Smart Zinc Phosphate Primer
Solvent Based Protective Coating
1 Litres & 5 Litres

Version No. : **1.2.2**
Issue Date: **01/04/2024**
Safety Data Sheet according to CLASS requirement

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

Product Identifier

Product Name	***Smart Zinc Phosphate Primer***
Product Code	SPZPP
Chemical Name	Not Applicable
Chemical Formula	Not Applicable
Other means of Identification	Solvent Based Metal Primer
CAS Number	Not Applicable

Relevant use of the chemical and restriction

Relevant identified uses	Use according to manufacturer's directions

Details of manufacturer / importer

Registered Company Name	**SMART PAINT MANUFACTURING SDN BHD** (1031014-A)
Address	No. 9 & 11, Jalan Indah Gemilang 5, Taman Perindustrian Gemilang, 81800 Ulu Tiram, Johor, Malaysia.
Telephone	+607-863 9855
Fax	+607-861 5055
Email	info@smart-paints.com
Web	http://www.smart-paints.com

Emergency telephone number

Association / Organisation	Not Applicable
Emergency telephone number	Not Applicable
Other emergency telephone number	Not Applicable

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substances or mixture

GHS Classification	**Flammable liquids** - Category 3 **Health Hazard** Aspiration Hazard - Category 1 Carcinogenicity - Category 1 B Germ Cell Mutagenicity - Category 1 B Respiratory Sensitisation - Category 1 Reproductive Toxicity - Category 2 Skin Corrosion/irritation - Category 2 Specific Target Organ Toxicity- Single Exposure - Category 3 **Environment Hazard** Hazardous To The Aquatic Environment – Chronic Hazard - Category 3

Label elements

GHS label elements	
Signal word	Warning

Hazard statement(s)

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H350	May cause cancer (route of exposure inhalation or dermal)
H340	May cause genetic defects (routes of exposure inhalation or dermal).
H334	May cause allergic or asthma symptoms or breathing difficulties if inhaled.
H361	Suspected of damaging fertility or the unborn child (routes of exposure inhalation or dermal).
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s)	
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	Wear protective gloves/protective clothing/eye protection/face protection.
P242	Wash thoroughly after handling.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautionary have been read and understood.
P281	Use personal protective equipment as required.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P285	In case of inadequate ventilation wear respiratory protection.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing shall not be allowed out of the workplace.
P273	Avoid release to the environment.

SECTION 2 HAZARDS IDENTIFICATION

Precautionary statement(s) Response	
P303+P361+P353	IF ON SKIN (or hair) : Remove/take off immediately all contaminated clothing. Rinse skin with water / shower.
P370+P378	In case of fire : Evacuate area.
P301+P310	IF SWALLOWED : Immediately call a POISON CENTER or doctor/physician.
P331	Do NOT induce vomiting.
P308+P313	IF exposed or concerned : Get medical advice / attention.
P304+P341	IF INHALED : If breathing is difficult, remove victim to fresh air and keep at rest.
P342+P311	If experiencing respiratory symptoms : CALL a POISON CENTER or doctor / physician .
P302+P352	IF ON SKIN : Wash with plenty of water and soap.
P321	Specific treatment (see information on this label).
P332+P313	If skin irritation occurs : Get medical advice / attention
P362	Take off contaminated clothing and was before reuse.
P304+P340	IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P333+P313	If skin irritation or rash occurs : Get medical advice / attention.
P363	Wash contaminated clothing before reuse.
Precautionary statement(s) Storage	
P403+P235	Store in a well - ventilated place. Keep cool.
P405	Store in locked up.
P403+P233	Store in a well - ventilated place. Keep container tightly closed.
Precautionary statement(s) Disposal	
P501	Dispose of content/ container to appropriate waste site or reclaimer in accordance with local or national regulations.

SECTION 3 COMPOSITION / INFORMATION OF INGREDIENTS

CAS number	% [weight]	Name
108-67-8	0.1 – 3.0	1,3,5-Trimethlbenzene
95-63-6	0.1 – 9.0	1,2,4-Trimethylbenzene
100-41-4	0.1 – 3.0	Ethylbenzene
64742-82-1	0.38 – 0.38	Naptha(petroleum),heavy, hydrosulfurised
64742-88-7	30.0 - 30.0	White spirit
64742-48-9	15.0 - 50.0	Naptha(petroleum),hydrotreated heavy
1330-20-7	10.0 – 10.0	xylene
96-29-7	0.305- 0.305	2-butanone oxime

SECTION 4 FIRST AID MEASURES

Description of first aid measure

Eye contact	▪ Check or and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelid open. Do not use an eye ointment. Seek for medical attention.
Skin contact	▪ Frequent or prolonged contact may irritate and cause dermatitis. Skin contact may aggravate an exiting dermatitis condition. Remove contaminated clothing – launder before reuse. Wash gently and thoroughly the contaminated skin with running water and non-abbrasive soap. Get medical attention if redness or irritation occurs.
Inhalation	▪ High vapour (>1000 ppm) are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anaesthesia. Drowsine unconsciousness and other central nervous system effects. Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform mouth to mouth resuscitation. Administer oxygen if available. Allow the victim to rest in a well ventilated area. Seek medical attention.

