SAFETY DATA SHEET

Issuing Date 13-May-2015 Revision Date 10-Jan-2023 Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name PSR-4000 MP Green, PSR-4000 MP Black, PIHP-200 Part A

Other means of identification

Product Code(s) 400425, 400429, 400031

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Solder mask part A

Uses advised against No information available

Supplier's details

Supplier Address Taiyo America, Inc. 2675 Antler Drive Carson City, NV 89701

TEL: 775-885-9959 (M-F 8-4 PDT)

Email SDSinfo@taiyo-america.com

Emergency telephone number

Emergency Telephone 1-80

Number

1-800-255-3924 (USA) 1-813-248-0585 (International)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Reproductive Toxicity	Category 1B
Flammable liquids	Category 4

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Danger

Hazard Statements

Harmful if swallowed

May damage fertility or the unborn child

Combustible liquid.

SDS Number: PSR-4000 MP Page 1 / 9



Appearance Green or Black

Physical State Viscous liquid.

Odor Mild Solvent

Precautionary Statements

Prevention

- · Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Keep away from heat/sparks/open flames/hot surfaces No smoking.

General Advice

• If exposed or concerned: Get medical attention/advice

Ingestion

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- · Rinse mouth.

Fire

• In case of fire: Use CO2, dry chemical, or foam for extinction.

Storage

- · Store locked up.
- Store in a well-ventilated place. Keep cool.

Disposal

• Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Dipropylene glycol monomethyl ether	34590-94-8	5-10	*
1-Propanone,	71868-10-5	1-5	*
2-methyl-1-[4-(methylthio)phenyl]-2-(4-morpholinyl)-			
Silicon dioxide	7631-86-9	0-5	*
Carbon black	1333-86-4	0-0.5	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice If symptoms

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Eye Contact

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while

rinsing. If symptoms persist, call a physician.

SDS Number: PSR-4000 MP Page 2 / 9

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. Consult a physician if necessary.

Inhalation Move to fresh air. If symptoms persist, call a physician. If breathing is difficult, give oxygen.

Ingestion Rinse mouth. Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a

physician.

Protection of First-aidersUse personal protective equipment.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

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

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO 2). Dry powder. Dry chemical.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

Combustible liquid. Vapors may travel to source of ignition and flash back. Risk of ignition In the event of fire and/or explosion do not breathe fumes. Keep product and empty container away from heat and sources of ignition.

Explosion Data

Sensitivity to Mechanical Impact None Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with

skin, eyes and clothing. Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Take precautionary measures against static discharges. Pay attention to flashback. In case of insufficient ventilation wear suitable

respiratory equipment.

Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Do not flush into surface water or sanitary sewer system. Avoid release to the environment.

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Dam up. Take up with sand, earth or other noncombustible absorbent material. Pick up and

transfer to properly labeled containers. Clean contaminated surface thoroughly.

SDS Number: PSR-4000 MP Page 3 / 9

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not

breathe vapors or spray mist. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). In case of insufficient ventilation, wear suitable respiratory equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Keep away from heat, sparks and open flame. No smoking. Do not take

internally.

Conditions for safe storage, including any incompatibilities

Storage Keep in properly labeled containers. Keep away from heat and sources of ignition. Keep out

of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated

place.

Incompatible Products Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

	Chemical Name	ACGIH TLV OSHA PEL		NIOSH IDLH
	Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	 (vacated) TWA: 0.1 mg/m³ respirable dust (30)/(%SiO2 + 2) mg/m³ TWA total dust (250)/(%SiO2 + 5) mppcf TWA respirable fraction (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction 	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust
D	ipropylene glycol monomethyl ether 34590-94-8		TWA: 100 ppm TWA: 600 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 600 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m³ (vacated) S* S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m³ STEL: 150 ppm STEL: 900 mg/m³
	Silicon dioxide 10 mg/m³ 7631-86-9		20 mppcf TWA; ((80)/(% SiO2) mg/m³)	IDLH: 3000 mg/m ³ TWA: 6 mg/m ³
	Carbon black 1333-86-4	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m³ (vacated) TWA: 3.5 mg/m³	IDLH: 1750 mg/m³ TWA: 3.5 mg/m³ TWA: 0.1 mg/m³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Skin and Body Protection Respiratory Protection Safety glasses with side-shields.

Lightweight protective clothing. Impervious gloves.

In case of insufficient ventilation wear suitable respiratory equipment. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should

be worn.

