



SAFETY DATA SHEET

Information in accordance with 1907/2006/EC, Article 31

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name** Radiant Inks™ RP1810 Catalyst
1.2 Chemical Family Catalyst
1.3 Product Codes RP1810
1.4 Manufacturer's Information

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HMIS INFO

Fire	1
Health	3
Physical Hazard	0
Protection	X

- 1.5 IN CASE OF EMERGENCY CONTACT** +381 11 266 11 22 *National Poison Control Center*

COMPOSITION, INFORMATION ON INGREDIENTS

Hazardous Ingredient	CAS #	EINECS #	Symbol(s)	R-phras(s)	Concentration (%)
1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]-	1760-24-3	217-164-6	Xi	41-43-52/53	<=100
N,N'-bis[3-(trimethoxysilyl)propyl]e thylen ediamine	68845-16-9	272-453-4	Xi	41	<5
1-(2-Aminoethyl)-2,2- demthoxy-1-aza-2-silacyclopentan methanol	618914-51- 5	200-659-6	Xi	41	<5
	67-56-1	200-659-6	T, F	11-23/24/25- 39/23/24/25	<=0,1

Chemical Characterization : N-(3-(trimethoxylsilyl)propyl)ethylenediamine

HAZARDS IDENTIFICATION

- 3.1 Risk Advice** Irritant. Risk advice to human and the environment.
3.2 Eye Contact Risk of serious damage to eyes.
3.3 Skin Contact May cause sensitization by skin contact.
3.4 Aquatic Env. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

FIRST AID MEASURES

- 4.1 General Advice** Remove contaminated clothing.
4.2 Eyes In case of contact with eyes rinse thoroughly with water. Summon a doctor immediately.
4.3 Skin In case of contact with skin wash off with soap and water. Consult a doctor if skin irritation persists.
4.4 Inhalation Ensure supply of fresh air. In the event of symptoms seek medical advice.
4.5 Ingestion Give water in small draughts. Call for medical advice immediately. Do not induce vomiting.



FIRE FIGHTING MEASURES

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| 5.1 Extinguishing Media | Foam, CO ₂ , Dry Powder. |
| 5.2 Extinguishing media which must not be used for safety reasons | Full water jet, water spray jet. |
| 5.3 Special hazards from the substance itself, its combustion products or from its vapors. | In the event of fire the following can be released:
- Carbon monoxide, carbon dioxide, silicon dioxide
- Nitrous gases (NOx) |
| 5.5 Special Protective Equipment for Firefighters | Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus and wear full protective suit. |

ACCIDENTAL RELEASE MEASURES

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| Personal Precautions | Use personal protective clothing. High risk of slipping due to a leakage/spillage of product. |
| Environmental Precautions | Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. |
| Methods for Cleaning Up/Taking Up | Dispose of absorbed material in accordance with the regulations. Take up with absorbent material (e.g. sand, diatomite, universal binder) |

HANDLING AND STORAGE

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| 7.1 Handling | Avoid formation of aerosols. Provide good ventilation of working area (local exhaust ventilation if necessary). |
| 7.2 Advice on Protection Against Fire and Explosion | Take precautionary measures against electrostatic loading. Keep away from sources of ignition (no smoking). Cool endangered containers by water spray. |
| 7.3 Storage | Do not store together with acids. Store in closed containers in cool, dry, well ventilated area. Protect from atmospheric moisture and water. |
| 7.4 Storage Temperature | 5-30°C / 41-86°F |

EXPOSURE CONTROL / PERSONAL PROTECTION

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| 8.1 Hygiene Measures | Wash hands before breaks and after work. Remove soiled or soaked clothing immediately. |
| 8.2 Respiratory Protection Equipment | Respiratory protection in case of insufficient extraction or prolonged exposure. Multi-purpose ABEK. |
| 8.3 Hand Protection | Gloves made of butyl (IIR) |
| 8.4 Eye Protection | Goggles with side pieces. Have eye bath available. |
| 8.5 Skin and Body Protection | Protective clothing |

