Dryden Aqua Ltd SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation

NoPhos

of the mixture

Synonyms

Registration number

Lanthanum chloride aqueous solution. (CAS 20211-76-1)

Issue date 27-June-2014

Version number 02

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

Identified uses Phosphate removal agent for swimming pools.

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Dryden Aqua Ltd

Address Butlerfield Industrial Estate

Bonnyrigg

Edinburgh EH19 3JQ

GB

Telephone +44 (0) 18758 22222

Fax: +44 (0) 18758 22229

e-mail aqua@drydenaqua.com
Contact person Christi Ashley-Sing

1.4. Emergency telephone +44 (0) 18758 22222

number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

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

Classification Xi;R41, R43, R52/53

The full text for all R-phrases is displayed in section 16.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Serious eye damage/eye irritation Category 1 H318 - Causes serious eye

damage.

Skin sensitisation Category 1 H317 - May cause an allergic skin

reaction.

Environmental hazards

Hazardous to the aquatic environment, Category 3 H412 - Harmful to aquatic life with

long-term aquatic hazard long lasting effects.

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards Risk of serious damage to eyes. May cause sensitisation by skin contact.

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

Specific hazards None known.

Main symptoms Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. May cause temporary blindness and severe eye damage. May cause an allergic skin

reaction. Rash. Dermatitis.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Lanthanum Chloride, Anhydrous Contains:

Hazard pictograms



Signal word Danger

Hazard statements

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P261 Avoid breathing mist or vapour.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE or doctor/physician.

P321 Specific treatment (see this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

Storage Not required

Disposal

P501 Dispose of contents/container (in accordance with related regulations).

Supplemental label information None.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name CAS-No. / EC No. REACH Registration No. **Notes** INDEX No.

Lanthanum Chloride, Anhydrous 20 - 25 10099-58-8 01-2119452063-49-xxxx

233-237-5

Classification: DSD: Xi;R41, R43, N;R51/53

Met. Corr. 1;H290, Skin Sens. 1;H317, Eye Dam. 1;H318, Aquatic

Chronic 2:H411

Other components below reportable levels 76

CLP: Regulation No. 1272/2008. DSD: Directive 67/548/EEC.

#: This substance has been assigned Community workplace exposure limit(s).

The full text for all R- and H-phrases is displayed in section 16. Composition comments

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Material name: NoPhos SDS UK 2/9

1359 Version #: 02 Revision date: 17-October-2014 Issue date: 27-June-2014

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of

eczema or other skin disorders: Seek medical attention and take along these instructions.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control centre immediately.

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

Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause temporary blindness and severe eye damage. May cause an allergic

skin reaction. Dermatitis.

4.3. Indication of any immediate medical attention and special

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

treatment needed

SECTION 5: Firefighting measures

General fire hazards Non-combustible, substance itself does not burn. No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Not available.

Suitable extinguishing

media

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn. No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective clothing.

Special fire fighting procedures

No unusual fire or explosion hazards noted.

Specific methodsUse standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapour. Ensure adequate ventilation. For personal protection, see section 8. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not breathe vapour. Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage,

Storage temperature: between 10°C and 25°C.

including any incompatibilities

Store in corrosive resistant container with a resistant inner liner. Store in original tightly closed

container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

The specified uses for this material are shown in section 1 of this document

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

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

Provide adequate general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen

according to the CEN standards and in discussion with the supplier of the personal protective

equipment. Launder contaminated clothing before reuse.

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.

(EN166)

Skin protection

- Hand protection Wear appropriate chemical resistant gloves. Contains a potential skin sensitizer.

(EN374) Please observe the instructions regarding permeability and breakthrough time which are

provided by the supplier of the gloves.

- Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

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

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material

and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the

workplace.

Environmental exposure

controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid.

Form Free flowing Liquid.

