Safety Data Sheet – FISH Probes

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	**Product identifier**	
	Product form:	Mixture
	Name:	CytoCell® FISH Probes (standard catalogue and custom myProbes® liquid FISH probes)
	Product code:	CE-LP* *** / LP* *** / RU-LP* *** / MP****
1.2	**Relevant identified uses of the substance or mixture and uses advised against**	
1.2.1	**Relevant identified uses**	
	Main use category:	Professional use
	Use of substance/mixture:	Laboratory chemicals
1.2.2	**Uses advised against**	
	No additional information available	
1.3	**Details of the supplier of the safety data sheet**	
	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	

1.4 Emergency telephone number

	Country	Organisation/Company	Address	Emergency Number	Comment
	Ireland	National Poisons Information Centre, Beaumont Hospital	Beaumont Hospital Beaumont Road, 9 Dublin	+353 1 8379964	
	United Kingdom	National Poisons Information Service (NHS Direct)	www.npis.org	111 (England & Wales only) 112 (EU) 08454 24 24 24 (Scotland)	

SECTION 2: Hazards identification

2.1	**Classification of the substance or mixture**	
2.1.1	**Classification according to Regulation (EC) No. 1272/2008 [CLP]**	
	Skin corrosion/irritation, Category 2	H315
	Serious eye damage/eye irritation, Category 2	H319
	Reproductive toxicity, Category 1B	H360
	Full text of hazard classes and H-statements: see section 16	
2.1.2	**Adverse physicochemical, human health and environmental effects**	
	May damage fertility or the unborn child. Causes skin irritation. Causes serious eye irritation.	
2.2	**Label elements**	
	Labelling according to Regulation (EC) No. 1272/2008 [CLP]	
	Hazard pictograms (CLP):	 GHS07 GHS08
	Signal word (CLP):	Danger
	Hazardous ingredients:	Formamide
	Hazard statements (CLP):	H315 - Causes skin irritation H319 - Causes serious eye irritation H360 - May damage fertility or the unborn child

	Precautionary statements (CLP):	P202 - Do not handle until all safety precautions have been read and understood P280 - Wear eye protection, protective clothing, protective gloves P302+P352 - IF ON SKIN: Wash with plenty of soap and water P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P308+P313 - IF exposed or concerned: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
2.3	**Other hazards**	
	No additional information available	

SECTION 3: Composition/information on ingredients

3.1	**Substance**			
	Not applicable			
3.2	**Mixture**			
	Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
	Formamide Substance listed as REACH Candidate	(CAS No) 75-12-7 (EC no) 200-842-0 (EC index no) 616-052-00-8	< 100	Repr. 1B, H360D
	Dextran sulfate, sodium salt	(CAS No) 9011-18-1	< 15	Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315
	Sodium chloride Substance with national workplace exposure limit(s) (LT, LV)	(CAS No) 7647-14-5 (EC no) 231-598-3 (REACH-no) 01-2119485491-33-XXXX	< 15	Not classified
	Full text of H-statements: see section 16			

SECTION 4: First aid measures

4.1	**Description of first aid measures**	
	First-aid measures general: First-aid measures after inhalation: First-aid measures after skin contact: First-aid measures after eye contact: First-aid measures after ingestion:	IF exposed or concerned: Get medical advice/attention. Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. 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. Call a poison center or a doctor if you feel unwell.
4.2	**Most important symptoms and effects, both acute and delayed**	
	Symptoms/injuries after skin contact: Symptoms/injuries after eye contact:	Irritation. Eye irritation.
4.3	**Indication of any immediate medical attention and special treatment needed**	
	Treat symptomatically.	

SECTION 5: Firefighting measures

5.1	**Extinguishing media**	
	Suitable extinguishing media:	Water spray. Dry powder. Foam. Carbon dioxide.
5.2	**Special hazards arising from the substance or mixture**	
	Hazardous decomposition products in case of fire:	Toxic fumes may be released.
5.3	**Advice for firefighters**	
	Protection during firefighting:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures		
6.1	**Personal precautions, protective equipment and emergency procedures**	
6.1.1	**For non-emergency personnel**	
	Emergency procedures:	Only qualified personnel equipped with suitable protective equipment may intervene.
6.1.2	**For emergency responders**	
	Protective equipment:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2	**Environmental precautions**	
	Avoid release to the environment. Notify authorities if product enters sewers or public waters.	
6.3	**Methods and material for containment and cleaning up**	
	Methods for cleaning up: Other information:	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Dispose of materials or solid residues at an authorized site.
6.4	**Reference to other sections**	
	For further information refer to section 13.	

