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Safety Data Sheet

LINKBRIGHT[™]

Thiol Oligonucleotide Conjugation kit CPN420 / 435 / 475 / 510 / 510B / 580 / 610 / 680 / 770 / 830 / 900 / 1130

Version 1.0 Revision Date 26.02.2021 According to Regulation (EC) No. 453/2010

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

Identification of the substance or mixture

Product Code: 4200MN, 4350MN, 4750MN, 5100MN, 510BMN, 5500MN, 5800AN, 6100MN, 6800AN, 7700MN, 8300MN, 9000MN, 1130MN

Product Name: LINKBRIGHT[™] Thiol Oligonucleotide Conjugation Kit CPN[™]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

Eyes 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 [™] -Thiol		
Water	7732-18-5	>95%
Conjugated polymer	None	<1 %
Polystyrene maleic anhydride	26762-29-8	<1 %
Iron oxide	1317-61-9	<1 %
Polyethylene glycol	25322-68-3	<1 %
Maleimide	541-59-3	<1 %
Solution SC		
Water	7732-18-5	>95%
Cysteine		<1 %
4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid	7365-45-9	<1 %
Solution HT		
Water	7732-18-5	>95%
4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid	7365-45-9	<1 %
Polyethylene glycol	25322-68-3	<1 %
Tris(2-carboxyethyl)phosphine	51805-45-9	<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.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a doctor. Do
	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	Use personal protection equipment Soak up with inert absorbent material
Environmental precautions	Prevent further leakage or spillage if safe to do so. See section 12 for
	more information

SECTION 7: Handling and Storage

Handling

Storage

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. 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 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 Skin Inhalation Ingestion Carcinogenic effects Mutagenic effects Reproductive toxicity Sensitisation Target organ effects May cause eye irritation with susceptible persons May cause skin irritation in susceptible persons May be harmful by inhalation May be harmful if swallowed None None None None None None

SECTION 12: Ecological Information

Ecotoxicity Mobility Biodegradation Bioaccumulation No information available No information available Inherently biodegradable Material does not bioaccumulate

SECTION 13: Disposal Considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport Information

IATA Proper shipping name Hazard class Subsidiary class Packing group UN-N Environmental hazards Special precautions for user

Not classified as dangerous within the meaning of transport regulations None None None None None None

SECTION 15: Regulatory Information

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 Regula	ion (EC) No 689/200 None	
Restricted substances under Annex V of Re	gulation (EC) No 689/2008 None	
Substances under Regulation (EC) No 850/	2004 of the European	
Parliament and of the Council of 29 April 20	04 on persistent	
organic pollutants and amending Directive 7	9/117/EEC None	
German Water hazard classes (Wassergefä	hrdungsklassen) Not classified	
Other international inventories	No information available	
Chemical safety assessment	No chemical safety assessment has b	een 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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