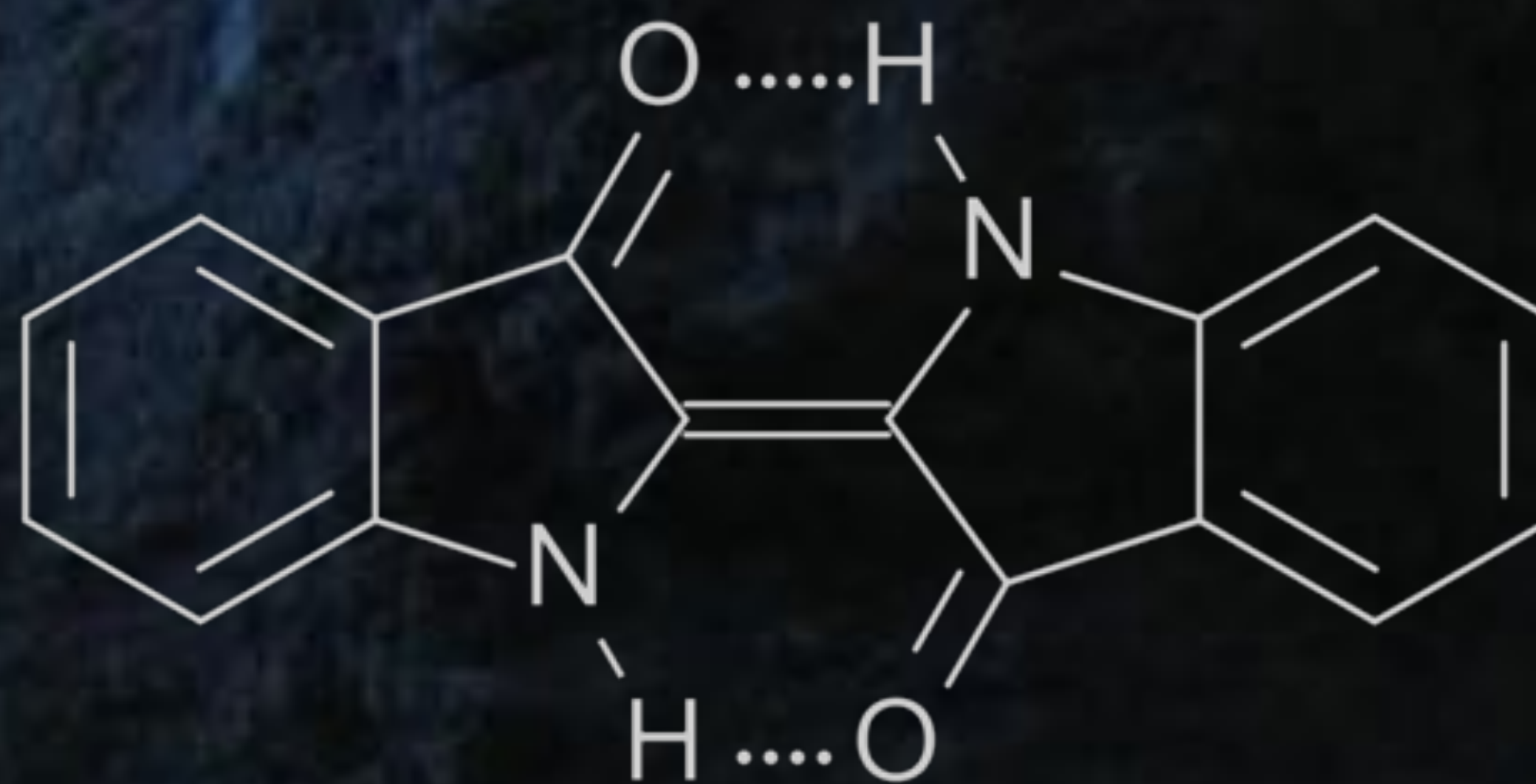