SECTION 7: Handling and storage		
7.1	**Precautions for safe handling**	
	Precautions for safe handling:	Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes.
	Hygiene measures:	Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2	**Conditions for safe storage, including any incompatibilities**	
	Storage conditions:	Store locked up. Store in a well-ventilated place. Keep cool.
7.3	**Specific end use(s)**	
	No additional information available	

SECTION 8: Exposure controls/personal protection			
8.1	**Control parameters**		
	formamide (75-12-7)		
	Belgium	Limit value (mg/m³)	18 mg/m³ (Formamide; Belgium; Time-weighted average exposure limit 8 h)
	Belgium	Limit value (ppm)	10 ppm (Formamide; Belgium; Time-weighted average exposure limit 8 h)
	France	VME (mg/m³)	30 mg/m³ (Formamide; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)
	France	VME (ppm)	20 ppm (Formamide; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)
	United Kingdom	WEL TWA (mg/m³)	37 mg/m³ Formamide; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
	United Kingdom	WEL TWA (ppm)	20 ppm Formamide; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
	United Kingdom	WEL STEL (mg/m³)	56 mg/m³ Formamide; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
	United Kingdom	WEL STEL (ppm)	30 ppm Formamide; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
	USA - ACGIH	ACGIH TWA (ppm)	10 ppm (Formamide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

	sodium chloride (7647-14-5)		
	Latvia	Local name	Nātrijahlorīds
	Latvia	OEL TWA (mg/m³)	5 mg/m³
	Lithuania	Local name	Natrio chloridas
	Lithuania	IPRV (mg/m³)	5 mg/m³
8.2	**Exposure controls**		
	Appropriate engineering controls: Hand protection: Eye protection: Skin and body protection: Respiratory protection: Environmental exposure controls:		Ensure good ventilation of the work station. Protective gloves Safety glasses Wear suitable protective clothing Wear respiratory protection Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1	**Information on basic physical and chemical properties**	
	Physical state: Colour: Odour: Odour threshold: pH: Relative evaporation rate (butylacetate=1): Melting point: Freezing point: Boiling point: Flash point: Auto-ignition temperature: Decomposition temperature: Flammability (solid, gas): Vapour pressure: Relative vapour density at 20°C: Relative density: Solubility: Log Pow: Viscosity, kinematic: Viscosity, dynamic: Explosive properties: Oxidising properties: Explosive limits:	Liquid Various. Odourless. No data available No data available No data available Not applicable No data available No data available 154°C No data available No data available Not applicable No data available No data available No data available No data available No data available No data available No data available No data available No data available
9.2	**Other information**	
	No additional information available	

SECTION 10: Stability and reactivity

10.1	**Reactivity**
	The product is non-reactive under normal conditions of use, storage and transport.
10.2	**Chemical stability**
	Stable under normal conditions.
10.3	**Possibility of hazardous reactions**
	No dangerous reactions known under normal conditions of use..
10.4	**Conditions to avoid**
	None under recommended storage and handling conditions (see section 7).
10.5	**Incompatible materials**
	No additional information available
10.6	**Hazardous decomposition products**
	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1	**Information on toxicological effects**	
	Acute toxicity:	Not classified
	formamide (75-12-7)	
	LD50 oral rat	> 5000 mg/kg (Rat)
	LD50 dermal rat	> 5000 mg/kg (Rat)
	LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
	dextran sulfate, sodium salt (9011-18-1)	
	LD50 oral rat	20600 mg/kg (Rat)
	sodium chloride (7647-14-5)	
	LD50 oral rat	3000 mg/kg (Rat; Experimental value; 3550 mg/kg bodyweight; Rat; Experimental value)
	LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value)
	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ toxicity (single exposure): Specific target organ toxicity (repeated exposure): Aspiration hazard:	Causes skin irritation. Causes serious eye irritation. Not classified Not classified Not classified May damage fertility or the unborn child. Not classified Not classified Not classified

