

SAFETY DATA SHEET

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC - United Kingdom (UK)
English

1. Identification of the substance/preparation and company/undertaking

Product name **Huh 7 Replicon 1a Cells, 1 ml**

Catalogue Number **67610280**



Component Number **67610280V**

Product type Liquid.

Company/undertaking identification

Supplier GE Healthcare UK Ltd
Amersham Place
Little Chalfont
Buckinghamshire HP7 9NA
England
+44 0870 606 1921

Emergency telephone number
Swedish Poisons Information Centre :
+46 (0)8 331 231

Person who prepared the MSDS: msdslifesciences@ge.com

United Kingdom (UK) GE Healthcare UK Ltd
Amersham Place
Little Chalfont
Buckinghamshire
HP7 9NA
0870 606 1921

2. Hazards identification

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification Not classified.

See section 11 for more detailed information on health effects and symptoms.

3. Composition/information on ingredients

Substance/preparation Preparation

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EC number</u>	<u>Classification</u>
dimethyl sulfoxide	67-68-5	10	200-664-3	Xi; R36/38

See section 16 for the full text of the R-phrases declared above

Occupational exposure limits, if available, are listed in section 8.

4. First-aid measures

First-aid measures

Inhalation Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Obtain medical attention if symptoms occur.

Ingestion Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Obtain medical attention if symptoms occur.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur.

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training.



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67610280



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Notes to physician	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media

Suitable	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	None known.
Special exposure hazards	In a fire or if heated, a pressure increase will occur and the container may burst. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
Storage	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
<u>Packaging materials</u>	
Recommended	Use original container.

8. Exposure controls/personal protection

Exposure limit values	Not available.
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Exposure controls

Occupational exposure controls	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
Skin protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



9. Physical and chemical properties

General information

Appearance

Physical state	Liquid.
Colour	Amber.

Important health, safety and environmental information

Explosive properties	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
Solubility	Not available.

10. Stability and reactivity

Stability	The product is stable.
Conditions to avoid	No specific data.
Materials to avoid	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Potential acute health effects

Inhalation	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Eye contact	No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
dimethyl sulfoxide	LD50 Dermal	Rat	40 g/kg	-
	LD50 Intraperitoneal	Rat	8200 mg/kg	-
	LD50 Intravenous	Rat	5360 mg/kg	-
	LD50 Oral	Rat	17400 mg/kg	-
	LD50 Oral	Rat	14500 mg/kg	-
	LD50 Subcutaneous	Rat	12 g/kg	-
	LD50 Unreported	Rat	1300 mg/kg	-
	TDLo Intracerebral	Rat	2234.8 mg/kg	-
	TDLo Intraperitoneal	Rat	200 mg/kg	-
	TDLo Intraperitoneal	Rat	1000 mg/kg	-
	TDLo Intraperitoneal	Rat	750 mg/kg	-

Conclusion/Summary Very low toxicity to humans or animals.

Potential chronic health effects

Chronic effects	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Reproductive toxicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation	No specific data.
Ingestion	No specific data.
Skin	No specific data.
Eyes	No specific data.

Target organs Contains material which may cause damage to the following organs: skin, eye, lens or cornea.

12. Ecological information

Environmental effects No known significant effects or critical hazards.

Product/ingredient name	Test	Result	Species	Exposure
dimethyl sulfoxide	-	Acute LC50 >400 ml/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 1 g	96 hours
	-	Acute LC50 35 to 37 ml/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - 0.7 g	96 hours
	-	Acute LC50 34000000 ug/L Fresh	Fish - Fathead minnow -	96 hours



		water	Pimephales promelas - 31 days - 15.8 mm - 0.062 g
Conclusion/Summary	Not available.		
Conclusion/Summary	Not available.		
<u>Product/ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
dimethyl sulfoxide	-	3.1%; 14 day(s).	Not readily
<u>Bioaccumulative potential</u>			
<u>Product/ingredient name</u>	<u>LogP_{ow}</u>	<u>BCF</u>	<u>Potential</u>
dimethyl sulfoxide	-2.03	<4	low
Other adverse effects	No known significant effects or critical hazards.		

13. Disposal considerations

Methods of disposal	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Hazardous waste	Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

14. Transport information

International transport regulations

Not classified.

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15. Regulatory information

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Risk phrases This product is not classified according to EU legislation.

Product use Industrial applications.

Europe inventory Not determined.

Other EU regulations

Additional warning phrases Safety data sheet available for professional user on request.

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK) R36/38- Irritating to eyes and skin.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK) Xi - Irritant



Indicates information that has changed from previously issued version.

History

Date of printing	29 April 2009	Date of previous issue	No previous validation
Date of issue	29 April 2009	Version	1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

