

## Safety Data Sheet

### POLYFLASH HPS

Safety Data Sheet dated: 02/22/2024 - version 1

Date of first edition: 02/22/2024

## 1. IDENTIFICATION

### Product identifier

Mixture identification:

Trade name: POLYFLASH HPS

Trade code: 903PH9990

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

Recommended use: Sealant

Restrictions on use: Not available

### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: Polyglass U.S.A. Inc.

1111 West Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Phone: 866-222-9782

Responsible: RDProductSafety@mapei.com

### Emergency 24 hour numbers:

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887

Emergency Transport CANUTEC (Canada) 1-613-996-6666

## 2. HAZARD(S) IDENTIFICATION



### Classification of the chemical

Eye irritation, Category 2A

Causes serious eye irritation.

Skin Sensitization, Category 1B

May cause an allergic skin reaction.

Chronic (long term) aquatic hazard, category 3

Harmful to aquatic life with long lasting effects.

### Label elements

#### Hazard pictograms and Signal Word



Warning

### Hazard statements

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

### Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing mist/vapours/spray.

P264 Wash skin thoroughly after handling.

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.

P308+P313 IF exposed or concerned: Get medical advice/attention.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container in accordance with applicable regulations.

**Ingredient(s) with unknown acute toxicity:**

None

**Hazards not otherwise classified identified during the classification process:**

None

This product contains titanium dioxide which IARC has classified as a Group 2B carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a dust hazard)

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**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substances**

Not Relevant

**Mixtures**

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

**List of components**

Qty	Name	Ident. Numb.	Classification	Registration Number
2.5-5 %	titanium dioxide; Dioxotitanium	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351	01-2119489379-17-XXXX
2.5-5 %	vinyltrimethoxysilane; Trimethoxyvinylsilane	CAS:2768-02-7 EC:220-449-8 Index:014-049-00-0	Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Sens. 1B, H317	01-2119513215-52-XXXX
2.5-5 %	n-[3-(trimethoxysilyl)propyl] ethylenediamine; (2-Aminoethyl)(3-(trimethoxysilyl)propyl)amine	CAS:1760-24-3 EC:217-164-6	Acute Tox. 4, H332; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 2, H411	01-2119970215-39-XXXX

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**4. FIRST AID MEASURES****Description of first aid measures**

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Obtain medical attention if skin related symptoms persist.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

- Remove casualty to fresh air and keep warm and at rest.

**Most important symptoms/effects, acute and delayed**

Eye irritation

Eye damages

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

- (see paragraph 4.1)

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**5. FIRE-FIGHTING MEASURES****Extinguishing media**

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media:**

None in particular.

**Specific hazards arising from the chemical**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: Not available

Explosive properties: Not Relevant

Oxidizing properties: Not Relevant

**Special protective equipment and precautions for fire-fighters**

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Remove persons to safety.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

**Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

**7. HANDLING AND STORAGE****Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature: Not available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Community Occupational Exposure Limits (OEL)**

	OEL Type	Country	Occupational Exposure Limit
titanium dioxide; Dioxotitanium CAS: 13463-67-7	ACGIH		Long Term: 10 mg/m3 A4 - LRT irr
	MAK	GERMANY	Long Term: 0.3 mg/m3
	OSHA		Long Term: 15 mg/m3
	ACGIH		Long Term: 10 mg/m3 A4 - Not Classifiable as a Human Carcinogen; lower respiratory tract irritation
	MAK	AUSTRIA	Long Term: 5 mg/m3; Short Term: 10 mg/m3
	MAK	SWITZERLAND	Long Term: 3 mg/m3
		D	

**Predicted No Effect Concentration (PNEC) values**

titanium dioxide; Dioxotitanium  
CAS: 13463-67-7 Exposure Route: Fresh Water; PNEC Limit: 0.184 mg/l

Exposure Route: Soil; PNEC Limit: 100 mg/kg  
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l  
Exposure Route: Marine water; PNEC Limit: 0.0184 mg/l  
Exposure Route: Marine water sediments; PNEC Limit: 100 mg/kg  
Exposure Route: Freshwater sediments; PNEC Limit: 1000 mg/kg  
Exposure Route: Intermittent release; PNEC Limit: 0.193 mg/l  
Exposure Route: Fresh Water; PNEC Limit: 0.34 mg/l

vinyltrimethoxysilane;  
Trimethoxyvinylsilane  
CAS: 2768-02-7

Exposure Route: Marine water; PNEC Limit: 0.034 mg/l  
Exposure Route: Freshwater sediments; PNEC Limit: 1.24 mg/kg  
Exposure Route: Marine water sediments; PNEC Limit: 0.12 mg/kg  
Exposure Route: Intermittent release; PNEC Limit: 3.4 mg/l

