1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	**Product identifiers**	DP1048C
	Trade Name or designation	Egg Wash Liquid
1.2	**Identification of Uses**	Cleaner
	Uses advised against	No specific uses are advised against
1.3	**Supplier**	Biolink Limited. Halifax Way Pocklington Ind. Est Pocklington York YO42 1NR
	Telephone No.	+44 (0) 1759 303444
	Fax No.	+44 (0) 1759 303158
	Email	info@biolinklimited.co.uk
1.4	**Emergency Phone**	+44 (0) 1280 738605 (office hours only)

2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EEC as amended

Xi, N, R36/37/38, R52/53

Classification in accordance to EC 1272/2008 as amended

PHYSICAL HAZARDS
Not Classified
HEALTH HAZARDS

Acute Toxicity Oral	Category 4	H302 Harmful if swallowed
Skin Irritant	Category 2	H315 Causes Skin irritation
Eye Damage	Category 1	H318 Causes serious eye damage

ENVIRONMENTAL HAZARDS

Aquatic Chronic Toxicity	Category 3	H412 Harmful to aquatic life with long lasting effects

Hazard summary

Physical hazards
Not Classified
Health hazards
Harmful if swallowed, causes serious eye damage, causes Skin irritation
Environmental hazards
Harmful to aquatic life with long lasting effects
Specific hazards
Not known

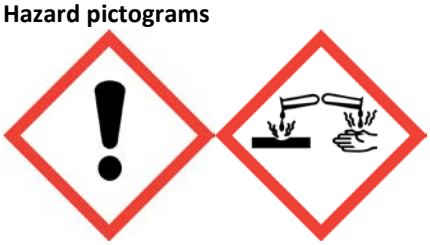
Main symptoms
Harmful if swallowed. Symptoms may include nausea and discomfort. May cause irritation to the skin. Symptoms may include redness, discomfort, rash. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

2.2 Label elements

Label in accordance with EC 1272/2008 as amended

Contains QUATERNARY AMMONIUM COMPOUNDS, DIDECYLDIMETHYLAMMONIUM CHLORIDE

Hazard pictograms



Signal word Danger

Hazard statements
H302 Harmful if swallowed
H315 Causes Skin irritation
H318 Causes serious eye damage
H412 Harmful to aquatic life with long lasting effects

Precautionary statements
Prevention
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
Response
P301 + P312 IF SWALLOWED: Call a POISON Centre or Doctor/physician if you feel unwell
P302 + P352 IF ON SKIN: Wash with plenty of soap and water
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Storage
None
Disposal
P501 Dispose of contents/container in accordance with local regulations.
Supplemental label information
Not applicable

2.3 Other hazards
Not known

3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

B-ALANINE, N-(2-CARBOXYETHYL)-,N-COCO ALKYL DERVIS,. DISODIUM SALTS			1-4%
CAS-No.: 90170-43-7	EC No.: 290-476-8	EC Index No.:	Reach No.: 01-2119976233-35
Classification (67/548/EEC) Xi, R36		Classification (EC 1272/2008) Eye Irrit. 2 H319	

ALCOHOLS, C12-15, ETHOXYLATED			1-3%
CAS-No.: 68131-39-5	EC No.: 500-195-7	EC Index No.:	Reach No.: 01-2119976233-35
Classification (67/548/EEC) Xn, Xi, R22, R41		Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Dam. 1 - H318	

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)			1 – 3%
CAS-No.: 164462-16-2	EC No.: 423-270-5	EC Index No.:	Reach No.: 01-0000016977-53
Classification (67/548/EEC) Not classified		Classification (EC 1272/2008) Met corr. 1 – H290	

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES			<1%
CAS-No.: 68424-85-1	EC No.: 270-325-2	EC Index No.: 612-131-00-6	Reach No.:
Classification (67/548/EEC) C, Xn, N, R34, R22, R50		Classification (EC 1272/2008) Met. Corr. 1 - H290 Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1- H318 Aquatic acute 1 -H400 Aquatic chronic 1 - H410	

DIDECYLDIMETHYLAMMONIUM CHLORIDE			<1%
CAS-No.: 7173-51-5	EC No.: 230-525-2	EC Index No.:	Reach No.:
Classification (67/548/EEC) C, N, R22, R34, R50		Classification (EC 1272/2008) Acute Tox.3 - H301 Skin Corr.1B - H314 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

4 - FIRST AID MEASURES

General Information

First aiders should wear suitable protective clothing.