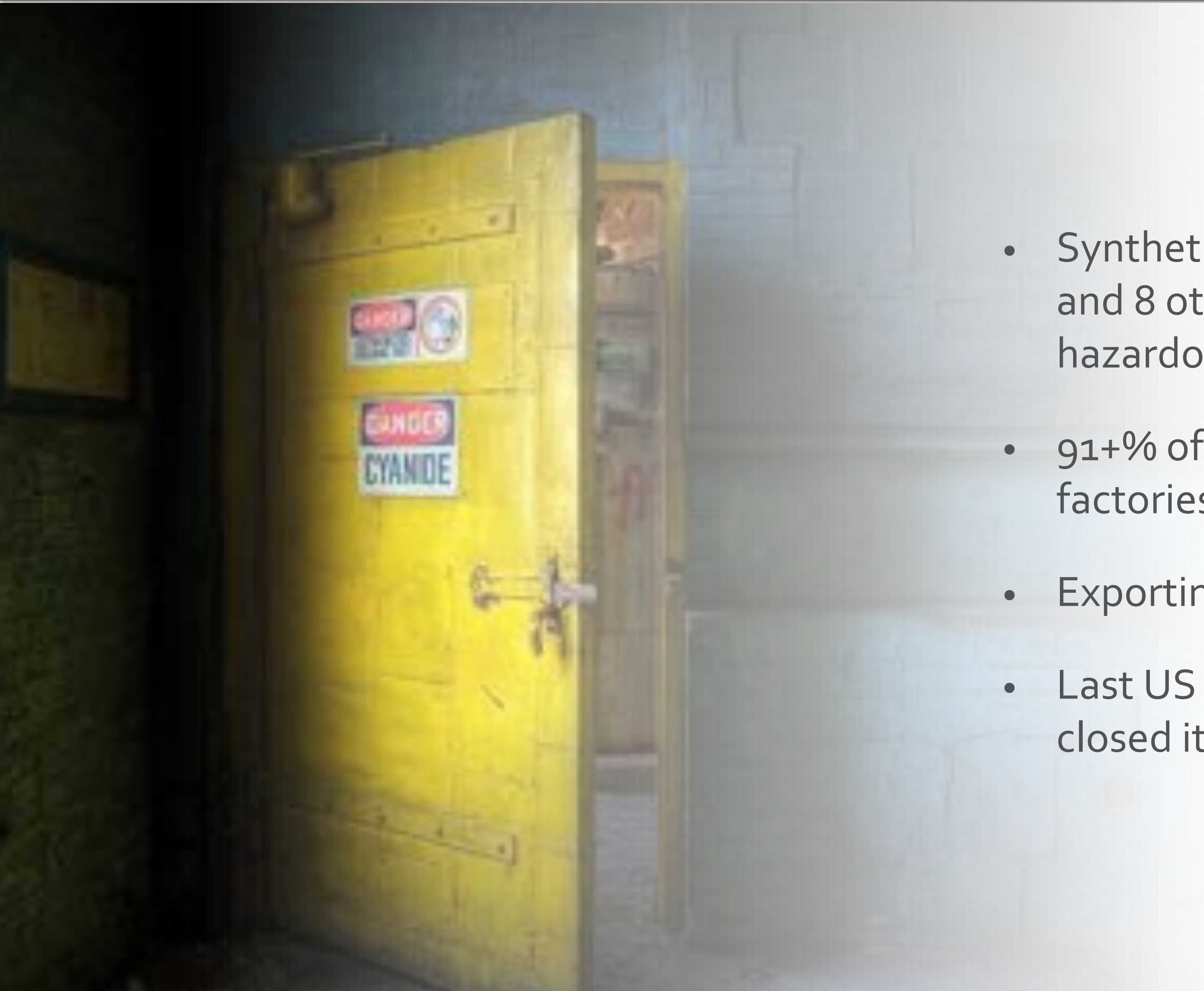