#### Derived No Effect Level (DNEL) values

titanium dioxide;  
Dioxotitanium  
CAS: 13463-67-7

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Worker Industry: 10 mg/m<sup>3</sup>; Worker Professional: 10 mg/m<sup>3</sup>

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 700 mg/kg

vinyltrimethoxysilane;  
Trimethoxyvinylsilane  
CAS: 2768-02-7

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Industry: 0.69 mg/kg; Consumer: 0.3 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Industry: 4.9 mg/m<sup>3</sup>; Consumer: 1.04 mg/m<sup>3</sup>

Appropriate engineering controls: Not available

#### Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness  $\geq 0,5$ mm; breakthrough time  $\geq 480$ min.

Nitrile rubber - NBR: thickness  $\geq 0,35$ mm; breakthrough time  $\geq 480$ min.

Butyl rubber - IIR: thickness  $\geq 0,5$ mm; breakthrough time  $\geq 480$ min.

Fluorinated rubber - FKM: thickness  $\geq 0,4$ mm; breakthrough time  $\geq 480$ min.

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA 294.4 for information on selection and use of appropriate respiratory protection equipment.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: paste various

Odour: Not Relevant

Odour threshold: Not Relevant

pH: Not Relevant

Melting point / freezing point: Not Relevant

Initial boiling point and boiling range: Not Relevant

Flash point: 100 °C (212 °F)

Evaporation rate: Not Relevant

Upper/lower flammability or explosive limits: Not Relevant

Vapour density: Not Relevant

Vapour pressure: Not Relevant

Relative density: 1.56 g/cm<sup>3</sup>

Solubility in water: Not Relevant

Solubility in oil: Not Relevant

Partition coefficient (n-octanol/water): Not Relevant  
Auto-ignition temperature: Not Relevant  
Decomposition temperature: Not Relevant  
Viscosity: Not Relevant  
Explosive properties: Not Relevant  
Oxidizing properties: Not Relevant  
Solid/gas flammability: Not Relevant

#### Other information

Substance Groups relevant properties Not Relevant  
Miscibility: Not Relevant  
Fat Solubility: Not Relevant  
Conductivity: Not Relevant

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## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under normal conditions

### Chemical stability

Data not available.

### Possibility of hazardous reactions

None.

### Conditions to avoid

Stable under normal conditions.

### Incompatible materials

None in particular.

### Hazardous decomposition products

None.

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## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	The product is classified: Eye irritation, Category 2A(H319)
d) respiratory or skin sensitisation	The product is classified: Skin Sensitization, Category 1B(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

#### Toxicological information on main components of the mixture:

titanium dioxide; Dioxotitanium	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg  LD50 Skin Rat > 2000 mg/m3 LC50 Inhalation Dust Rat > 6.82 mg/l 4h LD50 Skin Rabbit > 10000 mg/kg
vinyltrimethoxysilane;	a) acute toxicity	LD50 Oral Rat = 6899 mg/kg

Trimethoxyvinylsilane

LD50 Skin Rat = 3158 mg/kg

LC50 Inhalation Vapour Rat = 16.8 mg/l 4h

n-[3-(trimethoxysilyl)propyl] ethylenediamine; (2-Aminoethyl)(3-(trimethoxysilyl)propyl) amine

a) acute toxicity

LD50 Oral Rat = 2413 mg/kg

**Substance(s) listed on the IARC Monographs:**

titanium dioxide; Dioxititanium Group 2B

**Substance(s) listed as OSHA Carcinogen(s):**

titanium dioxide; Dioxititanium

**Substance(s) listed as NIOSH Carcinogen(s):**

titanium dioxide; Dioxititanium

**Substance(s) listed on the NTP report on Carcinogens:**

None

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**12. ECOLOGICAL INFORMATION**

**Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

**List of Eco-Toxicological properties of the product**

The product is classified: Chronic (long term) aquatic hazard, category 3(H412)

**List of Eco-Toxicological properties of the components**

Component	Ident. Numb.	Ecotox Data
titanium dioxide; Dioxititanium	CAS: 13463-67-7 - EINECS: 236-675-5 - INDEX: 022-006-00-2	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96  a) Aquatic acute toxicity : EC50 Algae = 16 mg/L 72 a) Aquatic acute toxicity : NOEC Algae = 5600 mg/L 72 a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48

**Persistence and degradability**

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

**Other adverse effects**

N.A.