4.1 Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Skin contact

Remove contaminated clothing. Wash off with plenty of water. Consult a doctor if symptoms persist.

Eye contact
Remove contaminated clothing. Wash off with plenty of water. Consult a physician if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed
Harmful if swallowed. Symptoms may include nausea and discomfort. May cause irritation to the skin. Symptoms may include redness, discomfort, rash. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

4.3 Indication of any immediate medical attention and special treatment needed
Rinse eye immediately with sterile saline solution.
Seek medical attention in case of ingestion, inhalation or contact with eyes.
If swallowed gastric irrigation with activated carbon

5 - FIRE FIGHTING MEASURES

General Fire Hazards

5.1. Extinguishing media
SUITABLE EXTINGUISHING MEDIA
Water spray, Dry powder, foam.
UNSUITABLE EXTINGUISHING MEDIA
None

5.2. Special hazards arising from the substance or mixture
UNUSUAL FIRE & EXPLOSION HAZARDS
In case of fire toxic gases may be released. (COx, NOx, HCl).
SPECIFIC HAZARDS
None noted.

5.3. Advice for fire-fighters
SPECIAL FIRE FIGHTING PROCEDURES
Collect fire extinguishing water separately, do not allow to enter drains. Exceptionally large spillages should be notified to the appropriate authorities.
PROTECTIVE EQUIPMENT FOR FIRE-FIGTHERS
Wear self-contained breathing apparatus.

6 - ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Keep unnecessary people away. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

6.2. Environmental precautions
Do not let product enter drains. Discharge into the environment must be avoided. Appropriate authorities should be notified in case of contamination of sewerage or surface water.

6.3. Methods and material for containment and cleaning up
Prevent further leakage or spillage if safe to do so. If possible contain the spillage with adsorbent material, place in a suitable container and dispose of as described in section 13 of this safety data sheet.
Quats. are incompatible with anionic compounds e.g. anionic surfactants. If large quantities are released into waste water collect in an appropriate container. Adjust with sodium lauryl sulphate solution (Concentration twice as high as the active ingredient in the waste water) to a mixture ratio of 1:1. Polluted surfaces can be decontaminated with a 10% sodium lauryl sulphate solution.

6.4. Reference to other sections
Personal protection –section 8.
Disposal considerations –Section 13.

7 - HANDLING AND STORAGE

7.1 Precautions for safe handling
Ensure good ventilation when using this product, avoid inhalation of vapours and spray. Handle with care and avoid spilling, skin and eye contact. Do not handle broken packages without protective equipment. Follow instructions and ensure correct dilution of this product before use.

7.2 Conditions for safe storage, including any incompatibilities
Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container

7.3 Specific end use(s)
Cleaner

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Not available

Biological limit values
Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no-effect level (DNEL)
Not available
Predicted no effect concentrations (PNECs)
Not available

8.2 Exposure controls

Appropriate Engineering controls
No specific engineering measures are noted except that this product should be used in a well ventilated area.
Individual protection measures, such as personal protective equipment
In case of splashing wear suitable protective equipment.
General information
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday
Respiratory equipment
Where risk assessment shows air-purifying respirators are appropriate use a respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator.
Hand protection
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.6 mm
Break through time: >480 min

Splash contact
Material: Nitrile rubber

Minimum layer thickness: 0.2 mm
Break through time: >35 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection
In case of splashing, wear safety goggles or face shield.
Other protection
Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures
DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke
Environmental exposure controls
Do not discharge into the watercourse or drains

9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	
Physical State:	Liquid
Form:	Solution
Colour:	Colourless
Odour	Slight
pH	10.0 – 11.0 (Undiluted)
BP/BP Range	>100°C
MP/MP Range	<0°C
SG/Density:	1.0 – 1.05 g/ml (1.01 typical)
Relative Index:	6 – 8 %
Solubility	Completely miscible in water

9.2. Other information
Not known

10 - STABILITY AND REACTIVITY

10.1 Reactivity
Not expected under normal conditions of use
10.2 Chemical stability
Stable under normal temperature conditions
10.3 Possibility of hazardous reactions
Not expected under normal conditions of use
10.4 Conditions to avoid
Avoid exposure to high temperatures or direct sunlight
10.5 Incompatible materials
Materials to avoid -strong acids or alkalis. Oxidising agents. Anionic compounds
10.6 Hazardous decomposition products
None, see section 5 for decomposition products under fire conditions

11 - TOXICOLOGICAL INFORMATION

General information

Information on likely routes of exposure

Inhalation

No specific symptoms noted.

