SAFETY DATA SHEET

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

1.1 Product identifier
Invisible Water - Phosphate Remover

1.2 Relevant identified uses of the mixture and uses advised against
Phosphate remover for use in swimming pool water

1.3 Details of the supplier of the Safety Data Sheet
Supplier:
Mineral Supplies International
Church Lane, Horsted Keynes
West Sussex, RH17 7AR United Kingdom

Responsible person:
Email: sales@mineralsi.com

Emergency telephone number:
+44(0)1825 790524

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the mixture
Classification according to Regulation (EC) No 1272/2008 (CLP):

Met. Corr.	1	H290 May be corrosive to metals.
Eye Dam.	1	H318 Causes serious eye damage.
Skin Sens.	1	H317 May cause an allergic skin reaction.
Aquatic Chronic	2	H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS05 GHS07 GHS09

Signal word Danger

Hazard statements
H290 May be corrosive to metals.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of 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.
P406 Store in corrosive resistant container with a resistant inner liner.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Description: Phosphate Remover

Description	CAS No.	Concentration (%)
Lanthanum chloride heptahydrate	10025-84-0	>85%
Inert ingredients	-	<15%

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General

Immediately remove any clothing soiled by the product.
Seek medical treatment in case of complaints.

Inhalation

Supply fresh air.
In case of unconsciousness place patient in stable, side position for transportation.
Seek medical treatment in case of complaints.

Skin contact:

Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

Eye contact:

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Protect unharmed eye.
Call a doctor immediately.

Ingestion:

If swallowed, rinse mouth with water (only if the person is conscious).
Induce vomiting, only if affected person is fully conscious.
Drink plenty of water and provide fresh air.
If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed: Causes serious eye damage.
Information for doctor: Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

The product is not flammable. Choose extinguishing media depending on surrounding fire.

Unsuitable extinguishing media:

No data available.

5.2 Special hazards arising from the substance or mixture:

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters:

Wear full protective clothing and self-contained breathing apparatus.
Do not inhale gases.

Additional information:
Dispose of fire debris and contaminated firefighting water in accordance with official regulations.
Collect contaminated firefighting water separately. It must not enter the sewage system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions. protective equipment and emergency procedures
Wear protective clothing.
Avoid formation of dust.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid contact with the eyes and skin.
Ensure adequate ventilation.

6.2 Environmental precautions
Damp down dust with water spray.
Keep contaminated washing water and dispose of appropriately.
Avoid release to the environment.
Do not allow to penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and clean-up
Avoid formation of dust.
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
Dispose of the material collected according to regulations.
Ensure adequate ventilation.

6.4 References to other sections
For further and detailed information see Sections 7, 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Wear protective clothing.
Prevent formation of dust.
Any unavoidable deposit of dust must be regularly removed.
Provide suction extractors if dust is formed.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid contact with the eyes and skin.
Keep receptacles tightly sealed.
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage. including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Prevent any seepage into the ground.
Keep container tightly sealed.
Store receptacle in a well-ventilated area.
Store in dry conditions.
Protect from humidity and water.
Information about storage in one common storage facility:
Keep away from foodstuffs, beverages and feed.
Further information about storage conditions:
Protect from heat and direct sunlight.
Store in a cool place.

7.3 Specific end use(s):
No specific instructions available

Additional information about design of technical facilities:

Ensure good ventilation at the workplace.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.
Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:
General protective and hygienic measures:
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not inhale dust / smoke / mist.
Do not eat, drink, smoke or sniff while working.
Use skin protection cream for skin protection.

Respiratory protection: Use suitable respiratory protective device when high concentrations are present.
Recommended filter device for short term use:
Filter P2
Filter FFP2

Protection of hands:


Protective gloves

Eye protection:


Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information
Appearance:
Form: Solid, tablets / granules
Colour: Off-white to white
Odour: Slight chemical
Odour threshold: Not determined
pH:N/a
Melting point: 852°C
Initial boiling point and boiling range: 1,750°C
Flash point: Undetermined
Flammability (solid, gas): Product is not flammable
Decomposition temperature: Not determined.
Auto-ignition temperature: Not applicable
Explosive properties: Product does not present an explosion hazard.
Explosion limits:
Lower: Not applicable
Upper: Not applicable
Oxidising properties: None
Vapour pressure: Not applicable.
Density at 20 °C: Not determined
Solubility in / Miscibility with water at 20 °C: Soluble
Partition coefficient: n-octanol/water: Not determined.
Viscosity:
Dynamic: Not applicable
Kinematic: Not applicable

9.2 Other information: No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Reacts with alkali (lyes).

Reacts with alkaline metals.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials:

Alkali (lye).

Alkaline metals

10.6 Hazardous decomposition products:

In case of fire, the following can be released:

Hydrogen chloride (HCl)

Toxic metal oxide smoke

SECTION 11: TOXILOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:		
Oral	LD50	2,621 mg/kg (rat (Sprague-Dawley))
Dermal	LD50	>1,638 mg/kg (rabbit)
	NOAEL (reproduction/developmental toxicity	≥91.8 mg/kg bw/day (Mouse)

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Causes serious eye damage.

Respiratory or skin sensitisation: May cause an allergic skin reaction.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): None

Germ cell mutagenicity Based on available data: The classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT - single exposure: Based on available data, the classification criteria are not met.

