

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

1.1 Product Identifier

Product Code: ax0660a

Product Name: Microglial maintenance media supplement A

Product Use: Maintaining IPSC derived microglia

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

For use as a laboratory reagent

1.3. Details of the supplier of the safety data sheet

Axol Bioscience Ltd.

Roslin Innovation Centre

Charnock Bradley Building

Easter Bush Campus

Easter Bush, EH25 9RG

United Kingdom

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as hazardous

2.2. Label elements

No label required

2.3. Other hazards

Physical hazard: Frozen vials of supplements shipped on dry ice are a cold burn risk. It is recommended that persons handling frozen vials should wear a laboratory coat, safety glasses and insulated gloves.

Environmental hazard: Contains no components known to be PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable, the product is a mixture

3.2. Mixtures

The product contains no substances which at their given concentration are considered to be hazardous to health. We recommend handling all chemicals with caution

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: No special measures required.

Skin Contact: Wash off immediately with plenty of water.

Eye Contact: Rinse cautiously with plenty of water, remove contact lenses if present. If symptoms persist, contact a physician.

Ingestion: Not expected to be a significant ingestion hazard under normal conditions of use.

Inhalation: Not expected to be a significant inhalation hazard under normal conditions of use.

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

No adverse symptoms anticipated from contact with the mixture.

Cold burns possible when handling frozen vials.

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

Notes to physician: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: CO₂ extinguishing powder, water spray, foam.

5.2. Special hazards arising from the substance or mixture

None

5.3. Advice for firefighters

Fire Fighting Procedures: Standard procedure for laboratory chemical fires.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment such as chemical-resistant gloves and lab coat.

6.2. Environmental precautions

No special environmental precautions required. Avoid discharge into drains and waterways where possible.

6.3. Methods and material for containment and cleaning up

Absorb with inert absorbent material. Place into suitable sealed containers for disposal. Wash area thoroughly after cleaning up the spill.

6.4. Reference to other sections

See section 8 for additional advice on PPE and section 13 for additional advice on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling: Always wear PPE, including insulated gloves while handling the frozen vial. Open thawed vials in a Class 2 biosafety cabinet. Dry ice used to ship frozen vials should be allowed to evaporate in a well ventilated area.

7.2. Conditions for safe storage, including any incompatibilities

Storage: Store at -80°C until required

7.3. Specific end use(s)

Specific end use(s): For research use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits Contains no substances with UK occupational exposure limit values

8.2. Exposure controls

Engineering measures: ensure adequate ventilation such as a laboratory safety cabinet.

Personal Protective Equipment

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection: Nitrile gloves.

Eye protection: Safety glasses.

Skin protection: Lab coat.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls: No special environmental precautions required. Avoid discharge into drains and waterways whenever possible

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Form: Frozen liquid
Colour: white

Odour: No data available

Odour threshold: No data available

pH: Approx. pH6-8

Melting point: Approx. 0°C

Boiling point: Approx. 100°C

Flashpoint: > 60°C

Evaporation rate: Similar to water

Flammability (gas, solids): Not applicable

Upper/lower flammability limits: Not applicable

Vapour pressure: Similar to water

Vapour density: Similar to water
Relative density: No data available
Solubility in water: Miscible with water
Solubility in other solvents: No data available
Partition coefficient (log K_{ow}): No data available
Autoignition temperature: No data available
Decomposition temperature: No data available
Viscosity: Not viscous
Explosive properties: Not classified as explosive
Oxidising properties: Not classified as oxidising

9.2. Other information

No other data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not considered to be a reactive material

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions anticipated.

10.4. Conditions to avoid

Avoid excessive heat

10.5. Incompatible materials

Strong oxidising agents

10.6. Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

(a) **acute toxicity** Not expected to be toxic. Contains no hazardous components above thresholds of concern.

(b) **skin corrosion/irritation** Not expected to be corrosive or irritant. Contains no hazardous components above thresholds of concern.

- (c) **serious eye damage/irritation** Not expected to be corrosive or irritant. Contains no hazardous components above thresholds of concern.
- (d) **respiratory/skin sensitisation** Not expected to be sensitising. Contains no hazardous components above thresholds of concern.
- (e) **germ cell mutagenicity** Not expected to be mutagenic. Contains no hazardous components above thresholds of concern.
- (f) **carcinogenicity** Not expected to be carcinogenic. Contains no hazardous components above thresholds of concern.
- (g) **reproductive toxicity** Not expected to be toxic to reproduction. Contains no hazardous components above thresholds of concern.
- (h) **STOT-single exposure** Not expected to be toxic. Contains no hazardous components above thresholds of concern.
- (i) **STOT-repeated exposure** Not expected to be toxic. Contains no hazardous components above thresholds of concern.
- (j) **aspiration hazard** Not applicable.

SECTION 12: Ecological information

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

12.1. Toxicity

Not expected to be toxic to aquatic organisms, based upon consideration of the components.

12.2. Persistence and degradability

Not expected to persist in the environment.

12.3. Bioaccumulative potential

Not expected to bioaccumulate.

12.4. Mobility in soil

Expected to partition to the aqueous compartment.

12.5. Results of PBT and vPvB assessment

The mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Other adverse effects

None identified.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided wherever possible. Empty containers or liners may retain some product residue. This material and its container must be disposed of according to approved disposal

technique. Disposal of this product, its solutions or any by-products shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport Information

	ADR	IMDG	ICAO
14.1 UN Number	None	None	None
14.2 UN Proper shipping name	None	None	None
14.3 Transport hazard class(es)	None	None	None
14.4 Packing group	None	None	None
14.5 Environmental hazards	None	None	None
14.6 Special precautions for user	None	None	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory Information

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

- Substances of very high concern: None.
- Restricted substances under EC 1907/2006, Annex XVII: None.
- Substances listed under Annex I of Regulation (EC) No. 689/2008: None.
- Restricted Substances listed under Annex V of Regulation (EC) No. 689/2008: None.
- Substances under regulation (EC) No. 850/2004 of the European Parliament and the council of 29th April 2004 on persistent organic pollutants and amending directive 79/117/EEC: None.
- German Water hazard classes: Not classified.
- Other International Inventories: No information available.

15.2. Chemical safety assessment

No Chemical safety assessment has been carried out for this product.

SECTION 16: Other Information

Revision information: This is a new SDS.

List of Abbreviations used in this SDS:

CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging Regulation (EC) no 1272/2008
EC	European Community/Commission
PBT	Persistent, Bioaccumulative and Toxic

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB very Persistent, very Bioaccumulative

References:

Supplier SDS

Classification and Labelling Inventory European Chemicals Agency, <http://echa.europa.eu/>

Method used for classification of mixtures:

/Ingredient based approaches

H Statements used in Section 3

H300 Fatal if swallowed

H301 Toxic if swallowed

H310 Fatal in contact with skin

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H318 Causes serious eye damage

H319 Causes serious eye irritation

H330 Fatal if inhaled

H331 Toxic if inhaled

H361 Suspected of damaging fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

H400 Very toxic to aquatic life

H411 Toxic to aquatic life with long-lasting effects

Training requirements for workers

No special training requirements.

The information above is believed to be correct but shall not be taken as being all-inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since Axol Bioscience Ltd. cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

Usage Statement: This product is intended for research use only and is not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, *in vitro* diagnostic uses, *ex vivo* or *in vivo* therapeutic uses or any type of consumption or application to humans.

END OF MATERIAL SAFETY DATA SHEET