Skin contact

May cause irritation to the skin. Symptoms may include redness, discomfort, rash

Eye contact

Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Ingestion

Harmful if swallowed. Symptoms may include nausea and discomfort

Symptoms

Harmful if swallowed. Symptoms may include nausea and discomfort. May cause irritation to the skin. Symptoms may include redness, discomfort, rash. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

11.1 Information on toxicological effects

Acute toxicity

B-ALANINE, N-(2-CARBOXYETHYL)-,N-COCO ALKYL DERVIS,. DISODIUM SALTS

Oral	LD50	>5000 mg/kg

ALCOHOLS, C12-15, ETHOXYLATED

Oral	LD50	>200-2000 mg/kg (Rat)

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

Oral	LD50	>4000 mg/kg
Inhalation	LC50 4h	>5mg/l
Dermal	LD50	>4000 mg/kg

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

Oral	LD50	795 mg/kg (Rat)
Dermal	ATEmix	> 5000 mg/kg (calculated)

DIDECYLDIMETHYLAMMONIUM CHLORIDE

Oral	LD50	238 mg/kg (Rat)
Dermal	LD50	3342 mg/kg (Rabbit)

Skin corrosion/irritation

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

OECD 404	Not irritating

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

OECD 404	Corrosive (Rabbit)

DIDECYLDIMETHYLAMMONIUM CHLORIDE

OECD 404 1h	Corrosive (Rabbit)

Serious eye damage/eye irritation

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

OECD 405	Not irritating

Respiratory sensitisation

Based on the available data not classified as a respiratory sensitiser

Skin sensitisation

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

OECD 406	Not sensitising

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

OECD 406	Not sensitising (Guinea pig)

DIDECYLDIMETHYLAMMONIUM CHLORIDE

	Buehler Test	Not Sensitising (Guinea pig)

Germ cell mutagenicity

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

OECD 471	Negative
HGPRT assay	Negative
Micronucleus assay	Negative

Carcinogenicity

Based on the available data not classified as a carcinogen

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed

Reproductive toxicity

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

OECD 421/422	Negative
Developmental toxicity	
NOAEL	>2000 mg/kg Oral (Rat)

Specific target organ toxicity - single exposure

Based on the available data not classified as a STOT SE

Specific target organ toxicity - repeated exposure

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3). May cause damage to the kidney after repeated ingestion of high doses-animal studies

OECD 453	NOAEL	530 mg/kg Oral (Rat)

Aspiration hazard

Based on the available data not classified as an aspiration hazard

Mixture versus substance information

No data available

Other information

Not known

12 - ECOLOGICAL INFORMATION

12.1 Toxicity

B-ALANINE, N-(2-CARBOXYETHYL)-,N-COCO ALKYL DERVIS,. DISODIUM SALTS

Toxicity to aquatic invertebrates	EC50 24 h	97.5 mg/l Daphnia magna
	EC50 48 h	97.5 mg/l Daphnia magna
Toxicity to Algae	EbC50 48 h	8.2 mg/l Chlorella Vulgaris
	EbC50 72 h	18 mg/l Chlorella Vulgaris
	ErC50 48 h	18 mg/l Chlorella Vulgaris
	ErC50 72 h	31 mg/l Chlorella Vulgaris

ALCOHOLS, C12-15, ETHOXYLATED

Toxicity to fish	LC50 96 h	>1-≤10 mg/l

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

Toxicity to fish	LC50 96 h	>200 mg/l *Brachydanio rerio*
	NOEC 28d	≥ 200 mg/l *Oncorhynchus mykiss*
Toxicity to aquatic invertebrates	EC50 48 h	>200 mg/l *Daphnia magna*
	NOEC 21d	≥ 200 mg/l *Daphnia magna*
Toxicity to Algae	EC50 72 h	>200 mg/l *Scenedesmus subspicatus*
Toxicity to Bacteria	EC20 0.5h	> 2000mg/l activated sludge

