



## SAFETY DATA SHEET

### Zerion® PGH-400 Gel, Granular

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

#### 1. Identification

##### Product identifier

**Product name** Zerion® PGH-400 Gel, Granular

**Product number** 1020-0020, 1020-0173

**Synonyms; trade names** Zerion PGH-400 Gel Powder 1000-2000 micron, Zerion PGH-400 Corrosion Inhibitor Gel Powder 1000-2000 micron

##### Recommended use of the chemical and restrictions on use

**Application** Corrosion inhibitor.

**Uses advised against** Use only for intended applications.

##### Details of the supplier of the safety data sheet

**Manufacturer** Northern Technologies International Corporation  
4201 Woodland Rd  
Circle Pines, MN 55014 - United States  
1-763-225-6600  
sds@ntic.com

##### Emergency telephone number

**Emergency telephone** Carechem +1 202 464 2554; Outside US/Canada +44 1865 407333 (24 hours; 7 days/week)

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

##### Other hazards

This product does not contain any substances classified as PBT or vPvB.

#### 3. Composition/information on ingredients

##### Mixtures

**Composition comments** None of the ingredients are required to be listed.

#### 4. First-aid measures

##### Description of first aid measures

**General information** Get medical advice/attention if you feel unwell.

## Zerion® PGH-400 Gel, Granular

<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. Never give anything by mouth to an unconscious person.
<b>Skin Contact</b>	Rinse with water.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

### **Most important symptoms and effects, both acute and delayed**

<b>General information</b>	See Section 11 for additional information on health hazards.
<b>Inhalation</b>	A single exposure may cause the following adverse effects: Temporary irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	May cause discomfort.
<b>Eye contact</b>	May be slightly irritating to eyes.

### **Indication of immediate medical attention and special treatment needed**

<b>Notes for the doctor</b>	Treat symptomatically.
-----------------------------	------------------------

## **5. Fire-fighting measures**

### **Extinguishing media**

<b>Suitable extinguishing media</b>	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	None known.

### **Special hazards arising from the substance or mixture**

<b>Specific hazards</b>	None known.
<b>Hazardous combustion products</b>	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

### **Advice for firefighters**

<b>Protective actions during firefighting</b>	Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

## **6. Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.
-----------------------------	---

### **Environmental precautions**

<b>Environmental precautions</b>	Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).
----------------------------------	--

## Zerion® PGH-400 Gel, Granular

### Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
<b>Reference to other sections</b>	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

### **7. Handling and storage**

#### Precautions for safe handling

<b>Usage precautions</b>	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment.
<b>Advice on general occupational hygiene</b>	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet.

#### Conditions for safe storage, including any incompatibilities

<b>Storage precautions</b>	Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.
<b>Storage class</b>	Unspecified storage.
<b>Specific end uses(s)</b>	
<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.

### **8. Exposure controls/Personal protection**

#### Control parameters

#### Occupational exposure limits

No exposure limits known for ingredient(s).

#### Exposure controls

<b>Appropriate engineering controls</b>	Provide adequate ventilation. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures.
<b>Eye/face protection</b>	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.
<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.
<b>Other skin and body protection</b>	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
<b>Hygiene measures</b>	Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
<b>Respiratory protection</b>	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

## Zerion® PGH-400 Gel, Granular

**Environmental exposure controls** Keep container tightly sealed when not in use.

### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance	Granules. Powder.
Color	White.
Odor	No characteristic odor.
Odor threshold	No data available.
pH	No data available.
Melting point	No data available.
Initial boiling point and range	No data available.
Flash point	Not applicable.
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	No data available.
Partition coefficient	No data available.
Auto-ignition temperature	No data available.
Decomposition Temperature	No data available.
Viscosity	No data available.
Explosive properties	Not applicable.
Oxidizing properties	Not applicable.
Other information	None.

### 10. Stability and reactivity

Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.

## Zerion® PGH-400 Gel, Granular

<b>Materials to avoid</b>	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

### 11. Toxicological information

#### Information on toxicological effects

##### Acute toxicity - oral

**Summary** Based on available data the classification criteria are not met.

##### Acute toxicity - dermal

**Summary** Based on available data the classification criteria are not met.

##### Acute toxicity - inhalation

**Summary** Based on available data the classification criteria are not met.

##### Skin corrosion/irritation

**Summary** Based on available data the classification criteria are not met.

##### Serious eye damage/irritation

**Summary** Based on available data the classification criteria are not met.

##### Respiratory sensitization

**Summary** Based on available data the classification criteria are not met.

##### Skin sensitization

**Summary** Based on available data the classification criteria are not met.

##### Germ cell mutagenicity

**Summary** Based on available data the classification criteria are not met.

##### Carcinogenicity

**Summary** Based on available data the classification criteria are not met.

**IARC carcinogenicity** None of the ingredients are listed or exempt.

**NTP carcinogenicity** None of the ingredients are listed or exempt.

**OSHA Carcinogenicity** None of the ingredients are listed or exempt.

##### Reproductive toxicity

**Summary** Based on available data the classification criteria are not met.

##### Specific target organ toxicity - single exposure

**Summary** Based on available data the classification criteria are not met.

##### Specific target organ toxicity - repeated exposure

**Summary** Based on available data the classification criteria are not met.

##### Aspiration hazard

**Summary** Based on available data the classification criteria are not met.

#### **General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

#### **Inhalation**

A single exposure may cause the following adverse effects: Temporary irritation.