SDS Number: PSR-4000 MP Page 4 / 9

Hygiene Measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical StateViscous liquidAppearanceGreen or BlackOdorMild SolventOdor ThresholdNo information available

Property Values Remarks/ - Method

No data available None known pН Melting Point/Range No data available None known **Boiling Point/Boiling Range** No data available None known Flash Point 78 °C None known **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known

Flammability Limits in Air

upper flammability limitNo data availablelower flammability limitNo data available

Vapor Pressure No data available None known **Vapor Density** No data available None known **Specific Gravity** No data available None known Water Solubility No data available None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/waterNo data available None known **Autoignition Temperature** No data available None known **Decomposition Temperature** No data available None known **Viscosity** No data available None known

Flammable Properties Combustible material: may burn but does not ignite readily.

Explosive Properties No data available Oxidizing Properties No data available

Other information

VOC Content (%) 20 VOC (g/l) 293

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks. Incompatible products.

SDS Number: PSR-4000 MP Page 5 / 9

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2). Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

InhalationThere is no data available for this product.Eye ContactThere is no data available for this product.Skin ContactThere is no data available for this product.

Ingestion Harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quartz	= 500 mg/kg (Rat)	-	-
Dipropylene glycol monomethyl ether	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	-
Silicon dioxide	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>2.2 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available. **Mutagenic Effects** No information available.

Carcinogenicity This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of

crystalline silica is unlikely to occur from exposure to this product. This product contains carbon black which is classified as a possible carcinogen when present as respirable dust.

This is not relevant for this product since it is not in a respirable form.

Chemical Name	ACGIH	IARC	NTP	OSHA
Silicon dioxide		Group 3		
Carbon black	A3	Group 2B	-	X

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to its Carcinogenicity to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive Toxicity May damage fertility or the unborn child

STOT - single exposure
STOT - repeated exposure
No information available.
No information available.

Target Organ Effects Liver. Kidney. Respiratory system. Eyes. Skin. Central nervous system (CNS). Blood.

Gastrointestinal tract (GI). Central vascular system (CVS). Lungs.

Aspiration Hazard No information available.

SDS Number: PSR-4000 MP Page 6 / 9

Numerical measures of toxicity - Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 878 mg/kg; Acute toxicity estimate

LD50 Dermal 129482 mg/kg; Acute toxicity estimate mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Dipropylene glycol monomethyl ether 34590-94-8		LC50 96 h: > 10000 mg/L static (Pimephales promelas)		LC50 48 h: = 1919 mg/L (Daphnia magna)
Silicon dioxide 7631-86-9	EC50 72 h: = 440 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: = 5000 mg/L static (Brachydanio rerio)		EC50 48 h: = 7600 mg/L (Ceriodaphnia dubia)
Carbon black 1333-86-4				EC50 24 h: > 5600 mg/L (Daphnia magna)

Persistence and Degradability

No information available.

Bioaccumulation

Chemical Name	Log Pow	
Dipropylene glycol monomethyl ether	-0.064	

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

According to 49 CRF §173.150(f)(1), this material should be reclassified as NA1993, Note:

Combustible Liquid, NOS if it is shipped in bulk.

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **EINECS** Complies **ELINCS** Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

U.S. Federal Regulations

SDS Number: PSR-4000 MP Page 7 / 9

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemi	cal Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Diethylene glycol m	onoethyl ether acetate	112-15-2	7-13	1.0

SARA 311/312 Hazard Categories

Acute Health HazardYesChronic Health HazardYesFire HazardYesSudden Release of Pressure HazardNoReactive HazardNo

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Quartz	14808-60-7	Carcinogen
Carbon black	1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island	
Quartz	X	Х	X	-	X	
Dipropylene glycol monomethyl ether	Х	Х	Х	Х	Х	
Silicon dioxide	X	X	X			
Carbon black	Х	Х	X	Х	X	
Barium sulfate	X	X	X			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

N	IFPA_	Health Hazard	1	Flammability	2	Instability 0	Physical and Chemical Hazards -
Н	IMIS	Health Hazard	1*	Flammability	2	Physical Hazard 0	Personal Protection X

16. OTHER INFORMATION

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

Issuing Date 13-May-2015
Revision Date 10-Jan-2023

SDS Number: PSR-4000 MP Page 8 / 9

^{*}Indicates a chronic health hazard.

Revision Note

Updated Contact Information

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

SDS Number: PSR-4000 MP Page 9 / 9