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

Toxicity to fish	LC50 96 h	0.085 mg/l (rainbow trout)
Toxicity to aquatic invertebrates	EC50 48 h	0.016 mg/l *Daphnia magna.*
Toxicity to Algae	EC50 72 h	0.025 mg/l *Pseudokirchneriella subcapitata*

DIDECYLDIMETHYLAMMONIUM CHLORIDE

Toxicity to fish	LC50 96 h	0.19mg/l *Pimephales promelas*
	NOEC 34 d	0.032 mg/l *Danio rerio*
Toxicity to aquatic invertebrates	EC50 48 h	0.062 mg/l *Daphnia magna*
	NOEC 21 d	0.010 mg/l *Daphnia magna*
Toxicity to Algae	ErC50 96 h	0.026 mg/l *Pseudokirchneriella subcapitata*

Toxicity to Bacteria	EC50 3 h	11 mg/l Activated Sludge

12.2 Persistence and degradability

B-ALANINE, N-(2-CARBOXYETHYL)-,N-COCO ALKYL DERVIS,. DISODIUM SALTS

Readily biodegradable

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

Readily biodegradable

OECD 301 F 28 d	80-90% BOD or the ThOD
OECD 311 60 d	80-90% TIC of the ThIC

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

Readily Biodegradable

OECD 301 D	70% Activated Sludge
COD	1130 mg/g

DIDECYLDIMETHYLAMMONIUM CHLORIDE

Readily Biodegradable

OECD 301 B 28 d	72%
Die away Test 28 d	93.3%
OECD 303 A 24-70 d	91 %

12.3 Bioaccumulative potential

No data available

Partition coefficient n-octanol/water (log Kow)

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)

Log Kow	-4.0

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

n-octanol/water OECD 107	2.88

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Not known

13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements

Residual waste

Dispose of waste and residues in accordance with local authority requirements

Contaminated packaging

Dispose of as unused product.

EU Waste Code

02-01-09

Disposal methods/information
Wear protective equipment as outlined in section 8 of this safety data sheet when handling this product contaminated materials and packaging.
Special precautions
Not noted.

14 - TRANSPORT INFORMATION

Road Transport Notes

14.1 UN-number
ADR/RID: N/A IMDG: N/A IATA: N/A

14.2 UN proper shipping name
ADR/RID: N/A
IMDG: N/A
IATA: N/A

14.3 Transport hazard class(es)
ADR/RID: N/A IMDG: N/A IATA: N/A

14.4 Packaging group
ADR/RID: N/A IMDG: N/A IATA: N/A

14.5 Environmental hazards
IMDG: Marine pollutant: No

14.6 Special precautions for users

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
N/A

Further information
N/A

15 - REGULATORY INFORMATION

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

Other regulations The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

15.2 Chemical Safety Assessment

National regulations Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

15.2 Chemical safety assessment
No Chemical Safety Assessment has been carried out.

16 - OTHER INFORMATION

List of abbreviations
CO Carbon Monoxide
NO Nitrogen Oxide
HCL Hydrochloric acid
TWA Time weighted average
STEL Short Term exposure limit
DW Dry weight

References

Information on evaluation method leading to the classification of mixture
The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15
C Corrosive
Xn Harmful
Xi Irritant
N Dangerous to the environment
R22 Harmful if swallowed
R34 Causes burns
R36 Irritating to eyes
R36/37/38 Irritating to eyes, respiratory system and skin
R41 Risk of serious damage to eyes
R50 Very toxic to aquatic organisms
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
H290 May be corrosive to metals
H301 Toxic if swallowed
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H315 Causes Skin irritation
H318 Causes serious eye damage
H319 Causes serious eye irritation
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects
H412 Harmful to aquatic life with long lasting effects
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
P301 + P312 IF SWALLOWED: Call a POISON Centre or Doctor/physician if you feel unwell
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P332+313 If skin irritation or rash occurs: Get medical advice/ attention
P501 Dispose of contents/container in accordance with local regulations.

Training information Follow training instructions when handling this material.

Disclaimer

Biolink cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. The information in the sheet was written based on the best knowledge and experience currently available.