Vetro Power Pre Cleaner

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product Name: Vetro Power Pre Cleaner
Synonyms: Vetro Power Pre-Cleaner

Company Name: **ZYAX CHEM PVT. LTD.,**
Address: 3rd Floor, Kamer Building, 38 Cawasji Patel Street, Fort, Mumbai - 400001, India.

Contact: +91 8779240420
info@zyax.in - www.zyax.in

Other Names Not Applicable

Recommended Use: For coating on synthetic surfaces including plastic acrylic and perspex.

SECTION 2: Hazards Identification

Hazard Statement :
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation
H336 May cause drowsiness or dizziness

Precautionary Statement (Prevention)
P210 Keep away from heat/sparks/open flames/hot surfaces – no smoking
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/lighting/…../equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray
P264 Wash skinthouroughly after handling
P271 Use only outdoors or in a well-ventilated area
P280 Wear protective gloves/protective clothing/eye protection/face protection

Preautionary Statement (Response)
P303+P361+P353 If on skin or hair: remove/take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if victim feels unwell
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Precautionary
P403+P233+P235 Store in a well-ventilated place. Keep cool. Keep container tightly

Statement (Storage)	closed P405 Store locked up
Precautionary Statement **(Disposal)**	P501 Dispose of contents/container to an approved waste disposal plant.

SECTION 3: Composition/information on ingredients

Chemical Characterisation Ingredients

Ingredient	CAS Number	EC Number	Content
Propan-2-ol (Isopropyl Alcohol)	**67-63-0**		70-99%
Water	**7732-18-5**		20-30%
Proprietary Ingredients			Remainder

SECTION 4: First Aid Measures

General Advice: Remove contaminated or saturated clothing

Inhalation: Remove victim from exposure. Take affected persons out into the fresh air. In case of persistent discomfort seek medical attention

Ingestion: Have the mouth rinsed with water. Have the patient drink plenty of water in small sips. Do not induce vomiting. Obtain medical attention.

Skin Contact: Wash off immediately with plenty of water. If swelling, redness, blistering or irritation occurs seek medical advice.

Eye contact: Keeping eyelid open, immediately rinse thoroughly for at least 5 minutes using plenty of water or, eye rinsing solution. Seek medical attention

Notes to physician: If required, therapy of irritative effect. After absorbing large amounts of substance: administration of activated charcoal. Acceleration of gastrointestinal passage

SECTION 5: Firefighting measures

Specific Measures: Caution: Use of water spray when fighting fire may be insufficient.
Small fire: use foam, dry chemical, CO2 or water spray.
Large Fire: Use foam, fog or water spray – Do not use water jets.
If safe to do so, move undamaged containers from fire area.
Cool containers with flooding quantities of water until well after fire is out.
Avoid getting water inside containers. Alcohol resistant foam is a preferred firefighting medium, but if not available, fine water spray can be used.

Specific Hazards: HIGHLY FLAMMABLE: These liquids have a low flashpoint - Will be easily ignited by heat, sparks orflame. Vapours will form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks). Containers may explode when heated. Vapours from runoff may create explosion hazard

Hazchem Code: 2YE

Precautions for Firefighters Wear respiratory protection equipment. Fully-encapsulated, gas tight suits should be worn for maximum protection

SECTION 6: Accidental release measures

Personal precautions: Protective clothing should be worn to prevent excessive skin contact.

Environmental Precautions: Prevent liquid entering sewers. Do not allow to enter surface waters, storm drains, etc.

Small spills: Take immediate steps to stop and contain the spill. Caution should be excised regarding personnel safety and exposure to be spilled material. Eliminate all sources of ignition and wear protective clothing. Absorb small spills onto paper towels and evaporate in a safe place Flush the contaminated area with plenty of water.

Large spills: Stop leak if you can do it without risk. Eliminate all sources of ignition and static; restrict access to area until completion of clean-up procedure. Wear adequate protective equipment, use self-contained breathing apparatus in confined poorly-ventilated areas. Large quantities should be absorbed on to sand, earth or non combustible absorbent material and removed to a safe area for disposal. Flush the contaminated area with plenty of water.

SECTION 7: Handling and storage

Handling and Storage: Avoid contact with skin or in eyes. Do not inhale vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. Open and handle container with care. Keep away from open fire. Keep away from heating sources. Keep away from sources of ignition

Conditions for safe Storage: Keep container tightly closed in a cool, dry and well-ventilated place away from direct sunlight and other sources of heat or ignition. Store away from oxidising agents. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Check regularly for leakage.

Storage Regulations: Refer Australian Standard AS 1940 -2004 “the storage and handling of flammable and combustible liquids”.

