

Safety Data Sheet

LINKBRIGHT™

SECTION 1: Identification of the Substance / Mixture & of the Company

Identification of the substance or mixture

Product Code: 4200AG, 4350AG, 4750AG5, 5100AG, 510BAG, 5500AG, 5800AG, 6100AG, 6800AG, 7700AG,

8300AG, 9000AG, 1130AG

Product Name: LINKBRIGHT™ Amine Antibody Conjugation Kit

 $\mathsf{CPN}^{1\!\!1}\!\!420\,/\,435\,/\,475\,/\,510\,/\,510B\,/\,580\,/\,610\,/\,680\,/\,770\,/\,830\,/\,900\,/\,1130$

Company/undertaking identification

Stream Bio Ltd, Alderley Park

Nether Alderley,

Cheshire, SK10 4TG, UK

24hr Emergency response +44 (0) 870 8200418 (CHEMTREC). For research use only. Not intended for human or animal diagnostic or therapeutic uses

SECTION 2: Hazards Identification

In accordance with local and national regulations

GHS - Classification

Non hazardous

Signal word

Non hazardous

European Union

Non hazardous

Principle routes of exposure / potential health effects

Eves

Skin

Inhalation

Ingestion

Specific effects

Carcinogenic effects Mutagenic effects

Reproductive toxicity

Sensitisation

Target organ effects

Health hazards

Non hazardous

Physical hazards

Non hazardous

EU specific hazard statements

R-phrase(s)

May cause eye irritation in susceptible persons May cause skin irritation in susceptible persons

May be harmful by inhalation

May be harmful if swallowed

Substance not yet tested

Substance not yet tested

Substance not yet tested

Substance not yet tested

No information

SECTION 3: Composition / Information on Ingredients

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

Chemical Name	CAS-No	Weight percent
LINKBRIGHT™-Amine		
Water	7732-18-5	>95%
Conjugated polymer	None	<1 %
Polystyrene maleic anhydride	26762-29-8	<1 %
Iron oxide	1317-61-9	<1 %
N-Hydroxysuccinimide	6066-82-6	<1 %
IgG antibody purification reagent		
Water	7732-18-5	>50%
Ammonium sulphate	7783-20-2	<50%
Solution R		
Water	7732-18-5	>95%
4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid	7365-45-9	<1 %
Polyethylene glycol	25322-68-3	<1 %
Solution SG		
Water	7732-18-5	>95%
Glycine	56-40-6	<1 %
4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid	7365-45-9	<1 %
Solution Z		
Water	7732-18-5	>95%
Bovine Serum Albumin	9048-46-8	<1 %
Polysorbate 20	9005-64-5	<1 %
4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid	7365-45-9	<1 %
Polyethylene glycol	25322-68-3	<1 %

SECTION 4: First Aid Measures

Skin contact Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice. Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a doctor.

Never give anything by mouth to an unconscious person. If symptoms persist, call a doctor. Do Ingestion

not induce vomiting without medical advice.

Inhalation Remove to fresh air. If symptoms persist, call a doctor. If not breathing, give artificial respiration. Notes to Physician

Teat symptomatically.

SECTION 5: Firefighting Measures

Suitable extinguishing media Special protective equipment for firefighters Water spray. Carbon dioxide (CO2). Foam. Dry chemical. Wear self-contained breathing apparatus & protective suit.

SECTION 6: Accidental Release Measures

Personal precautions Methods for cleaning up Environmental precautions Use personal protection equipment Soak up with inert absorbent material

Prevent further leakage or spillage if safe to do so. See section 12 for

more information

SECTION 7: Handling and Storage

Handling Avoid contact with skin, eyes and clothing. Wear personal

protective equipment.

Storage Keep in a dry, cool and well-ventilated place.

SECTION 8: Exposure Controls / Personal Protection

Exposure limits

At this time, the limited evidence available suggests caution when potential exposures to nanoparticles may occur. Due to the limited information about health risks from nanomaterials, it is prudent to take steps for minimizing worker exposures. Research is still needed to understand the impact of nanotechnology on health, and to determine appropriate exposure monitoring and control strategies.

Contains no substances with occupational exposure limit values.

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal protective equipment

Personal protective equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection

Hand protection

Eye protection

Skin and body protection

Hygiene measures

Environmental exposure controls

In case of insufficient ventilation, wear suitable respiratory equipment

Impervious gloves

Safety glasses with side-shields Lightweight protective clothing

Handle in accordance with good industrial hygiene and safety practice

Prevent product from entering drains

SECTION 9: Physical and Chemical Properties

General information

Form

Appearance

Odor

Boiling point / boiling range Melting point / melting range

Flash point

Autoignition temperature Oxidising properties

Water solubility

Suspension

Coloured liquid

No information available

No data available No data available

No data available No data available

No data available Soluble

SECTION 10: Stability and Reactivity

Chemical stability

Reactivity

Materials to avoid

Hazardous decomposition products

Polymerisation

Conditions to avoid

Stable under normal conditions

None known

No dangerous reaction known under conditions of normal use

None under normal use condition

Hazardous polymerisation does not occur

No information available

SECTION 11: Toxicological Information

Acute toxicity

At this time, the limited evidence available suggests caution when potential exposures to nanoparticles may occur. Due to the limited information about health risks from nanomaterials, it is prudent to take steps for minimizing worker exposures. Occupational health risks associated with manufacturing and using nanomaterials are not yet clearly understood. Studies have indicated that low solubility nanoparticles are more toxic than larger particles on a mass for mass basis. There are strong indications that particle surface area and surface chemistry are responsible for observed responses in cell cultures and animals. There are indications that nanoparticles can penetrate through the skin or move from the respiratory system to other organs.

Principle routes of exposure / potential health effects

Eyes May cause eye irritation with susceptible persons Skin May cause skin irritation in susceptible persons

Inhalation May be harmful by inhalation Ingestion May be harmful if swallowed

Carcinogenic effectsNoneMutagenic effectsNoneReproductive toxicityNoneSensitisationNone

Target organ effects No known effects under normal use conditions

SECTION 12: Ecological Information

EcotoxicityNo information availableMobilityNo information availableBiodegradationInherently biodegradableBioaccumulationMaterial does not bioaccumulate

SECTION 13: Disposal Considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport Information

IATA

Proper shipping name Not classified as dangerous within the meaning of transport regulations

Hazard class

Subsidiary class

Packing group

UN-N

Environmental hazards

Special precautions for user

None

None

None

SECTION 15: Regulatory Information

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

Substances of very high concern
Restricted substances under EC 1907/2006, Annex XVII
Substances listed under Annex I of Regulation (EC) No 689/200
Restricted substances under Annex V of Regulation (EC) No 689/2008
Substances under Regulation (EC) No 850/2004 of the European
Parliament and of the Council of 29 April 2004 on persistent
organic pollutants and amending Directive 79/117/EEC
German Water hazard classes (Wassergefährdungsklassen)

Other international inventories Chemical safety assessment None None None

None

None

Not classified

No information available

No chemical safety assessment has been carried out

SECTION 16: Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

References

- National Institute for Occupational Safety and Health (NIOSH), U.S., 2010: http://www.cdc.gov/niosh/topics/nanotech/
- National Institute for Occupational Safety and Health (NIOSH), U.S., 2009: http://www.cdc.gov/niosh/docs/2009-125/pdfs/2009-125.pdf

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information 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 the Company 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. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"

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