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**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

**Special precautions:**

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

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## 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

**UN number**

DOT-UN Number: Not Applicable

ADR-UN number: Not Applicable

IATA-Un number: Not Applicable

IMDG-Un number: Not Applicable

**UN proper shipping name**

DOT-Proper Shipping Name: Not Applicable

ADR-Shipping Name: Not Applicable

IATA-Technical name: Not Applicable

IMDG-Technical name: Not Applicable

**Transport hazard class(es)**

DOT-Hazard Class: Not Applicable

ADR-Class: Not Applicable

IATA-Class: Not Applicable

IMDG-Class: Not Applicable

**Packing group**

DOT Packing Group: Not Applicable

ADR-Packing Group: Not Applicable

IATA-Packing group: Not Applicable

IMDG-Packing group: Not Applicable

**Environmental hazards**

Marine pollutant: No

Environmental Pollutant: Not Applicable

DOT-RQ: No

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

Not Applicable

**Special precautions**

Department of Transportation (DOT):

Not Applicable

Road and Rail (ADR-RID):

Not Applicable

Air (IATA):

Not Applicable

Sea (IMDG):

Not Applicable

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## 15. REGULATORY INFORMATION

**USA - Federal regulations**

**TSCA - Toxic Substances Control Act**

All the components are listed on the TSCA inventory

**TSCA listed substances:**

titanium dioxide; Dioxotitanium is listed in TSCA Section 8b

vinyltrimethoxysilane; Trimethoxyvinylsilane is listed in TSCA Section 8b

n-[3-(trimethoxysilyl)propyl] ethylenediamine; (2-Aminoethyl)(3-(trimethoxysilyl)propyl)amine is listed in TSCA Section 8b

**SARA - Superfund Amendments and Reauthorization Act**

**Section 302 - Extremely Hazardous Substances:**

No substances listed

**Section 304 - Hazardous substances:**

No substances listed

**Section 313 - Toxic chemical list:**

No substances listed

**CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**

**Substance(s) listed under CERCLA:**

No substances listed

**CAA - Clean Air Act**

**CAA listed substances:**

No substances listed

**CWA - Clean Water Act**

**CWA listed substances:**

No substances listed

**USA - State specific regulations**

**California Proposition 65**

**Substance(s) listed under California Proposition 65:**

titanium dioxide; Dioxititanium    Listed as carcinogen

**Massachusetts Right to know**

**Substance(s) listed under Massachusetts Right to know:**

titanium dioxide; Dioxititanium

**Pennsylvania Right to know**

**Substance(s) listed under Pennsylvania Right to know:**

titanium dioxide; Dioxititanium

**New Jersey Right to know**

**Substance(s) listed under New Jersey Right to know:**

titanium dioxide; Dioxititanium

**Canada - Federal regulations**

**DSL - Domestic Substances List**

All the substances are listed in the DSL.

**NDSL - Non Domestic Substances List**

This product complies with NDSL inventory

**NPRI - National Pollutant Release Inventory**

**NPRI (National Pollutant Release Inventory) - List of substances listed.**

No substances listed

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**16. OTHER INFORMATION**

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Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

<b>Code</b>	<b>Description</b>
H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.



<b>Code</b>	<b>Hazard class and hazard category</b>	<b>Description</b>
A.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
A.3/1	Eye Dam. 1	Serious eye damage, Category 1
A.4.2/1	Skin Sens. 1	Skin Sensitization, Category 1
A.4.2/1B	Skin Sens. 1B	Skin Sensitization, Category 1B
A.6/2	Carc. 2	Carcinogenicity, Category 2
B.6/3	Flam. Liq. 3	Flammable Liquids — Category 3
US-HAE/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2

**Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
 IMDG: International Maritime Code for Dangerous Goods.  
 IATA: International Air Transport Association.  
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
 ICAO: International Civil Aviation Organization.  
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
 CLP: Classification, Labeling, Packaging.  
 EINECS: European Inventory of Existing Commercial Chemical Substances.  
 INCI: International Nomenclature of Cosmetic Ingredients.  
 CAS: Chemical Abstracts Service (division of the American Chemical Society).  
 GefStoffVO: Ordinance on Hazardous Substances, Germany.  
 LC50: Lethal concentration, for 50 percent of test population.  
 LD50: Lethal dose, for 50 percent of test population.  
 DNEL: Derived No Effect Level.  
 PNEC: Predicted No Effect Concentration.  
 TLV: Threshold Limiting Value.  
 TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
 STEL: Short Term Exposure limit.  
 STOT: Specific Target Organ Toxicity.  
 WGK: German Water Hazard Class.  
 KSt: Explosion coefficient.