Colour Blue

Odour Odourless.
Odour threshold Not applicable

pH 5.5 1% ageous solution

Melting point/freezing point not applicable / < 0 °C (< 32 °F) estimated

Initial boiling point and boiling

range

> 100 °C (> 212 °F) estimated

Flash point Not applicable

Not applicable **Evaporation rate** Flammability (solid, gas) Not applicable

Upper/lower flammability or explosive limits

Flammability limit - lower Not applicable

(%)

Not applicable

Flammability limit - upper

(%)

Vapour pressure Not applicable Vapour density Not applicable Not available. Relative density

Solubility(ies)

Solubility (water) miscible Solubility (other) Not available. Auto-ignition temperature Not applicable **Decomposition temperature** Not applicable Viscosity Not applicable Not applicable **Explosive properties** Oxidizing properties Not applicable

9.2. Other information

Density 1.25 g/cm3 Percent volatile 76 % estimated

SECTION 10: Stability and reactivity

10.1. Reactivity Material is stable under normal conditions. 10.2. Chemical stability Material is stable under normal conditions. 10.3. Possibility of hazardous Hazardous polymerisation does not occur.

reactions

10.4. Conditions to avoid Contact with incompatible materials. Do not expose to temperatures above 75 °C. Do not freeze. 10.5. Incompatible materials Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid

exothermic reactions.

May be corrosive to metals. 10.6. Hazardous decomposition

products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information There is no toxicological data available on the preparation itself.

Data shown in this section has been published in the substance(s) REACH dossier

Information on likely routes of exposure

Inhalation Not available.

Skin contact May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion Not available.

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred **Symptoms**

vision. May cause temporary blindness and severe eye damage.

May cause an allergic skin reaction. Rash. Dermatitis. Skin contact may provoke the following

symptoms: Sensitisation

11.1. Information on toxicological effects

Acute toxicity May cause an allergic skin reaction.

Test results Components **Species**

Lanthanum Chloride, Anhydrous (CAS 10099-58-8)

Acute

Dermal

LD50 Rabbit > 1638 mg/kg bw

Oral

LD50 Rat 2361 - 2909 mg/kg bw

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory sensitisation Due to partial or complete lack of data the classification is not possible.

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible. Carcinogenicity Due to partial or complete lack of data the classification is not possible. Reproductive toxicity Due to partial or complete lack of data the classification is not possible. Due to partial or complete lack of data the classification is not possible. Specific target organ toxicity -

single exposure

Specific target organ toxicity -

repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance

information

No information available.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects.

Product		Species	Test results
NoPhos (CAS Mixture)			
Aquatic			
Crustacea	EC50	Daphnia	180 μg/l, 48 hours
			4.0583 mg/l, 21 days
	NOEC	Daphnia	0.7333 mg/l, 21 days
Fish	NOEC	Fish	1.0833 mg/l, 21 days
Components		Species	Test results
Lanthanum Chloride, Anhy	drous (CAS		

10099-58-8)

Aquatic

Algae	EC50	Algae	28.2 mg/l, 72 hours Growth inhibition
Crustacea	EC50	Daphnia	43.2 µg/l, 48 hours static
			0.974 mg/l, 21 days mortality
	NOEC	Daphnia	0.176 mg/l, 21 days mortality

Carp (Cyprinus carpio)

12.2. Persistence and

Fish

The product solely consists of inorganic compounds which are not biodegradable.

degradability

12.3. Bioaccumulative potential Does not bioaccumulate.

Material name: NoPhos SDS UK

NOEC

0.46 mg/l, 21 days OECD 24

^{*} Estimates for product may be based on additional component data not shown.

^{*} Estimates for product may be based on additional component data not shown.

Partition coefficient

n-octanol/water (log Kow)

Not available.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil The product is miscible with water. May spread in water systems.

Mobility in general This product is miscible in water.

12.5. Results of PBT

and vPvB assessment

Not available.

12.6. Other adverse effects May cause long-term adverse effects in the aquatic environment. Do not discharge into drains,

water courses or onto the ground.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

14.7. Transport in bulk according

This substance/mixture is not intended to be transported in bulk.

to Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, Article 59(1). Candidate List

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use

Not regulated.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are

breastfeeding.

Not regulated.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Always applicable.

Directive 94/33/EC on the protection of young people at work

Not listed.

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.

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.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

SECTION 16: Other information

List of abbreviations Not available.

Material name: NoPhos SDS UK

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

References

Information on evaluation method leading to the classification of mixture

Full text of any statements or R-phrases and H-statements under Sections 2 to 15 Not available.

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

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.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

Revision information

Training information

None.

The 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,

Read safety instructions, SDS and emergency procedures before handling. Follow training

instructions when handling this material.

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available

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