PZP PRO PROTECT

1 IDENTIFICATION

GHS Product Identifier
Product Code: PZP001

Other means of identification
N/A

Recommended use of the chemical and restriction on use:
For professional use only. Release agent for composite moulds.

Supplier's details:
71-75 Sheton Street, Covent Garden, London, WC2H 9JQ, United Kingdom

Email: info@siriustechnologies.co.uk

Trading Address:
71-75 Sheton Street, Covent Garden, London, WC2H 9JQ, United Kingdom

Emergency phone number:
+44 7718 792 400

2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture
Product Definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
AcuteTox.4, H302
SkinIrrit.2, H315
EyeIrrit.2A, H319
Aquatic Chronic 4, H413

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended. See section 16 for full text of the H statements declared above. See section 11 for more detailed information on health effects and symptoms.

GHS label elements

Hazard Statements:

H302: Harmful if swallowed
H315: Causes skin irritation
H319: Causes serious eye irritation
H413: May cause long lasting harmful effects to aquatic life

Precautionary Statements:

P280:	Wear protective gloves/protective clothing/eye protection/face protection.
P301/P330/P331:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302/P361/P353:	IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305/P351/P338/P311:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P405:	Store locked up.

Other hazards which do not result in classification:
None Known

3 COMPOSITION/INFORMATION ON INGREDIENTS

Description	CAS Number	EINECS Number	%	Note
Cyclosilazanes, di-Me, Mehydrogen,polymerswithdi-Me, Mehydrogensilazanes,reaction Products with3(triethoxysilyl)-1-propanamine	475645-84-2		25-50	

4 FIRST-AID MEASURES

Description of necessary first-aid measures

General:
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation:
Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin Contact:
Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion:
If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of First aiders:
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Most important symptoms/effects, acute and delayed:
There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhoea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Over-exposure signs/symptoms
Eye contact: Adverse symptoms may include the following:
Pain
Watering
Redness

Inhalation: No specific data

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician:
Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments:
No specific treatment.

See toxicological information (section 11)

5 FIRE-FIGHTING MEASURES

Suitable extinguishing media

Recommended:
Alcohol-resistant foam, CO2, powders, water spray.
Do not use water jet.

Specific hazards arising from the chemical
Hazards from the substance or mixture:
In a fire or if heated, a pressure increase will occur, and the container may burst. This material is potentially harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products:
No specific data.

Special protective actions for fire-fighters:
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures.
For non-emergency personnel:
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions:
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Potentially water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up
Small spill:
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container.

Large spill:
Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

Reference to other sections:
See section 1 for emergency contact information.
See section 8 for information on appropriate personal protective equipment.
See section 13 for additional waste treatment information.

7 HANDLING AND STORAGE

Precautions for safe handling
Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapour or spray. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation in inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, keep tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against static discharge. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations.

Notes on joint storage
Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions
Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Occupational exposure limits:
No exposure limit value known.

Recommended monitoring procedures:
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls:
Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable protection must be worn.

Individual protection measures
Hygiene Measures:
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield/ If inhalation hazard exist, a full-face respirator may be required instead. Recommended: Safety glasses with side-shields.

Hand protection:
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Gloves
For prolonged or repeated handling, use the following type of gloves:

Recommended: > 8 hours (breakthrough time): butyl rubber (0.6mm) or nitrile rubber (0.5mm) gloves (EN 374).
The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374-3 : 2003
The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Body protection:
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear suitable protective clothing and eye/face protection.

Other skin protection:
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection:
Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour (Type A) and particulate filter (EN 141).

Environmental exposure controls:
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties
Appearance

Physical State:	Liquid
Colour:	Clear
Odour:	Slight ammonia smell
Odour Threshold:	Not Available
pH:	Not Available
Melting point/freezing point:	Not Available
Initial boiling point and boiling rage:	Not Available
Flash Point:	Cleveland Open Cup: 89 C
Evaporation Rate:	Not Available
Flammability (solid/gas):	Not Available
Upper/lower flammability or explosive limit:	Not Available
Vapour pressure:	Not Available
Vapour Density:	Not Available
Relative density:	0.97
Solubility(ies):	Not Available
Partition coefficient: n-octanol/water:	Not Available
Auto-ignition temperature:	Not Available
Decomposition Temperature:	Not Available
Viscosity:	Not Available
Explosive properties:	Not Available
Oxidising properties:	Not Available

10 STABILITY AND REACTIVITY

Reactivity
No specific test data related to reactivity available for this product or its ingredients.

Chemical stability
Stable under recommended storage and handling conditions (see section 7).