STOT - repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity:

EC50/48h	2.083 mg/l
EC50/3h	560 mg/l
NOEC/21 days	0.46 mg/l
NOEC/3h	180 mg/l
EC50/24 h	1.61 mg/l
LC50/96h	2 mg/l

12.2 Persistence and degradability: Not applicable

12.3 Bioaccumulative potential:

All research into the bioaccumulation of Lanthanum in the aquatic compartment showed, that Lanthanum may have a potential to bioaccumulate in aquatic organisms. There is also increasing evidence that certain aquatic organisms have a physiological regulation mechanism for the uptake of Lanthanum and that Lanthanum ions are essential for their biologoical function. Thus this bioaccumulation is no cause for concern as in the classical sense for organic substances. On the contrary bioaccumulation investigations in the terrestrial compartment indicated only a low potential for Lanthanum to bioaccumulate in plants.

12.4 Mobility in soil: No further relevant information available.

Additional ecological information:

AOX-indication: The product does not contain organically bounded halogens (AOX-free).

12.5 Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

12.6 **Other adverse effects:** No further relevant information available.

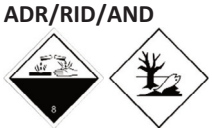
SECTION 13: DISPOSAL CONSIDERATIONS

13.1 **Waste treatment methods**
Recommendation: Disposal according to the local regulations.
Waste disposal key: 51540 (ÖNORM S 2100)
European waste catalogue
06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
Uncleaned packaging:
Recommendation:
Empty contaminated packaging thoroughly. They may be recycled after thorough and proper cleaning. Packaging that may not be cleaned are to be disposed of in the same manner as the product. Disposal must be made according to official regulations.
Recommended cleaning agents: Water, if necessary together with cleaning agents.

SECTION 14: TRANSPORT INFORMATION

ADR / RID / AND, IMDG, IATA:

14.1 **UN number or ID number**
UN 1759
14.2 **UN proper shipping name**
ADR/RID/AND 1759 CORROSIVE SOLID, N.O.S. (Lanthanum chloride heptahydrate), ENVIRONMENTALLY HAZARDOUS
IMDG CORROSIVE SOLID, N.O.S. (Lanthanum chloride heptahydrate), MARINE POLLUTANT
IATA CORROSIVE SOLID, N.O.S. (Lanthanum chloride heptahydrate)
14.3 **Transport hazard class(es)**
ADR/RID/AND



Class 8 (C10) Corrosive substances
Label 8
IMDG

Class 8 Corrosive substances
Label 8
IATA

Class 8 Corrosive substances
Label 8
14.4 **Packing group**
ADR / RID / AND, IMDG, IATA: III
14.5 **Environmental hazards:** Environmentally hazardous substance, solid; Marine Pollutant
Marine pollutant: Symbol (fish and tree)
Special marking (ADR/RID/ADN): Symbol (fish and tree)
14.6 **Special precaution for user:** Warning: Corrosive substances.
Danger code (Kemler): 80
EMS Number: F-A, S-B
Stowage category: A
No relevant information available
14.7 **Transport in bulk according to Annex II of Marpol and the IBC Code:** Not applicable

Transport/Additional information:
ADR/RID/ADN
Excepted quantities (EQ): E1
Limited quantities (LQ): 5 kg

Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30g
Maximum net quantity per outer packaging: 1000g
Transport category: 3
Tunnel restriction code: E

IMDG
Limited quantities (LQ): 5 kg
Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30g
Maximum net quantity per outer packaging: 1000g

UN "Model Regulation": UN 1759 CORROSIVE SOLID, N.O.S. (LANTHANUM CHLORIDE HEPTAHYDRATE), 8, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: REGULATORY INFORMATION

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

Sara
Section 302 (extremely hazardous substances): Substance is not listed.
Section 313 (Specific toxic chemical listings): Substance is not listed.
TSCA (Toxic Substances Control Act): Substance is listed.
Proposition 65
Chemicals known to cause cancer: Substance is not listed**.**
Chemicals known to cause reproductive toxicity to females: Substance is not listed.
Chemicals known to cause reproductive toxicity for males: Substance is not listed.
Chemicals known to cause developmental toxicity: Substance is not listed.
Carcinogenicity categories
EPA (Environmental Protection Agency): Substance is not listed.
TLV (Threshold Limit Value established by ACGIH): Substance is not listed.
NIOSH-Ca (National Institute for Occupational Safety and Health): Substance is not listed.
European Inventory of Existing Commercial chemical Substances (EINECS): Substance is listed.
Canadian substance listings:
Canadian Domestic Substances List (DSL): Substance is listed.
Canadian Ingredient Disclosure list (limit 0.1%): Substance is not listed.
Canadian Ingredient Disclosure list (limit 1%): Substance is not listed.
Philippines Inventory of Chemicals and Chemical Substances: Substance is listed.
Chinese Chemical Inventory of Existing Chemical Substances: Substance is listed.
Australian Inventory of Chemical Substances: Substance is listed.
Korean Existing Chemical Inventory KE-21827
Standard for the Uniform Scheduling of Medicines and Poisons: Substance is not listed.
New Zealand Inventory of Chemicals: Substance is listed.
Existing and New Chemical List (Japan)
10025-84-0 Lanthanum chloride heptahydrate
Directive 2012/18/EU
Named dangerous substances - ANNEX I: Substance is not listed.
Seveso category: E2 Hazardous to the Aquatic Environment
Qualifying quantity (tonnes) for the application of lower-tier requirements: 200 t
Qualifying quantity (tonnes) for the application of upper-tier requirements: 500 t

15.2 Chemical safety assessment
No information

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
Met. Corr.1: Corrosive to metals – Category 1
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations. The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources, and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required. Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

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