

SAFETY DATA SHEET

(Reach Regulation (EC) NO 1907/2006 – 453/2010)

SECTION 1: Identification of the Substance/ Mixture and of the Company/ Undertaking

1.1. Product identifier

- Product name: **Erythrocyte Lysis Solution**
- Product code: **GGS-JL-009**
- Pack size: **Solution/ suspension to make up 1000mls working solution**
- GTIN-13: **5060174130038**
- GMDN: **30621 'Chromosome Culture Kit'**
- REACH: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

1.2. Relevant identified uses of the substances or mixture and uses advised against

Recommended Use: In Vitro Diagnostics
Identified uses: Laboratory chemicals

Erythrocyte Lysis Solution

Is a simple pretreatment for heavily blood-stained amniotic fluid and bone marrow samples which quickly removes heavy red blood cell (erythrocyte) contamination. Unlike many similar products used in molecular biology that lyse red blood cells, this product is extremely gentle in its action and is specially suited for cytogenetic cell culture work. It is well documented that high concentrations of red blood cells inhibit growth of cells from amniotic fluid by restricting colony size.

Note: This product will not prevent maternal contamination from occurring because it has no effect on white blood cells.

1.3. Details of the supplier of the safety data sheet

- Registered company name: Genial Helix Limited
- Address: Genial Helix, Evans Business Centre, Minerva Avenue, Off Sovereign Way, Chester, Flintshire, CH1 4QL, U.K.
- Telephone: +44 (0)1244 757 155
- Email: info@genialhelix.com
- Website: www.genialhelix.com

1.4. Emergency telephone number: +44 (0)1244 757 155

- Emergency Response Organisation: Genial Helix Limited | www.genialhelix.com

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture in compliance with EC regulation No. 1272/2008 and its amendments.

- Acute toxicity, Oral (Category 4), H302
- Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn	Harmful	R22
Xi	Irritant	R36

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2. Label elements

Labelling in compliance with EC regulation No. 1272/2008 and its amendments

Pictograms:



Single Word:

Warning

Hazard statement(s)

H302 Harmful if swallowed
H319 Causes serious eye irritation

Precautionary statement(s)

P305 + P351 + P338 IF IN EYES: Rinse immediately with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplement Hazard Statements

None

2.3. Other Hazards

This substance/ mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

Synonyms: Salmiac

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification
Ammonium chloride	
CAS-No. 12125-02-9 EC-No. 235-186-4	Acute Tox. 4; Eye Irrit. 2; H302, H319

Hazardous ingredients according to Directive 1999/45/EC

Component	Classification
Ammonium chloride	
CAS-No. 12125-02-9 EC-No. 235-186-4	Xn, R22 – R36

For the full text of the H-Statements and R-Phrases mentioned in the Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/ or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

- 5.2 Special hazards arising from the substance or mixture**
No data available
- 5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary
- 5.4 Further information**
The product itself does not burn

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
- 6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- 6.3 Methods and materials for containing and cleaning up**
Contain spillage, and then collect. Wear a lab coat and rubber gloves, wipe with paper tissues and keep in suitable container for disposal.
- 6.4 Reference to other sections**
For disposal see section 13.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling**
Avoid contact with skin or eyes. Keep container tightly closed when not in use. Provide appropriate exhaust ventilation. For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities**
Store in a cool place. Keep lid tightly closed. Keep away from UV light, keep product in the dark. Correctly stored, the product is stable for up to 12 months.
- 7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No	Value	Control parameters	Basis
Ammonium chloride	12125-02-9	TWA	10 mg/m ³	UK. EH40 WEL – Workplace Exposure Limits
	Remarks	The word 'fume' is often used to include gases and vapours. This is not the case for exposure limits where 'fume' should normally be applied to solid particles generated by chemical reactions or condensed from the gaseous state, usually after volatilisation from melted substances. The generation of fume is often accompanied by a chemical reaction such as oxidation or thermal breakdown.		

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN (166(EU))

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where protection from nuisance levels are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Control of environmental exposures

Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: Liquid (clear/ cloudy)
b) Odour	Odourless
c) Odour Threshold	No data available
d) pH	7.2 – 7.5
e) Melting point/ freezing Point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	N/A
h) Evaporation rate	N/A
i) Flammability (liquid)	Non-Flammable
j) Upper/lower flammability or explosive limits	N/A
k) Vapour pressure	As of water (0.03 atm)
l) Vapour density	No data available
m) Relative density	1.06g/cm ³ at 20°C
n) Water solubility	Soluble
o) Partition coefficient: N octanol/water	No data available
p) Auto-ignition temperature	N/A
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	Nil
t) Oxidizing properties	Nil

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Exposure to moisture may affect product quality

- 10.5 Incompatible materials**
Strong acids, Strong bases, Strong oxidising agents
- 10.6 Hazardous decomposition products**
Other decomposition products – No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
No data available

Skin corrosion/ irritation
Skin – Rabbit
Result: No skin irritation

Serious eye damage/ eye irritation
Eyes – Rabbit
Result: Eye irritation

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Specific target organ toxicity – single exposure
No data available

Specific target organ toxicity – repeated exposure
Inhalation – May cause respiratory irritation

Aspiration hazard
No data available

Additional information
RTECS: BP4550000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

- 12.1 Toxicity**
Toxic to aquatic life
- 12.2 Persistence and degradability**
No data available
- 12.3 Bioaccumulative potential**
No data available
- 12.4 Mobility in soil**
No data available
- 12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessments not available as chemical safety assessment not required/ not conducted
- 12.6 Other adverse effects**
Toxic to aquatic life
-



SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Use approved government contractor.
Observe all International, National, State and Local environmental laws.

Contaminated packaging

Dispose of as unused product

SECTION 14: Transport information

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

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

No data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Irrit.	Eye Irritation
H302	Harmful if swallowed
H319	Causes serious eye irritation

Full text of R-phrases referred to under sections 2 and 3

Xn	Harmful
R22	Harmful if swallowed
R36	Irritating to eyes

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Genial Helix Ltd and its Affiliates will not be held liable for any damage resulting from handling or from contact with the above product.
