

Safety Data Sheet Product ID: 841 Catalyst

Version 2.0 Date February 11, 2021

CHEMTREC: (800) 424 9300 For Chemical Emergency Only

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 **PRODUCT IDENTIFICATION**

Product Name 841 Catalyst

1.2 RELEVANT IDENTIFIED USES OF THE PRODUCT

Product Use Industrial applications: Industrial use only for printing operations.

1.3 SUPPLIER

Independent Ink Incorporated 13700 S. Gramercy Place Gardena, California 90249 Tel: (310) 523 4657 Fax: (310) 329 5366

1.2 EMERGENCY TELEPHONE NUMBER(S)

Medical	Poison Control Center	USA	(800) 222 1222
Transportation	CHEMTREC	USA	(800) 424 9300

SECTION 2: Hazards Identification

2.1 CLASSIFICATION OF THE PRODUCT

H332	Acute Toxicity 4	Inhalation (Dusts/Mists)
H314	Skin corrosion/irritation 1B	May cause an allergic skin reaction
H304	Aspiration Hazard	May be fatal if swallowed and enters airways
H317	Skin Sensitivity	May cause an allergic skin reaction
H318	Eye damage/ Irritant 1	Causes serious eye damage/irritation
H226	Flammable 3	Flammable liquid and vapor

2.2 LABEL ELEMENTS



Single Word : Danger

Hazzard statements:

H314 – Causes severe skin burns and eye damage

H317 – May Cause an allergic skin reaction

H332 – Harmful if inhaled

H226 – Flammable liquid and vapor

Precautionary Statements:

P280 – Wear protective gloves/protecting clothing/eye protection/face protection
P 260 – Do not breathe dust/fume/gas/mist/vapors/spray
P305 + P351 - + P338 -- If in eyes : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P210 – Keep away from heat/sparks/open flames/hot surfaces – No smoking.

Harmful: Possible risk of irreversible effects through inhalation, contact with skin and if swallowed.

2.3 OTHER HAZARDS

Repeated exposure may cause skin dryness or cracking IF SWALLOWED: Immediately call a Poison Control Center and a physician. Get medical attention. Keep container tightly closed. Store in a well ventilated place.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product Name	CAS NO.	EC No.	%	GHS Classification
Propylene glycol monomethyl ether	107-98-2	203-539-1	10-30	Flammable liquids (Category 3), H226 Reproductive toxicity (Category 1B), H360 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Methyl isobutyl ketone	108-10-1	203-550-1	10-30	Flammable liquids (Category 2), H225 Acute toxicity, Inhalation (Category 4), H332 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Xylenes (o-, m-, p- isomers)	1330-20-7	215-535-7	10-30	Flammable Liquids: Category 3, H226 Acute Toxicity inhalation Category 4, H312 Acute Toxicity Dermal Category 4, H312 Skin irritant Category 2, H315 Carcinogenicity (Category 2), H351 Specific target organ toxicity - repeated exposure (Category 2), H373 Aspiration hazard (Category 1), H304 Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 2), H411
Diethylene Triamine	111-40-0	203-865-4	5 - 10	Acute Toxicity, Oral Category 4 H 302 Acute Toxicity, Inhalation Category 1 H 330 Acute Toxicity Dermal Category 4, H312 Skin corrosion Category 1B, H314 Serious Eye damage Category 1, H318

Product ID: 841 Catalyst

				Specific target organ toxicity, single exposure Category3 Respiratory system H335
Ethyl benzene (contaminant)	100-41-4	202-849-4	1 - 5	Flammable liquids (Category 2), H225 Acute toxicity, Inhalation (Category 4), H332 Carcinogenicity (Category 2), H351 Specific target organ toxicity - repeated exposure (Category 2), H373 Aspiration hazard (Category 1), H304 Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 3), H412

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

EYE CONTACT: Flush immediately with water for 15 minutes. Get medical attention.

- SKIN CONTACT: Wash with soap and water. Remove contaminated clothing. Consult a physician if irritation persists. Do not re-use clothing until cleaned.
- INHALATION: Remove to fresh air. Restore breathing. Get medical attention.

INGESTION: Do not give liquids if victim is unconscious or drowsy. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Call a Poison Control Center or physician.

SECTION 5: FIRE FIGHTING MEASURES

5.1 PHYSICAL CHARACTERISTICS

FLASH POINT: 27 °C /80 °F METHOD USED: TCC

FLAMMABLE LIMITS IN AIR BY VOLUME: Data not available

5.2 EXTINGUISHING MEDIA

EXTINGUISHING MEDIA: CO2, dry chemical, water. DO NOT use a direct stream of water. Product will float and can be re-ignited on surface of water.

