

# SAFETY DATA SHEET

Issuing Date: 01-Mar-2019

Version 14

## Polyplast PY Series

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Polyplast PY Series

**Product code** PY

**Product Code(s)** PY-064 PY-066 PY-114 PY-121 PY-127 PY-155 PY-164 PY-165 PY-180 PY-190 PY-205 PY-210 PY-230 PY-301 PY-311 PY-325 PY-814 PY-821 PY-825 PY-827 PY-830 PY-863 PY-864 PY-865 PY-866 PY-SB PY-TW PYS25309 PYS36919 PYS40514

**Product Use** Solvent Based Screen Printing Ink.

**Manufactured by**  
 FUJIFILM Manufacturing U.S.A., Inc.  
 20 West 14th Avenue  
 North Kansas City, MO. 64116 USA  
 Phone#: (913) 342-4060

**Distributed in Canada by**  
 FUJIFILM Canada, Inc.  
 600 Suffolk Ct.  
 Mississauga, Ontario L5R 4G4

**SDSs are available at the following website(s):** <https://www.fujifilmusa.com/support/msds/search>

**Company Phone Number** U.S.A: 800-473-3854 Canada: 800-263-5018

**Emergency Telephone** Transport-CHEMTREC Inside NA: 800-424-9300  
 Transport-CHEMTREC Outside NA: 703-527-3887  
 Transport-CANUTEC Inside Canada: 613-996-6666  
 Medical Emergency (24 hour): 877-935-7387

**E-mail** EHS@fujifilm.com

### 2. HAZARDS IDENTIFICATION

**Classification**

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1A

Reproductive toxicity	Category 2
Flammable liquids	Category 3

### GHS Label elements, including precautionary statements

Danger

#### Hazard Statements

Causes skin irritation  
 Causes serious eye damage  
 May cause an allergic skin reaction  
 Suspected of damaging fertility or the unborn child  
 Flammable liquid and vapor



#### Precautionary Statements

##### **Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Wash face, hands and any exposed skin thoroughly after handling  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing must not be allowed out of the workplace  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/Bond container and receiving equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Use explosion-proof electrical (ventilation and lighting) equipment

##### **Response**

If exposed or concerned: Get medical advice/attention  
 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  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
 Wash contaminated clothing before reuse  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

##### **Storage**

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

##### **Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not classified

#### Other hazards

May be harmful if swallowed

#### Unknown Acute Toxicity

19.49650904% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Cyclohexanone	108-94-1	10-30%
dicyclohexyl phthalate	84-61-7	1-5%
Solvent naphtha, light aromatic	64742-95-6	1-5%
1,2,4-Trimethylbenzene	95-63-6	0.5-1.5%

### 4. FIRST AID MEASURES

#### First aid measures for different exposure routes

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	In case of contact with substance, immediately flush eyes with running water for at least 30 minutes. Keep eye wide open while rinsing. Do not rub affected area. Call a physician immediately.
<b>Skin contact</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	Move to fresh air. Administer oxygen if breathing is difficult. If symptoms persist, call a physician.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
<b>Protection of First-aiders</b>	Use personal protective equipment.

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

May cause redness, itching, and pain. Burning feeling and temporary redness. May cause allergic skin reaction. Burning sensation. Redness.

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

Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Alcohol resistant foam.

#### Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

#### Specific hazards arising from the chemical

Flammable. Will be easily ignited by heat, sparks or flames. May cause sensitization by skin contact.

#### Hazardous Combustion Products

Carbon oxides. Hydrogen chloride. Nitrogen oxides (NO<sub>x</sub>).

#### Explosion Data

**Sensitivity to Mechanical Impact** none

**Sensitivity to Static Discharge** Yes

**Protective Equipment and Precautions for Firefighters**

Move containers from fire area if you can do it without risk.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Use personal protective equipment. Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions**

Do not flush into surface water or sanitary sewer system.

**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** Use personal protective equipment. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take precautionary measures against static discharges. Pay attention to flashback. Use only non-sparking tools. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

**Other information** Water spray may reduce vapor; but may not prevent ignition in closed spaces.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Avoid breathing vapors or mists. Ensure adequate ventilation. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid exposure during pregnancy.

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

Keep away from heat and sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
Cyclohexanone	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 100 mg/m <sup>3</sup> (vacated) S*	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m <sup>3</sup>	
1,2,4-Trimethylbenzene			TWA: 25 ppm TWA: 125 mg/m <sup>3</sup>	

**Exposure controls**

**Engineering Measures** Showers Eyewash stations Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Tightly fitting safety goggles. Face-shield.