Possibility of hazardous reactions
Under normal conditions and use, hazardous reaction will not occur.

Conditions to avoid
When exposed to high temperatures may produce hazardous decomposition products.

Incompatible materials
Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 TOXICOLOGICAL INFORMATION TOXICOLOGICAL (HEALTH) EFFECTS

Toxicological (health) effects

Conclusion/Summary	Based on available data, the classification criteria are not met.
General:	No known significant effects or critical hazards.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Development effects:	No known significant effects or critical hazards.
Fertility effects:	No known significant effects or critical hazards.
Other Information:	Not Available

Information on the likely routes of exposure
Acute toxicity
Conclusion/Summary: Harmful if swallowed

Irritation/Corrosion
Conclusion/Summary:

Skin: Irritating to skin.
Eyes: Causes serious eye irritation.
Respiratory: Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics:
Not available.

Delayed and immediate effects and also chronic effects from short- and long-term exposure
Short term exposure:
Potential immediate effects
Not available

Potential delayed effects
Not available

Long term exposure:
Potential immediate effects
Not available

Potential delayed effects
Not available

Numerical measures of toxicity (such as acute toxicity estimates)
Not available.

Interactive effects
Not available

Where specific chemical data are not available
Not available.

Mixtures
Not available.

Mixture versus ingredient information
Not available.

Other information
Not available.

12 ECOLOGICAL INFORMATION

Toxicity
There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Conclusion/Summary: May cause long lasting harmful effects to aquatic life.

Persistence and degradability
Based on available data, the classification criteria are not met.

Bio accumulative potential
Not available.

Mobility in soil
Not available.

Other adverse effects
No known significant effects or critical hazards.

13 DISPOSAL CONSIDERATIONS

Disposal methods
Waste treatment methods
Product

Methods of disposal:
The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any byproducts 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 non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous Waste:
Yes

Disposal considerations:
Do not allow to enter drains or watercourses. Dispose of 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. For further information, contact your local waste authority.

European waste catalogue (EWC)
The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste Code	Waste Designation
080111*	Waste paint and varnish containing organic solvents or other hazardous substances.

Packaging
Methods of disposal:
The generation off waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations:
Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Special precautions:
This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14 TRANSPORT INFORMATION

UN Number
Not applicable

UN Proper Shipping Name
Not applicable

Transport hazard class(es)
Not applicable

Packing group, if applicable
Not applicable

Environmental hazards
Not applicable

Special precautions for user
Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

15 REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV
List of substances subject to authorisation

Annex XIV
None of the components are listed.
Substances of very high concern
None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
Not applicable

Other EU regulations
VOC
The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

VOC for Ready-for-Use Mixture
Not applicable

Europe Inventory
All components are listed or exempted

Ozone depleting substances (1005/2009/EU)
Not listed.

Prior Informed Consent (PIC) (649/2012/EU)
Not listed.

Seveso Directive
This product is not controlled under the Seveso Directive.

National regulations
Industrial use the information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

References
EH40/2005 Workplace exposure limits.
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830.

International regulations
Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

CN code: 2942 00 00

International Lists

National inventory

Australia:	Not determined
Canada:	At least one component is not listed in DSL, but all such components are listed in NDSL.
China:	Not determined.
Japan:	Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia:	Not determined.
New Zealand:	Not determined.
Philippines:	Not determined.
Republic of Korea:	All components are listed or exempted.
Taiwan:	Not determined.
Turkey:	Not determined.
United States:	All components are listed or exempted.

Chemical safety assessment
No chemical safety assessment has been carried out.

16 OTHER INFORMATION

Other information

Abbreviations and acronyms

ATE:	Acute Toxicity Estimate
CLP:	Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL:	Derived Minimal Effect Level
DNEL:	Derived No Effect Level
EUH statement:	CLP specific Hazard statement
PBT:	Persistent, Bio accumulative and Toxic
PNEC:	Predicted No Effect Concentration
RRN:	REACH Registration Number
vPvB:	Very Persistent and Very Bio accumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox.4, H302	Expert Judgement
Skin Irrit.2, H315	Expert Judgement
Eye Irrit.2A, H319	Expert Judgement
Aquatic Chronic4, H413	Expert Judgement

Full text of H-phrases and P-phrases referred to in sections 2 and 3

H302:	Harmful if swallowed.
H315:	Causes skin irritation.

H318:	Causes serious eye irritation.
H413:	May cause long lasting harmful effects to aquatic life.
P280:	Wear protective gloves/protective clothing/eye protection/face protection.
P301/P330/P331:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302/P361/P353:	IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305/P351/P338/P311:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P405:	Store locked up.

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Notice to reader

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.