SPECIAL FIRE FIGHTING PROCEDURES & PRECAUTIONS:

Clear fire area of unprotected personnel. Do not enter confined fire space without using self contained breathing apparatus and protective clothing. Keep run-off water out of sewers and water sources. If risk of water pollution occurs, notify appropriate authorities.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup that could result in container rupture. Vapors are heavier than air and may spread near ground to sources of ignition. May explode when heated or when exposed to flames or sparks. May form explosive or toxic mixtures with air.

SPECIFIC HAZARDS: Fire creates toxic gases/vapors/fumes of Carbon Monoxide (CO). Carbon Dioxide (CO2).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:

Avoid eye or skin contact. Place leaking containers in well ventilated area. Eliminate ignition sources. If fire potential exists, blanket spill with foam or use water spray to disperse vapors. Contain spill to minimize contaminated area and facilitate salvage or disposal. To clean spill, flush area sparingly with water or use an absorbent. Avoid run-off into storm sewers and ditches that lead to natural waterways. All cleanup and disposal should be carried out in accordance with federal, state and local regulations. If required, state and local authorities should be notified.

6.2 WASTE DISPOSAL METHOD:

Recovered liquids may be sent to a licensed recycler or incineration facility. Contaminated material must be disposed of in a permitted waste management facility. Consult federal, state, or local disposal authorities for approved procedures.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatible materials. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

Do not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

Keep liquid away from heat, sparks and open flame. Surfaces that are sufficiently hot may ignite even liquid product in the absence of spark or flame. Extinguish pilot lights, cigarettes and turns off other sources of ignition prior to use and until all vapors are gone. Vapors may accumulate and travel to ignition sources distant from handling point flash fire can result.

Keep containers tightly closed when not in use. Use adequate ventilation. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld, or perform similar operations on or near the containers.

Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment. Store in a cool dry place with adequate ventilation Keep away from open flames and high temperatures.

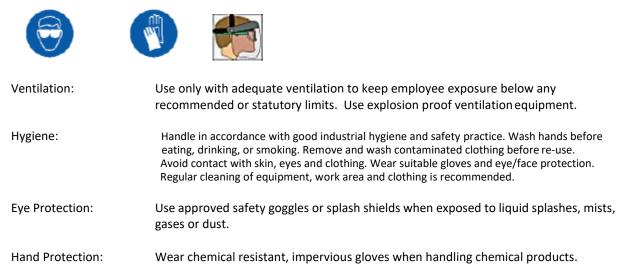
Wash with soap and water before eating, drinking, smoking or using toilet facilities. Launder contaminated clothing before re-use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE GUIDELINES

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Ontario TWAEV	Mexico OEL (TWA)
Propylene glycol monomethyl ether	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 150 ppm STEL: 540 mg/m ³		TWA: 100 ppm STEL: 150 ppm	
Methyl isobutyl ketone	TWA: 20 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 205 mg/m ³ STEL: 75 ppm STEL: 300 mg/m ³ TWA: 100 ppm TWA: 410 mg/m ³	500 ppm	TWA: 50 ppm STEL: 75 ppm	TWA/LMPE-PPT: 50 ppm TWA/LMPE-PPT: 205 mg/m ³ STEL/LMPE-CT: 75 ppm STEL/LMPE-CT: 307 mg/m ³
Xylenes (o-, m-, p- isomers)	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³		TWA: 100 ppm STEL: 150 ppm	TWA/LMPE-PPT: 100 ppm TWA/LMPE-PPT: 435 mg/m ³ STEL/LMPE-CT: 150 ppm STEL/LMPE-CT: 655 mg/m ³
Diethylene triamine	TWA: 1 ppm Skin	TWA: 1 ppm TWA: 4 mg/m ³		TWA: 1 ppm Skin	TWA/LMPE-PPT: 1 ppm TWA/LMPE-PPT: 4.2 mg/m ³
Ethyl benzene (contaminant)	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³	800 ppm (10% LEL)	TWA: 100 ppm STEL: 125 ppm	TWA/LMPE-PPT: 100 ppm TWA/LMPE-PPT: 435 mg/m ³ STEL/LMPE-CT: 125 ppm STEL/LMPE-CT: 545 mg/m ³

8.2 PERSONAL PROTECTION



Respiratory Protection: Use an air purifying or air fed respirator if exposure will result in exposure in excess of allowable limits. Ensure that the respirator's safe working rating exceeds the expected exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 EXPOSURE GUIDELINES