SECTION 12: Ecological information

12.1	**Toxicity**	
	Ecology - general:	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
	formamide (75-12-7)	
	LC50 fish 1	4600 mg/l (LC50; 96 h; Leuciscus idus)
	EC50 Daphnia 1	> 500 mg/l (EC50; 48 h)
	Threshold limit algae 1	> 500 mg/l (EC50; 72 h)
	sodium chloride (7647-14-5)	
	LC50 fish 2	5840 mg/l (LC50; ASTM; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)
	Threshold limit algae 2	2430 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 120 h; Algae; Static system; Fresh water; Experimental value)
12.2	**Persistence and degradability**	
	formamide (75-12-7)	
	Persistence and degradability	Inherently biodegradable. Biodegradable in soil. Photodegradation in the air.
	BOD (% of ThOD)	0
	dextran sulfate, sodium salt (9011-18-1)	
	Persistence and degradability	Biodegradability in water: no data available.
	sodium chloride (7647-14-5)	
	Persistence and degradability	Biodegradability: Not applicable. No (test)data available on mobility of the substance.
	Biochemical oxygen demand (BOD)	Not applicable
12.3	**Bioaccumulative potential**	
	formamide (75-12-7)	
	Log Pow	-1,6 - -0,82
	Bioaccumulative potential	Bioaccumulation: Not applicable.
	dextran sulfate, sodium salt (9011-18-1)	
	Bioaccumulative potential	Bioaccumulation: No data available.

	sodium chloride (7647-14-5)	
	Log Pow	-3,0 (Calculated)
	Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
12.4	**Mobility in soil**	
	formamide (75-12-7)	
	Surface tension	0,058 N/m
12.5	**Results of PBT and vPvB assessment**	
	Component	
	formamide (75-12-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
12.6	**Other adverse effects**	
	No additional information available	

SECTION 13: Disposal considerations

13.1	**Waste treatment methods**	
	Waste treatment methods: Waste disposal recommendations:	Dispose of contents/container in accordance with licensed collector's sorting instructions. Avoid release to the environment.

SECTION 14: Transport information

	In accordance with ADR / RID / IMDG / IATA / ADN				
	ADR	IMDG	IATA	ADN	RID
14.1	**UN number**				
	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2	**UN proper shipping name**				
	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3	**Transport hazard class(es)**				
	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4	**Packing group**				
	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5	**Environmental hazards**				
	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
	No supplementary information available				
14.6	**Special precautions for user**				
	Overland transport				
	Not applicable				
	Transport by sea				
	Not applicable				
	Air transport				
	Not applicable				
	Inland waterway transport				
	Not applicable				
	Rail transport				
	Not applicable				
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**				
	Not applicable				

SECTION 15: Regulatory information		
15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	
15.1.1	**EU-Regulations**	
	The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
	3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	CytoCell® Probes - formamide
	3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	CytoCell® Probes - CytoCell® Probes
	30. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Toxic to Reproduction category 1A or 1B (Table 3.1) or Toxic to Reproduction category 1 or 2 (Table 3.2) and listed as follows: Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or Reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5 Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or Reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6	formamide - formamide
	Contains a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit: Formamide (EC 200-842-0, CAS 75-12-7)	
	Contains no REACH Annex XIV substances	
15.1.2	**National regulations**	
	Germany	
	VwVwS Annex reference:	Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)
	12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV:	Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
	Netherlands	
	SZW-lijst van kankerverwekkende stoffen: SZW-lijst van mutagene stoffen: NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding: NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid: NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling:	None of the components are listed None of the components are listed None of the components are listed None of the components are listed None of the components are listed
	Denmark	
	Recommendations Danish Regulation:	Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal
15.2	**Chemical safety assessment**	
	No chemical safety assessment has been carried out	

SECTION 16: Other information	
See also “SDSDAPI” for details of the DAPI Counterstain included within each CytoCell FISH Probe Kit.	
Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H360D	May damage the unborn child

SDS EU_NSC

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.