Revision 1



SAFETY DATA SHEET PiColorLock™ Gold

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name PiColorLock™ Gold

Product No. 303

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

Identified uses Phosphate detection

1.3. Details of the supplier of the safety data sheet

Supplier Innova Biosciences Ltd.

Babraham Hall Babraham Cambridge CB22 3AT

Tel. +44(0) 1223 496170 Fax. +44(0) 1223 496172 info@innovabiosciences.com

1.4. Emergency telephone number

+44 (0) 1223 496170 (Mon-Fri, 09:00-17:00, UK Time)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Not classified.

Human health Skin Irrit. 2 - H315;Eye Irrit. 2 - H319;Skin Sens. 1 - H317;STOT SE 3 - H335

Environment Aquatic Chronic 3 - H412

Classification (1999/45/EEC) Xi;R36/37/38. R43. R52/53.

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

2.2. Label elements

Contains AMMONIUM MOLYBDATE

Label In Accordance With (EC) No. 1272/2008



Signal Word Warning

Hazard Statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Dispose of contents/container in accordance with local regulations.

Supplementary Precautionary Statements

P273 Avoid release to the environment.
P261 Avoid breathing vapour/spray.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P363 Wash contaminated clothing before reuse.

P403+233 Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

P501

3.2. Mixtures

HYDROCHLORIC ACID%			10-30%
CAS-No.: 7647-01-0	EC No.: 231-595-7		
Classification (EC 1272/2008) Skin Corr. 1B - H314 STOT SE 3 - H335		Classification (67/548/EEC) C;R34 Xi;R37	

AMMONIUM MOLYBDATE			1-5%
CAS-No.: 12054-85-2	EC No.:		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Skin Irrit. 2 - H315		Xi;R38.	
Skin Sens. 1 - H317		N;R51/53.	
Aquatic Chronic 2 - H411		D/13	

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

Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention immediately!

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

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

Inhalation.

May cause irritation to the respiratory system.

Ingestion

Harmful if swallowed.

Skin contact

Irritating to skin. Risk of sensitisation or allergic reactions among sensitive individuals.

Eye contact

May cause severe irritation to eyes.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Hydrogen chloride (HCI) gas

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not allow ANY environmental contamination.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Store in a refrigerator. Store in tightly closed original container.

Storage Class

Chemical storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
AMMONIUM MOLYBDATE	WEL		5 mg/m3		10 mg/m3	as Mo
HYDROCHLORIC ACID%	WEL	1 ppm	2 mg/m3	5 ppm	8 mg/m3	

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment





Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Hand protection

Use suitable protective gloves if risk of skin contact.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Liquid

ColourBrown/ orangeOdourOdourless.SolubilitySoluble in water.

Initial boiling point and boiling range

Not available.

Melting point (°C)

Not available.

pH-Value, Conc. Solution <1

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Reacts with alkalis and generates heat.

10.5. Incompatible materials

Materials To Avoid

Strong alkalis. Strong oxidising substances.

10.6. Hazardous decomposition products

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

No information available.

Inhalation

May cause irritation to the respiratory system.

Ingestion

Harmful if swallowed.

Skin contact

Irritating to skin. Risk of sensitisation or allergic reactions among sensitive individuals.

Eye contact

May cause severe irritation to eyes.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Degradability

No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

Road Transport Notes

Not Classified

Rail Transport NotesNot classified.Sea Transport NotesNot classified.Air Transport NotesNot classified.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

EU Legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 19/12/2012

Revision 1

Risk Phrases In Full

R34 Causes burns.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R36/37/38 Irritating to eyes, respiratory system and skin.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In FullH314Causes severe skin burns and eye damage.H315Causes skin irritation.H317May cause an allergic skin reaction.H319Causes serious eye irritation.H335May cause respiratory irritation.H411Toxic to aquatic life with long lasting effects.H412Harmful to aquatic life with long lasting effects.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.