Product ID: 841 Catalyst

PHYSICAL STATE	Liquid	рН	Not determined
FLASH POINT	27 °C / 80 °F	EXPLOSION LIMITS	Upper: Data not available Lower : 1%
BOILING POINT	>149 °C/>300 °F	SPECIFIC GRAVITY	1.01
VAPOR DENSITY	Heavier than air	EVAPORATION RATE	No data available
VAPOR PRESSURE (mm Hg)	No data available	% VOLATILE RATE	No data available
WEIGHT PER GALLON	8.4 lbs	APPEARANCE & ODOR	Clear, Characteristic
SOLUBILITY IN WATER	Negligible	VOC	497.85 grams/liter

9.2 OTHER EXPOSURE GUIDELINES

Photochemically reactive

9.3 ENGINEERING MEASURES Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

SECTION 10: STABILITY AND REACTIVITY

10.1	STABILITY	Stable under normal conditions.
10.2	REACTIVITY	No data available
10.3	POSSIBILITY OF HAZARDOUS REACTIONS	Hazardous reactions will not occur under normal conditions of storage and use.
10.4	CONDITIONS TO AVOID	Heat, flames and sparks.
10.5 agents	INCOMPATIBLE MATERIALS	Strong acids, strong bases, Strong oxidizing agents, reducing
10.6	HAZARDOUS DECOMPOSITION PRODUCTS	Hazardous decomposition products should not be produced under normal conditions. Fire creates toxic gases and vapors of Carbon Monoxide (CO) and Carbon Dioxide (CO ₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propylene glycol monomethyl ether	5200 mg/kg (Rat)	13000 mg/kg(Rabbit)	54.6 mg/L (Rat)4 h >24 mg/L (Rat)1 h
Methyl isobutyl ketone	2080 mg/kg (Rat)	>16000 mg/kg (Rabbit)	8.2 mg/L(Rat)4 h
Xylenes (o-, m-, p- isomers)	4300 mg/kg(Rat)	>1700 mg/kg(Rabbit)	5000 ppm(Rat)4 h 47635 mg/L(Rat)4 h
Diethylene triamine	819 mg/kg(Rat)	672 mg/kg(Rabbit)	

Product ID: 841 Catalyst

Ethyl benzene (contaminant)	3500 mg/kg(Rat)	15354 mg/k	kg(Rabbit)	17.2 mg/L(Rat)4 h
hronic Toxicity				
Component	ACGIH	IARC	NTP	OSHA
Methyl isobutyl ketone	A3	Group 2B		Х
Ethyl benzene (contaminant)	A3	Group 2B		Х
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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity:

We have no quantitative data concerning the ecological effects of this product. Should not be released into the environment

Component	Algae	Fish	Water Flea
Propylene glycol monomethyl ether		96h LC50 Leuciscus idus: 4600 - 10000 mg/L [static] 96h LC50 Pimephales promelas: 20.8 g/L [static]	48h EC50 Daphnia magna: 23300 mg/L
Methyl isobutyl ketone	96h EC50 Pseudokirchneriella subcapitata: 400 mg/L	96h LC50 Pimephales promelas: 496 - 514 mg/L [flow-through]	48h EC50 Daphnia magna: 170 mg/L
Diethylene triamine	72h EC50 Pseudokirchneriella subcapitata: 1164 mg/L 96h EC50 Pseudokirchneriella subcapitata: 345.6 mg/L 96h EC50 Desmodesmus subspicatus: 592 mg/L	96h LC50 Poecilia reticulata: 1014 mg/L [semi-static] 96h LC50 Poecilia reticulata:248 mg/L [static] 96h LC50 Leuciscus idus: 430mg/L [semi-static]	48h EC50 Daphnia magna: 16 mg/L 24h EC50 Daphnia magna: 37 mg/L
Ethyl benzene (contaminant)	96h EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static] 72h EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static] 72h EC50 Pseudokirchneriella subcapitata: 4.6 mg/L 96h EC50 Pseudokirchneriella subcapitata: >438 mg/L	 96h LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static] 96h LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through] 96h LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static] 96h LC50 Lepomis macrochirus: 32 mg/L [static] 96h LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static] 96h LC50 Poecilia reticulata: 9.6 mg/L [static] 	48h EC50 Daphnia magna: 1.8 - 2.4 mg/L