**Skin and body protection** Wear protective gloves/clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	According to product specification	<b>Odor</b>	Solvent
<b>Odor Threshold</b>	Not available	<b>Physical State @20°C</b>	Liquid
<b>pH</b>	Not available	<b>Molecular Weight</b>	Not available
<b>Specific Gravity</b>	1.046 - 1.67	<b>Autoignition temperature</b>	Not available
<b>Flash point</b>	109 °F / 43 °C	<b>Boiling point / boiling range</b>	307 °F / 153 °C
<b>Decomposition temperature</b>	Not available	<b>Freezing Point</b>	Not available
<b>Melting point / melting range</b>	Not available	<b>Explosive Properties</b>	Not available
<b>Flammability Limit in Air</b>		<b>Partition coefficient</b>	Not available
<b>upper</b> 9.4		<b>Vapor Pressure</b>	4 mmHg @ 20 °C
<b>Lower</b> 1.3		<b>Density</b>	Not available
<b>Oxidizing Properties</b>	Not available	<b>VOC (lb/gal)</b>	Not available
<b>Solubility</b>	Insoluble in water	<b>Dynamic viscosity</b>	Not available
<b>Evaporation rate</b>	Not available		
<b>Vapor density</b>	Not available		
<b>Weight per Gallon (lbs)</b>	8.7-13.9		
<b>VOC (g/l)</b>	Not available		
<b>VOC Content California</b>			
<b>VOC Content of Material</b>		510-659 grams per liter	
<b>VOC Content of Coating less Water and Exempt Solvents</b>		510-659 grams per liter	

**10. STABILITY AND REACTIVITY**

**Reactivity**

Stable under recommended storage conditions.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

Hazardous polymerization does not occur.

**Conditions to Avoid**

Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Heat, flames and sparks.

**Incompatible Materials**

Strong oxidizing agents, strong acids, and strong bases.

**Hazardous Decomposition Products**

Carbon oxides. Nitrogen oxides (NOx).

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

**Acute toxicity**

**Inhalation**

May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

**Eyes**

Risk of serious damage to eyes.

**Skin**

Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
Cyclohexanone	= 1544 mg/kg ( Rat )	= 947 mg/kg ( Rabbit )	= 8000 ppm ( Rat ) 4 h
dicyclohexyl phthalate	= 30 mL/kg ( Rat )		
Solvent naphtha, light aromatic	= 8400 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 3400 ppm ( Rat ) 4 h
1,2,4-Trimethylbenzene	= 3280 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 18 g/m <sup>3</sup> ( Rat ) 4 h

**Information on toxicological effects**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation**

Non-irritating during normal use.

**Corrosivity**

No information available.

**Sensitization**

May cause sensitization by skin contact.

**Mutagenic Effects**

No information available.

**Reproductive Toxicity**

Product is or contains a chemical which is a known or suspected reproductive hazard.

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Cyclohexanone	A3	Group 3		

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

- A1 - Known Human Carcinogen
- A2 - Suspected Human Carcinogen
- A3 - Animal Carcinogen
- A4 - Not Classifiable as a Human Carcinogen

**NTP: (National Toxicity Program)**

- Known - Known Carcinogen
- Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

**IARC: (International Agency for Research on Cancer)**

- Group 1: Carcinogenic to humans
- Group 2A: Probably carcinogenic to humans
- Group 2B: Possibly carcinogenic to humans
- Group 3: Not classifiable as to its carcinogenicity to humans

**OSHA: (Occupational Safety & Health Administration)**

- X - Present

**STOT - single exposure**

No information available.

<b>STOT - repeated exposure</b>	No information available.
<b>Chronic toxicity</b>	May cause adverse liver effects. May cause adverse kidney effects.
<b>Target Organ Effects</b>	Blood, Central nervous system (CNS), Eyes, Kidney, Liver, Lungs, Respiratory system, Skin, Reproductive system.
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

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

ATEmix (oral)	4362 mg/kg
ATEmix (dermal)	5368 mg/kg
ATEmix (inhalation-gas)	22004 mg/l
ATEmix (inhalation-dust/mist)	7.3 mg/l
ATEmix (inhalation-vapor)	55.7 mg/l

ATE: Acute toxicity estimate

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Chemical Name	Algae toxicity	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Cyclohexanone	20: 96 h Chlorella vulgaris mg/L EC50	Pimephales promelas: 481 - 578 mg/L at 96 h Pimephales promelas: 8.9 mg/L at 96 h		
1,2,4-Trimethylbenzene		Pimephales promelas: 7.19 - 8.28 mg/L at 96 h		

**Persistence and degradability**

No information available.

**Bioaccumulation**

Chemical Name	Octanol Water Partition Coefficient (log pow)
Cyclohexanone	0.86
1,2,4-Trimethylbenzene	3.63

**Mobility**

No information available.

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with all applicable national environmental laws and regulations. Dispose of in accordance with federal, state, and local regulations. Do not dispose of waste into sewers, drains or use other methods that will come into contact with surface waters.

**Contaminated packaging**

Do not re-use empty containers.