Storage class: 2A flammable liquid

SECTION 8: Exposure controls/personal protection

National Exposure Standard:

Name	CAS No	STEL		TWA	
		mg/m3	ppm	mg/m3	ppm
Propan-2-ol (Isopropyl Alcohol)	67-63-0	1230	500	983	400

Other Exposure Information A time weighted average (TWA) has been established for Propan-2-ol (Safe Work Australia) of 983 mg/m³, (400 ppm). The corresponding STEL level is 1,230 mg/m³, (500 ppm). The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

Appropraite Engineering Controls	In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.
Respiratory Protection:	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing vapours or mists. Select and use respirators in accordance with AS 1716 – Respiratory Protective Devices and be selected in accordance with AS 1715 – Selection, Use and Maintenance of Respiratory Protective Devices. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist filters. Filter capacity and respirator type depends on exposure levels.
Eye Protection:	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.
Skin Protection:	Hand protection should comply with AS 2161, Occupational protective gloves – Selection Use and Maintenance. Recommendation: PVC, neoprene or nitile rubber gloves.
Other Protective Clothing Equipment:	Impermeable clothing. Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.
Hygienic Measures:	Always wash hand before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.
Footwear:	Safety boots in industrial situations is advisory. Foot protection should comply with AS 2210, occupational protective footwear- Guide to selection, care and use.

SECTION 9: Physical and chemical properties

Form:	Liquid
Appearance:	Colourless
Odor:	Alcoholic, sharp
Melting Point:	-89°C
Boiling Point:	82-83°C
Solubility in Water:	fully miscible
Flash Point: :	12 °C
Vapor Pressure:	42 hPa at 20 °C
Specific Gravity:	0.785 – 0.786 g/$^{c}m^{3}$ at 20 °C
Relative Density:	0.822 kg/l (at 20^{o} C)
Ignition Temp.	ca. 425 °C
Evaporation Rate:	0.300 (n=BuAc = 1)

Explosion Limits:	lower: 2.0 Vol-%	upper: 13.4 Vol-%
pH (500 g/l H_2O):	n.a	
Dynamic viscosity:	2.4 mPa.s (at 20° C)	
Kinematic viscosity	3.05 mm^2/s (at 20° C)	
Volatile Organic Compounds (VOC):	99.57%	818.426g/l

SECTION 10: Stability and reactivity

Chemical Stability: Stable under normal use conditions

Conditions to Avoid Heat, sparks, flame and build up of static electricity.

Incompatibility (Material To Avoid): acids, alkalines, oxidants, reductants

Hazardous Decomposition does not decompose with normal use

SECTION 11: Toxicological information

General: From our experience and the information provided to us this product does present any adverse health effects if the product is handled in accordance with this Material Safety Data Sheet and product label.

Ingestion: Unlikely under normal occupational exposures, but swallowing a minor amount may cause minor throatvirritation and vomiting. Ingestion of larger amounts (about 100 grams or more) may cause headache, dizziness, drowsiness, inebriation, unconsciousness, narcosis, gastrointestinal pain, cramps, nausea, vomiting and diarrhoea. Large amounts may cause respiratory paralysis, coma, unconsciousness and death. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Aspiration can result in severe, life-threatening lung damage.

Eye Contact: Moderate to severe eye irritant, based on animal evidence. Exposure of volunteers to vapours at approximately 400 ppm for 3 to 5 minutes produced mild irritation, while 800 ppm was considered objectionable. Direct eye contact with the liquid and splashes may cause severe eye irritation, pain, redness, possible corneal burns and eye damage..

Skin Contact: Contact with the skin may result in irritation

Inhalation: Where the material is used in a poorly ventilated area, at elevated temperature or in confined spaces, vapour may cause irritation to the mucous membranes of the respiratory tract. May cause headaches, vomiting, dizziness, drowsiness and nausea.

SECTION 12: Ecological information

Ecological Information: No ecological problems are expected to occur when the product is handled and used with due care and attention

Ecotoxicity: Avoid contaminating waterways

SECTION 13: Disposal considerations

Disposal Considerations Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local authority, state and federal government regulations.

SECTION 14: Transport information

	Land Transport	Sea Transport (IMDG / IMO)	Air Transport (IATA / ICAO)
UN Number	1170	1170	1170
Proper Shipping Name	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)
DG Class	3	3	3
Identification Number of Hazard	33	33	33
Hazchem Code	2YE	2YE	2YE
Packaging Group	II	II	II
Marine pollutant	no	no	no

SECTION 15: Regulatory information

Classification: Highly Flammable

Poisons Schedule: Not scheduled

SECTION 16: Other information

DISCLAIMER: The information contained in this Material Safety Data Sheet (MSDS) is believed to be correct and was obtained from sources we believe are reliable. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. Zyax Chem pvt. Ltd. (India) makes no representations, guarantees or warranties of any kind as to the accuracy, suitability for particular applications, hazards connected with the use of the material, or the results to be obtained from the use thereof. User assumes all risks and liability of any use, processing or handling of any material, variations in methods, conditions and equipment used to store, handle or process the material and hazards connected with the use of the material are solely the responsibility of the user and remain at their sole discretion. Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user, and the user has the responsibility to provide a safe work place, to examine all aspects of its operation and to determine if or where precautions, in addition to those described herein, are required.