



SAFETY DATA SHEET HITOX[®] Gray, TIOPREM[®] C Gray

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

1.1. Product identifier

Product Name HITOX[®] Gray, TIOPREM C Gray
Grades HITOX[®] Gray, TIOPREM C Gray

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

Identified uses Pigment, used in paints and plastics.
Uses Advised Against Any use other than those identified.

1.3. Details of the supplier of the safety data sheet

Supplier: TOR Minerals International, Inc.
722 Burseson St.
Corpus Christi, Texas 78402
Tel +1-361-883-5591 Fax: +1-361-883-7616
sales@torminerals.com

1.4. Emergency telephone number

TOR Minerals International Inc. +1-361-883-5591

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Not classified.
Human health Not classified.
Environment Not classified.
Classification (67/548/EEC) Not classified.

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

Human health: Dust may irritate the eyes and respiratory system.
Environment: The product is not expected to be hazardous to the environment.

2.2. Label elements

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

No pictogram required.

Precautionary Statements

P261 Avoid breathing dust.
P273 Avoid release to the environment.
P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.
P501A Dispose of contents/container in accordance with local authority requirements.

2.3. Other hazards

None.

HITOX[®] Gray, TIOPREM[®] C Gray

SECTION 3: COMPOSITION/INFORMATON INGREDIENTS

3.1. Mixtures

Rutile titanium dioxide	91%
CAS-No.: 1317-80-2	EC No: 215-282-2
Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Not classified.
Amorphous silica	1.5%
CAS-No.: 7631-86-9	EC No: 231-545-4
Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Not classified.
Ferric oxide	3.3%
CAS-No.: 1309-37-1	EC No: 215-168-2
Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Not classified.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly and give plenty of water to drink. Seek medical advice if necessary.

Skin Contact

Clean by mechanical dry removal. Subsequently rinse with water.

Eye Contact

Immediately flush with plenty of water or eyewash solution for up to 10 minutes. Contact physician if irritation persists.

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

None.

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

None

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing Media

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

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

Unusual Fire & Explosion Hazards

None known.

Specific Hazards

Take precautionary measures against static discharges.

HITOX[®] Gray, TIOPREM[®] C Gray

5.3. Advice for firefighters

Protective equipment for firefighters

Wear self-contained breathing apparatus and full protective clothing. Keep all unnecessary people away. Fire water run-off must not be allowed to contaminate ground or enter drains, sewers, or water courses. Provide bunding against fire water run-off.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing (see Section 8). Avoid inhalation of dust.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Dispose of absorbed material in accordance within local regulations.

6.4. Reference to other sections

For waste disposal, see section 13..

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advise on safe handling

Avoid inhalation of dust and contact with skin and eyes.

Advise on fire and explosion protection

Not applicable.

7.2. Conditions for safe storage, including any incompatibilities

Dry storage at moderate temperatures

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

See product information

8.1. Control parameters

Name	STD	TWA – 8 Hrs		STEL – 15 Min		Notes
Ferric oxide	WEL		5 mg/m ³		10 mg/m ³	As Fe
Amorphous silica	WEL		2.4 mg/m ³			
Rutile titanium dioxide	WEL		10 mg/m ³			

WEL = Workplace Exposure Limit

Ingredient Comments

WEL = Workplace Exposure Limits COSHH – see note section 16.

8.2. Exposure controls

Technical

Avoid dust formation.

Engineering Measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory equipment must be provided.

HITOX[®] Gray, TIOPREM[®] C Gray

Hand protection

Wear suitable protective gloves conforming to EN 374.

Eye protection

Wear approved safety goggles.

Other Protection

Provide eyewash station and safety shower.

Hygiene measures

When using do not eat, drink, or smoke.

Environmental

No special exposure controls require

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Powder, dust.
Colour	Gray.
Odour	Odourless
Solubility	Insoluble in water.
Initial Boiling Point and Boiling Range:	2500 – 3000°C.
Melting Point (°C)	1840°C.
Relative Density	4.1
Ph-Value, Diluted Solution	6.5 – 7.5 @ 10% slurry in water.

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None.

10.2. Chemical stability

Stable under normal conditions of storage and use. See section 7.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Not known.

10.5. Incompatible materials

Materials to Avoid

None known.

10.6. Hazardous decomposition products

No hazardous decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Health effects of this preparation as supplied have not been fully determined. The information below should be regarded as precautionary.

HITOX[®] Gray, TIOPREM[®] C Gray

Inhalation

Dust may irritate respiratory system or lungs. Pre-existing respiratory conditions may be aggravated by inhalation of dust.

Ingestion

May cause discomfort if swallowed.

Skin contact

Powder may irritate skin. Not a skin sensitizer.

Eye contact

Particles in the eyes may cause irritation.

Carcinogenicity

In lifetime inhalation studies of rats, respirable size titanium dioxide (TiO₂) particles were shown to cause an increase in lung tumors at an exposure level that caused lung overload and inflammation. Tests with other animals indicate that rats respond more severely than other rodents. These tumors were found to only occur in overload conditions, were unique to the rat and were found to have little or no relevance to humans. In 2006, the IARC has characterized TiO₂ as a possible carcinogen to humans (Group 2B) through inhalation (not ingestion). The NTP and OSHA have not characterized TiO₂ as a carcinogen.

Occupational exposure to TiO₂ based on epidemiology studies does not indicate an increased risk of cancer in humans.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Oral

Rat

No Toxicological effects found.

12.2. Persistence and degradability

Degradability

The product solely consists of inorganic compounds which are not biodegradable. The remaining substances of the product are expected to be not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative Potential

Bioaccumulative is unlikely to be significant because of the lower water solubility of this product.

12.4. Mobility in soil

Mobility

The product contains substances which are insoluble in water and which sediment in water systems.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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

SECTION 14: TRANSFORMATION INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

HITOX[®] Gray, TIOPREM[®] C Gray

14.1. UN number

Not applicable.

14.2 UN Proper shipping name

Not applicable.

14.3 Transport hazard class(es)

None

14.4. Packing group

Not applicable.

14.5. Environmental hazards

None.

14.6. Special precautions for user

See section 6 and 8

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

No hazardous goods

SECTION 15: REGULATORY INFORMATION

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

EINECS (EU) Status	: On the inventory, or in compliance with the inventory
AICS (AU) Status	: On the inventory, or in compliance with the inventory
DSL (CA) Status	: On the inventory, or in compliance with the inventory
ENCS (JP) Status	: On the inventory, or in compliance with the inventory
KECI (KR) Status	: On the inventory, or in compliance with the inventory
PICCS (PH) Status	: On the inventory, or in compliance with the inventory
IECSC (CN) Status	: On the inventory, or in compliance with the inventory
ISHL (JP) Status	: On the inventory, or in compliance with the inventory
NZIOC Status	: On the inventory, or in compliance with the inventory
HSNO (NZ) Status	: On the inventory, or in compliance with the inventory
TSCA Status	: On the inventory, or in compliance with the inventory

15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

None.

Disclaimer

SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No statements herein are to be construed as inducement to infringe any relevant patent. Under no circumstances shall seller be liable for incidental, consequential or indirect damages for alleged negligence breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be the Buyer's purchase price. Data and results are based on lab work and must be confirmed by testing for its intended conditions of use.

All data and recommendations as well as formulations made herein are based on our present state of knowledge. We disclaim all liability on risks or formulae that may result from the use of our products, including improper or illicit use.

TOR Minerals International, Inc. · 722 Burlson St. · Corpus Christi, Texas 78402 · USA · Tel +1-361-883-5591 · www.torminerals.com