PHYSICAL AND CHEMICAL PROPERTIES

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| 9.1 Form | Liquid |
| 9.2 Color | Colorless |
| 9.3 Odor | Slight, specific |
| 9.4 Melting Point | < -50°C/-122°F |
| 9.5 Boiling Point | 147°C/297°F at 16 hPa |
| 9.6 Flash Point | > 100°C/212°F (Method: DIN EN 22719 (DIN 51758) |
| 9.7 Ignition Temperature | 300°C/572°F (Method: DIN 51794) |
| 9.8 Lower Explosion Limit | Not measured |



9. PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

9.9 Upper Explosion Limit	Not measured
9.10 Vapor Pressure	< 5 hPa at 50°C/122°F
9.11 Specific Gravity	1.02 g/cm ³ at 25°C/77°F (1.013 hPa) (Method: DIN 51757)
9.12 Water Solubility	Miscible in any ratio
9.13 pH	10.5 at 10 g/l water at 25°C/77°F
9.14 Viscosity, Dynamic	4-5 mPa.s at 25°C/77°F (Method: DIN 51562)
9.15 Further Information	With water slow hydrolysis

STABILITY AND REACTIVITY

10.1 Thermal Decomposition	> 150°C/302°F
10.2 Hazardous Reactions	Reactions with acids. Reactions with water.
10.3 Hazardous Decomposition Products	Methanol

TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD50 Species: Rat Dose: 2.413 mg/kg
Acute Dermal Toxicity	LD50 Species: Rat Dose: > 2.009 mg/kg
Skin Irritation	Species: Rabbit Mild irritant
Eye Irritation	Species: Rabbit Irritant - risk of serious damage to eyes
Sensitization	Species: Guinea Pig Sensitizing Method: OECD 406 (according to Magnusson and Kligman)
Remarks	Risk of serious damage to eyes. Possibility of sensitization through skin contact.

ECOLOGICAL INFORMATION

Ecotoxicity Effects

Toxicity to Fish	LC50 Species: Minnow Dose: 168 mg/l Exposure time: 96 h
Toxicity to Bacteria	EC0 Species: Activated Sludge Dose: 435 mg/l
Toxicity to Daphniae	EC50 Species: Daphnia Magna Dose: 87,4 mg/l Exposure time: 48 h

Further Ecological Information

Remarks	The product is considered to be a weak water pollutant. Do not allow to enter soil, waterways or waste water canal.
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DISPOSAL CONSIDERATIONS

Product	In accordance with local authority regulations, take to special waste incineration plant.
Contaminated Packaging	If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

TRANSPORT INFORMATION

14.1 Land Transport (GGVSE/ADR/RID/GGVE)	Not regulated
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14.2 Sea Transport (IMDG/GGVSee)	Not regulated
14.3 Air Transport (ICAO/IATA)	Not regulated

REGULATORY INFORMATION

Labeling in accordance with EC The product is classified and labeled in accordance with EC directives on dangerous substances.

Hazard symbol(s)



Xi
Irritant

Hazardous component(s) for labeling	1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]- EINECS-No.: 217-164-6
R-phrase(s)	41 Risk of serious damage to eyes. 43 May cause sensitization by skin contact. 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 36/37/39 Wear suitable protective clothing, gloves and eye/face protection. 60 This material and its container must be disposed of as hazardous waste. 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

OTHER INFORMATION

16.1 Disclosure

All recommendations and statements made, if any, are based on Imagoprint Doo's research and experience. However, since Imagoprint has no control over the conditions of use or storage of the product sold, Imagoprint cannot guarantee the results obtained through the use of its products. All products are sold and samples are given without any representation or warranty, expressed or implied, of fitness for any particular purpose or otherwise, and upon condition that the buyer shall determine the suitability of the product for its own purposes. This applies also where protective rights of third parties are involved. It does not release the user from the obligation to test the suitability of the product for the intended use and application. The data in this SDS relates only to the specific material designated herein and does not apply to use in combination with any other material or process. Recipients of our products must take responsibility for observing existing laws and regulations.

16.2 R-Phrases of Components from Chapter 3 – Full Wording

11	Highly flammable.
23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
39/23/24/25	Toxic: Danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
41	Risk of serious damage to eyes.
43	May cause sensitization by skin contact.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.