Component	log Pow
Propylene glycol monomethyl ether	-0.437

Product ID: 841 Catalyst

Methyl isobutyl ketone	1.19
Xylenes (o-, m-, p- isomers)	2.96
Diethylene triamine	-1.3
Ethyl benzene (contaminant)	3.118

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste Disposal Methods	Dispose of the waste according to local regulations. Waste should not be released into the environment. Waste can be incinerated or disposed of in a landfill when in accordance with local regulations. This material, as supplied, is a hazardous waste according to Federal regulations (40 CFR 261).
Contaminated Packaging	Dispose of surplus and non-recyclable product via a licensed waste disposal contractor Dispose of in accordance with local regulations. Empty containers should be taken for
Special Precautions	local recycling, recovery or waste disposal. None

SECTION 14: TRANSPORT INFORMATION

	UN	IMDG	ΙΑΤΑ	US DOT
Number	UN2734	UN2734	UN2734	UN2734
UN Proper Shipping Name	Polyamines, Liquid, Corrosive, Flammable, NOS (Diethylenetriamine, Methyl Isobutyl Ketone)	Polyamines, Liquid, Corrosive, Flammable, NOS (Diethylenetriamine, Methyl Isobutyl Ketone)	Polyamines, Liquid, Corrosive, Flammable, NOS (Diethylenetriamine, Methyl Isobutyl Ketone)	Polyamines, Liquid, Corrosive, Flammable, NOS (Diethylenetriamine, Methyl Isobutyl Ketone)
Transport Hazard Class	CORROSIVE 8	CORROSIVE 8	CORROSIVE 8	3 CORROSIVE 8
Packaging Group	II	Ĩ	Ĩ	Ĩ
Special Precautions for User	Not available	Not available	Not available	Not available
Additional Information	None	None	None	None

ERG Emergency Response Guide 129

SECTION 15: REGULATORY INFORMATION

International Inventories: Listed on TSCA. For further information, please contact: Manufacturer, importer, supplier

US Federal Regulations: SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Ethyl benzene (contaminant)	100-41-4	1 - 5	0.1
Methyl isobutyl ketone	108-10-1	10 - 30	1.0
Xylenes (o-, m-, p- isomers)	1330-20-7	10 - 30	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

Component	CAS-No	Weight %
Ethyl benzene (contaminant)	100-41-4	1 - 5
Methyl isobutyl ketone	108-10-1	10 - 30
Xylenes (o-, m-, p- isomers)	1330-20-7	10 - 30

US State Regulations:

Component	Massachusetts Right To Know	Minnesota Right To Know	New Jersey Right To Know	Pennsylvania Right To Know
Propylene glycol monomethyl ether	Х	Х	Х	Х
Methyl isobutyl ketone	Х	Х	Х	Х
Xylenes (o-, m-, p- isomers)	Х	Х	Х	Х
Diethylene triamine	Х	Х	Х	Х
Ethyl benzene (contaminant)	Х	Х	Х	Х

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer and / or WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm

Component	CAS-No	Weight
Ethyl benzene (contaminant)	100-41-4	1 -
Methyl isobutyl ketone	108-10-1	10 -

Canada:

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

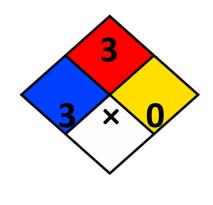
Component	WHMIS Classifications of Components
Propylene glycol monomethyl ether	B2
Methyl isobutyl ketone	B2,D2A
Xylenes (o-, m-, p- isomers)	B2,D2A,D2B
Diethylene triamine	D2B,E
Ethyl benzene (contaminant)	B2,D2A,D2B

Product ID: 841 Catalyst

Component	NPRI - National Pollutant Release Inventory	
Propylene glycol monomethyl ether	Part 4 Substance	
Methyl isobutyl ketone	Part 4 Substance	
	Part 1, Group 1 Substance	
	Part 5, Individual Substance	
Xylenes (o-, m-, p- isomers)	Part 1, Group 1 Substance	
	Part 5 Substance	
	Part 5, Isomer Groups	
Ethyl benzene (contaminant)	Part 4 Substance	
	Part 1, Group 1 Substance	

Regulation (EC) No. 1907/2006 (REACH), Article 57

This product does not contain substances of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 57)



Irritant

Flammable

SECTION 16: OTHER INFORMATION

DISCLAIMER: While Independent Ink Incorporated (III) believes that the data set forth in this sheet is accurate and represents the best information currently available to III. Independent Ink Incorporated makes no warranty, expressed or implied, with respect thereto and expressly disclaims all liability for reliance thereon.