## Zerion® PGH-400 Gel, Granular

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin Contact</b>	May cause discomfort.
<b>Eye contact</b>	May be slightly irritating to eyes.
<b>Target Organs</b>	No specific target organs known.

### 12. Ecological information

#### Acute aquatic toxicity

**Summary** Based on available data the classification criteria are not met.

#### Chronic aquatic toxicity

**Summary** Based on available data the classification criteria are not met.

#### Persistence and degradability

**Persistence and degradability** The degradability of the product is not known.

#### Bioaccumulative potential

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** No data available.

#### Mobility in soil

**Mobility** No data available.

#### Other adverse effects

**Other adverse effects** None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information** Product in unopened original container prior to use does not meet criteria for hazardous waste according to 40 CFR 261 (no components listed on F, K, P or U lists; not ignitable, not corrosive, not reactive and not toxic). The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods** Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible.

### 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

#### UN Number

**UN No. (International)** Not applicable.

**UN No. (DOT)** Not applicable.

#### UN proper shipping name

**Proper shipping name (International)** Not applicable.

## Zerion® PGH-400 Gel, Granular

**Proper shipping name (DOT)** Not applicable.

**Transport hazard class(es)**

**Transport Labels (International)** No transport warning sign required.

**DOT transport labels**  
No transport warning sign required.

**Packing group**

**Packing group (International)** Not applicable.

**DOT packing group** Not applicable.

**Environmental hazards**

**Environmentally Hazardous Substance**  
No.

**Special precautions for user**

Not applicable.

**DOT reportable quantity** Not applicable.

**DOT TIH Zone** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**Regulatory References** OSHA Hazard Communication Standard 29 CFR §1910.1200

**US Federal Regulations**

**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**  
None of the ingredients are listed.

**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**  
None of the ingredients are listed.

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**  
None of the ingredients are listed.

**SARA 313 Emission Reporting**  
None of the ingredients are listed.

**CAA Accidental Release Prevention**  
None of the ingredients are listed.

**OSHA Highly Hazardous Chemicals**  
None of the ingredients are listed.

**US State Regulations**

**California Proposition 65 Carcinogens and Reproductive Toxins**  
None of the ingredients are listed or exempt.

## Zerion® PGH-400 Gel, Granular

**California Air Toxics "Hot Spots" (A-I)**

None of the ingredients are listed.

**California Air Toxics "Hot Spots" (A-II)**

None of the ingredients are listed.

**California Directors List of Hazardous Substances**

None of the ingredients are listed.

**Massachusetts "Right To Know" List**

None of the ingredients are listed.

**Rhode Island "Right To Know" List**

None of the ingredients are listed.

**Minnesota "Right To Know" List**

None of the ingredients are listed.

**New Jersey "Right To Know" List**

None of the ingredients are listed.

**Pennsylvania "Right To Know" List**

None of the ingredients are listed.

**Inventories****EU - EINECS/ELINCS**

All the ingredients are listed or exempt.

**Canada - DSL/NDL**

All the ingredients are listed or exempt.

**US - TSCA**

All the ingredients are listed or exempt.

**Australia - AICS**

All the ingredients are listed or exempt.

**Japan - ENCS**

All the ingredients are listed or exempt.

**Korea - KECI**

All the ingredients are listed or exempt.

**China - IECSC**

All the ingredients are listed or exempt.

**Philippines - PICCS**

All the ingredients are listed or exempt.

**New Zealand - NZIOC**

All the ingredients are listed or exempt.

**Taiwan - TCSI**

All the ingredients are listed or exempt.

**16. Other information**



## Zerion® PGH-400 Gel, Granular

### Abbreviations and acronyms used in the safety data sheet

TDG: The transport of dangerous goods act

IATA: International air transport association.

ICAO: Technical instructions for the safe transport of dangerous goods by air.

IMDG: International maritime dangerous goods.

CAS: Chemical abstracts service.

ATE: Acute toxicity estimate.

LC<sub>50</sub>: Lethal concentration to 50 % of a test population.

LD<sub>50</sub>: Lethal dose to 50% of a test population (median lethal dose).

EC<sub>50</sub>: 50% of maximal effective concentration.

PBT: Persistent, bioaccumulative and toxic substance.

vPvB: Very persistent and very bioaccumulative.

### Training advice

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

### Issued by

HS&E Manager.

### Revision date

7/7/2021

### Revision

1.3

### Supersedes date

12/13/2017

### SDS No.

509

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.