                 | mg/cm2 (Eisenia foetida, 48 h |       |           |
|                 | filter paper)                 |       |           |

### Persistence and degradability

Persistence and degradability

No information available.

### Bioaccumulative potential

#### **Bioaccumulation**

**Component Information** 

|               | Component information |                       |  |
|---------------|-----------------------|-----------------------|--|
| Chemical name |                       | Partition coefficient |  |
| Π             | Formamide             | -0.82                 |  |

### Mobility in soil

Mobility in soil

No information available.

### Other adverse effects

No information available.

# Section 13: Disposal considerations

# Disposal methods

Waste from residues/unused products

Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from

New Zealand as waste. Substances which are hazardous to human health or corrosive to metals – may be discharged into the environment if a tolerable exposure limit has been set for the substance (or a component of that substance); and the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the tolerable exposure limit. If there is no tolerable exposure limit for the substance, then it may only be discharged into the environment if the substance is very rapidly converted to substances that are not hazardous substances.

#### Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from. Packages may only be reused or recycled if:

- the substance has a physical hazard other than corrosive to metal, and has been treated to remove any residual contents of the hazardous substance:
- or for substances that have a health or environmental hazard, or corrosive to metal, the contents of the residue in the package are below the threshold for the substance to be classified as hazardous in the Hazardous Substances (Hazard Classification) Notice 2020.

# Section 14: Transport information

IATA Not regulated

IMDG Not regulated

# Section 15: Regulatory information

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

### National regulations

EPA New Zealand HSNO approval code or group standard

HSR002596 - Laboratory Chemicals and Reagent Kits

**National regulations** 

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

and

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

#### **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

### International Inventories

Contact supplier for inventory compliance status

# **Section 16: Other information**

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**Revision Note** Updated format.

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

Legend

| 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     | i milippines inventory of offermodis and offermodi odbstanees                                       |  |

| 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)

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**