SECTION 5 FIREFIGHTING MEASURES

Suitable Fire Extinguishing Media :
Small fire : Use dry chemical. Foam or CO2.
Large fire : Use water spray. Fog or foam. Water or foam may cause frothing.

Special Protective Actions For Fire Fighters:
Cool container in water spray in order to prevent pressure build-up, auto ignition or explosion. Avoid flushing spilled material into sewers, stream or other bodies of water. For small outdoor fires, portable fire extinguishers may be used, and self contained breathing apparatus (SCBA) may not be required. Respiratory and eye protection are required for fire fighting personnel.

Specific Hazards Arising From The Chemical :
Static discharge, material can accumulate static charges which can cause an incendiary electrical discharge. “Empty” containers retain product residue (liquid and/or vapour) and can be dangerous. DO NOT pressurize, cut. Weld braze, solder, drill grind, or expose such containers to heat, flame sparks, static electricity, or other sources of ignition ; they may explode and cause injury or death.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment And Emergency Procedure

Eye /skin protection :
Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available. Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Wear a face shield and chemical resistant clothing such as rubber apron when splashing is likely.
Respiratory Protection :
Use JKKP/NIOSH approved respiratory protection (full face piece recommended) when exposure limits are exceeded.
Ventilation :
Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits. If practical, use local mechanical exhause ventilation at source of air contamination such as open process equipment.

Environment Precaution
Flammable liquid. Ventilate. Eliminate all sources of ignition. Prevent additional discharge of material. For small spills implement cleanup procedure; for large spills implement cleanup procedure and if in public area, keep public away and advice authorities , provide suitable personal protective. dike and contain spill with inert material (sand, earth, etc) and transfer liquid and solid separately to container for recovery or disposal. Report as per regulatory or disposal. Do not use combustible material such as sawdust. Report as per regulatory equipment.

Methods And Materials For Containments And Clean Up
For small liquid spills (<1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residue to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose to all salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Remove contaminated soil and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions For Safe Handling
Avoid smoking and use of open ire. Avoid inhalation of vapours and contact with skin and eyes. Observe good industrial practices.

Condition For Safe Storage ,including Any Incompatibilities
Store in tightly closed original container in well-ventilated area. Avoid expose to direct sunlight.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters/ Occupational Limits

	ACGIH TLV-TWA		OSHA PEL-TWA	
Ingredient/Bahan	**ppm**	**mg/m3**	**ppm**	**mg/m3**
1,3,5-Trimethlbenzene	20	-	100	435
1,3,5-Trimethlbenzene	-	-	-	-
Ethylbenzene	-	-	-	-
Naptha(petroleum),heavy, hydrosulfurised	20	-	100	435
White spirit			100	435
Naptha(petroleum), hydrotreated heavy	20	-	100	435
2-butanone oxime	20	-	100	435
xylene	20	434	100	435

APPROPRIATE ENGINEERING CONTROL MEASURES
If user operations generate dust, fumes, gas, vapours or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.Emission 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.

PERSONAL PROTECTION
Respiratory protection
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Recommended : Full mask with type Cartridge filter.
Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products I a risk assessment indicates this is necessary. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations.
Eye 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.
Recommended : Safety glasses with side-shields.

Skin/ 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 protective clothing.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance / colour	Liquid / Green
Solid	80.0%
Specific Gravity (@ 25°C)	1.70
Viscosity (Ku)	100.0 – 105.0
***Boiling Point**	145 - 200 oC
***Melting Point**	Not applicable
***Vapour Pressure (@ 20°C)**	Not applicable
Vapour Density (101.3 kPA / air=1)	Not applicable
Evaporation Rate (n - Butyl Ether=1)	Not applicable
Solubility	Insoluble in water
Odour	Aromatic Hydrocarbon

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY
No dangerous reaction known under condition of normal use.

CHEMICAL STABILITY
Stable under normal temperature conditions and recommended use.

POSSIBILTY OF HAZARDOUS REACTION
Under normal conditions of storage and use, hazardous reaction will not occur.

CONDITIONS TO AVOID
Heat, flame , sparks.
Nitric acid, sulfuric acid, strong oxidizing agents.
Electrostatic accumulation hazard? If Yes, use proper grounding procedure.

HAZARDOUS DECOMPOSITION PRODUCTS
Under normal conditions of storage and use, hazardous decompositions products should not be produced.