**US EPA Waste Number**

D001



**14. TRANSPORT INFORMATION**

**DOT**

<b>Proper Shipping Name</b>	Printing ink
<b>UN/ID No</b>	UN1210
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Reportable Quantity (RQ)</b>	Vinyl acetate: RQ kg= 0.369, Cyclohexanone: RQ kg= 15497.00, Xylenes isomers and mixture: RQ kg= 0.027, Ethyl acrylate: RQ kg= 0, Formaldehyde: RQ kg= 0.004, Vinyl chloride: RQ kg= 3880.94, Trichloroethylene: RQ kg= 0.015, Cumene: RQ kg= 1.341
<b>Description</b>	UN1210 Printing ink 3, III
<b>Emergency Response Guide Number</b>	129
<b>Packaging Exceptions</b>	150
<b>Non-bulk Packaging</b>	173
<b>Bulk Packaging</b>	242

**TDG**

<b>Proper Shipping Name</b>	Printing ink
<b>UN/ID No</b>	UN1210
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Description</b>	UN1210 Printing ink 3, III

**MEX**

<b>Proper Shipping Name</b>	Printing ink
<b>UN/ID No</b>	UN1210
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Description</b>	UN1210 Printing ink 3, III

**ICAO**

<b>Proper Shipping Name</b>	Printing ink
<b>UN/ID No</b>	UN1210
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Description</b>	UN1210 Printing ink 3, III

**IATA**

<b>Proper Shipping Name</b>	Printing ink
<b>UN/ID No</b>	UN1210
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Description</b>	UN1210 Printing ink 3, III

**IMDG**

<b>Proper Shipping Name</b>	Printing ink
<b>UN/ID No</b>	UN1210
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>EmS-No</b>	F-E, S-D
<b>Description</b>	UN1210 Printing ink 3, III

**ADR/RID**

<b>Proper Shipping Name</b>	Printing ink
<b>UN/ID No</b>	UN1210

**Hazard Class** 3  
**Packing Group** III  
**Classification Code** F1  
**Description** UN1210 Printing ink 3, III  
**ADR/RID-Labels** 3

**ADN**

**Proper Shipping Name** Printing ink  
**UN/ID No** UN1210  
**Hazard Class** 3  
**Packing Group** III  
**Classification Code** F1  
**Description** UN1210 Printing ink 3, III  
**Limited quantity** LQ7  
**Ventilation** VE01

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA** Yes  
**DSL/NDSL** Yes  
**PICCS** Yes  
**EINECS/ELINCS** No  
**ENCS** No  
**IECSC** Yes  
**KECL** Yes  
**AICS** Yes

\*Yes - All component(s) of this product are included or are exempt from listing on the inventory.

\*No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**TSCA Sections 4, 5 and 12(b)**

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

**SARA 313**

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:

Chemical Name	CAS No	SARA 313 - Threshold Values %	Weight-%
1,2,4-Trimethylbenzene	95-63-6	1.0	0.5-1.5%

**SARA 311/312 Hazard Categories**

Classification is shown in section 2 of this SDS

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21

and 40 CFR 122.42):.

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
dicyclohexyl phthalate		X		

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Cyclohexanone	5000		RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. State Regulations**

**California Proposition 65**



**WARNING:** Cancer - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Chemical Name	CAS No	California Prop. 65	Weight-%
Cumene	98-82-8	Carcinogen	<0.1%
Ethylbenzene	100-41-4	Carcinogen	<0.1%
ethyl acrylate	140-88-5	Carcinogen	<0.1%
formaldehyde	50-00-0	Carcinogen	<0.1%

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Cyclohexanone	X	X	X	X	X
dicyclohexyl phthalate			X		
1,2,4-Trimethylbenzene	X	X	X	X	

**International Regulations**

**Canada - NDSL**

This product does not contain any NDSL chemicals.

**Mexico - Grade**

Moderate risk, Grade 2

**Mexico - Carcinogen Status and Exposure Limits**

Chemical Name	Carcinogen Status	Exposure Limits
Cyclohexanone		Mexico: TWA 50 ppm Mexico: TWA 200 mg/m <sup>3</sup> Mexico: STEL 100 ppm Mexico: STEL 400 mg/m <sup>3</sup>

**Other Regulations**

No information available

<b>CPSIA</b>	Formulated to comply
<b>CONEG</b>	Formulated to comply
<b>ASTM F-963</b>	Formulated to comply
<b>CHPA</b>	Formulated to comply
<b>RoHS</b>	Formulated to comply
<b>REACH/SVHC</b>	Does not comply
<b>EN-71</b>	Formulated to comply

**16. OTHER INFORMATION**

<b>NFPA</b>	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards -
<b>HMIS</b>	Health Hazard 2*	Flammability 2	Physical Hazard 0	Personal protection B

*\*Indicates a chronic health hazard.*

**Prepared By** FUJIFILM Environment, Health and Safety, phone: 800-473-3854

**Revision Date** 01-Mar-2019

**Revision Note** No information available

**Disclaimer** **The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.**

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