SECTION 11 TOXICOLOGY INFORMATION

There is no data available on the product itself.
Toxicological information of hazardous ingredients :

a. **Aspiration Hazard**

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
1,2,4-Trimethylbenzene	5000	3160	DNA	DNA	DNA
Naptha(petroleum), hydrotreated heavy	15000	3000	DNA	6.1	DNA
White spirit	5000	2000	DNA	5	DNA

b. **Carcinogenicity**

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
Naptha(petroleum), hydrotreated heavy	15000	3000	DNA	6.1	DNA
White spirit	5000	2000	DNA	5	DNA

c. **Germ Cell Mutagenicity**

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
White spirit	5000	2000	DNA	5	DNA

d. **Reproductive Toxicity**

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
White spirit	5000	2000	DNA	5	DNA

e. **Skin Corrosion or irritation**

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
1,2,4-Trimethylbenzene	5000	3160	DNA	DNA	DNA
1,2,4-Trimethylbenzene	DNA	DNA	DNA	24	DNA
White spirit	5000	2000	DNA	5	DNA
Xylene	4000	2000	DNA	20	DNA

f. **Specific Target Organ Toxicity-Single Exposure**

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
1,2,4-Trimethylbenzene	5000	3160	DNA	DNA	DNA
1,2,4-Trimethylbenzene	DNA	DNA	DNA	24	DNA
White spirit	5000	2000	DNA	5	DNA
Xylene	4000	2000	DNA	20	DNA

g. **Respiratory Sensitisation**

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
2-butanoe oxime	930	3160	DNA	DNA	DNA

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity
No data available.

Persistence And Degradability
No information available.

Bioaccumulative Potential
Has the potential to bioaccumulate.

Mobility In Soil
Floats on water. Adsorbs to soil and has low mobility.

Other Adverse Effects
Do not allow product to reach ground water, water course or sewage system.

SECTION 13 DISPOSAL INFORMATION

Waste Disposal :
Recover or recycle if possible. Otherwise dispose in accordance with all applicable with all applicable national environment laws and regulations.

Product Disposal:
This product when dispose of in its unused and uncontaminated state should be treated as a hazardous waste.

Container Disposal :
Drain container thoroughly. Rinse three times with suitable solvent. Treat rinsing as for product disposal. After draining, vent in a safe place away from sparks and fire. Send drum recoverer or metal reclaimer. Residue may cause an explosion hazard. Do not pincture, cut or weld uncleaned drums. Keep container labelled until cleaned and then remove or deface labels.

SECTION 14 TRANSPORT INFORMATION

Transport to be in accordance with ADR/RID for road/rail, IMDG for sea and IATA for air.

LAND TRANSPORT
Classified as Dangerous Goods by the criteria of the European Agreement concerning the international carriage of Dangerous Goods (ADR) by Road & Regulations concerning the international carriage of Dangerous Goods (RID) by Rail.

UN Number: 1263
Proper shipping name : Paint (including paint, lacquer,enamel, stain, shellac, varnish, liquid filler and liquid lacquer base) or paint related material (including paint thinning or reducing compound.
Class: 3
Packaging Group: III

SEA TRANSPORT
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG) for the transport of Sea.

UN Number: 1263
Proper shipping name : Paint (including paint, lacquer,enamel, stain, shellac, varnish, liquid filler and liquid lacquer base) or paint related material (including paint thinning or reducing compound.
Class : 3
Packaging Group: III
Marine Pollutant: No
SEA (Annex II of MARPOL 73/78 and the IBC Code)/ LAUT (Annex II of MARPOL 73/78 dan the IBC Code) : Not Applicable

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for the transport by Air.

UN Number: 1263
Proper shipping name : Paint (including paint, lacquer,enamel, stain, shellac, varnish, liquid filler and liquid lacquer base) or paint related material (including paint thinning or reducing compound.
Class: 3
Packaging Group: III

SECTION 15 REGULATORY INFORMATION

Applicable national regulations :

a) OHSA 1994 and relevant regulation
b) Factories and Machinery Act 1967 and relevant regulations
c) Environment Quality Act 1967 and regulations.
d) Pesticide Act 1974 and regulations
e) Occupational Safety and Health (Classification, Labelling And Safety Data Sheet of Hazardous Chemicals) Reg 2013
f) Industry Code Of Practice (On Chemicals Classification And Hazard Communication

SECTION 16 OTHER INFORMATION

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ABBREVIATION/SINGKATAN
ACGIH American Conference of Governmental Industrial Hygienists
TLV Threshold limit value
TWA Time-Weighted Average
OSHA Occupational Safety and Health Administration
PEL Permissible Exposure Limit
LD50 Lethal Dose
LC50 Median Lethal concentration
IACR International Agency for Research in Cancer
CAS Registry Numbers Chemical Abstracts Service Registry Numbers
ICOP Industry Code Of Practice on Chemical Classification and Health approved by Minister under section 37 of the Act
C Ceiling Limit
CEIL Ceiling Limit airborne concentration
STEL Short Term Exposure Limit
DNA Data Not Available
N/R Not Regulated

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