Real Indigo



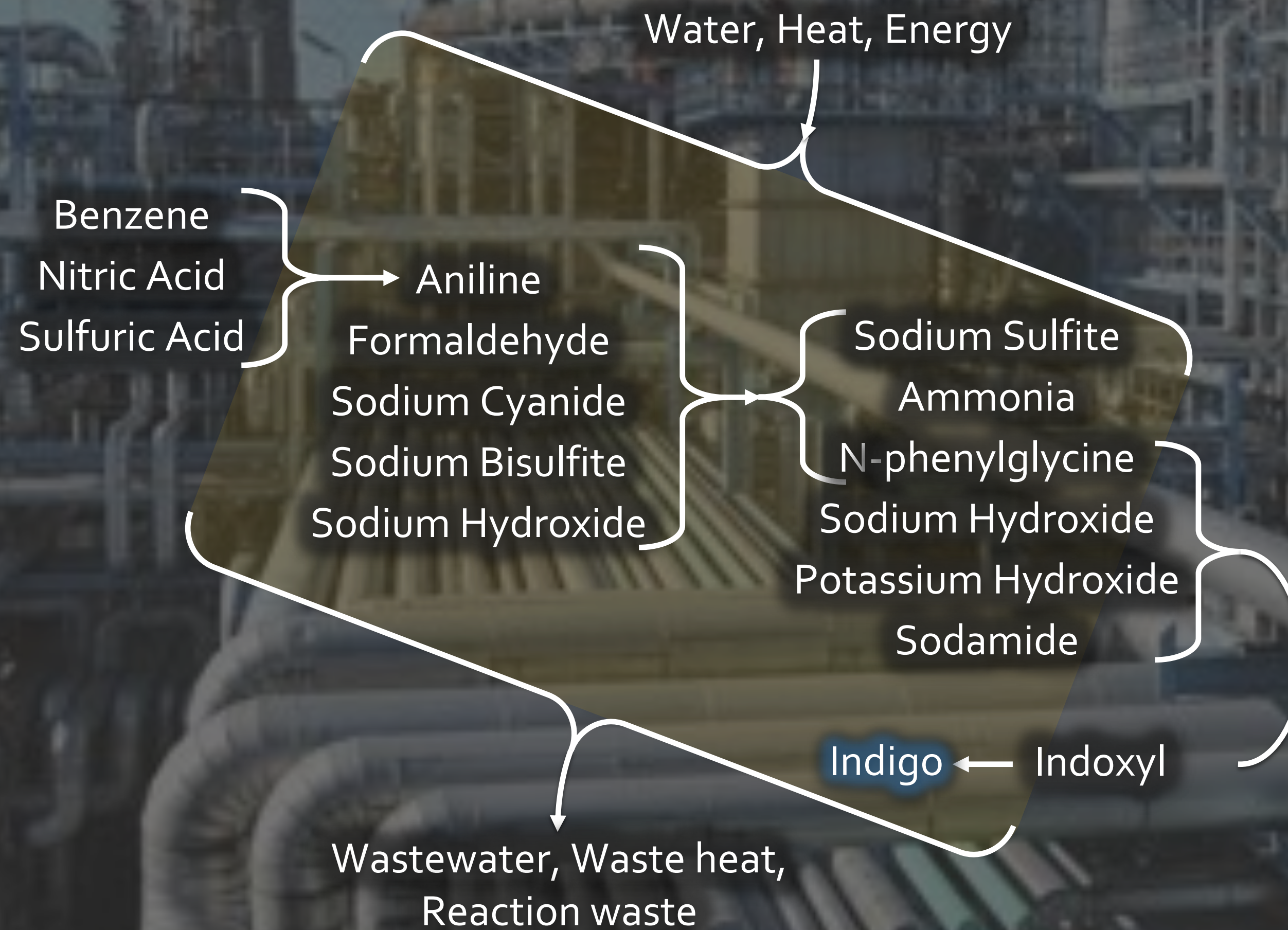
Indigo Manufacturing Today



- Synthetic indigo produced from Benzene, Cyanide, and 8 other harmful chemistries, numerous hazardous side and by products of synthesis
- 91+% of global indigo made today comes from 4 factories in China
- Exporting our pollution doesn't solve it
- Last US indigo manufacturer Buffalo Color Corp closed its doors in 2002.

The Two Indigos: Petroleum-based

Synthetic Indigo

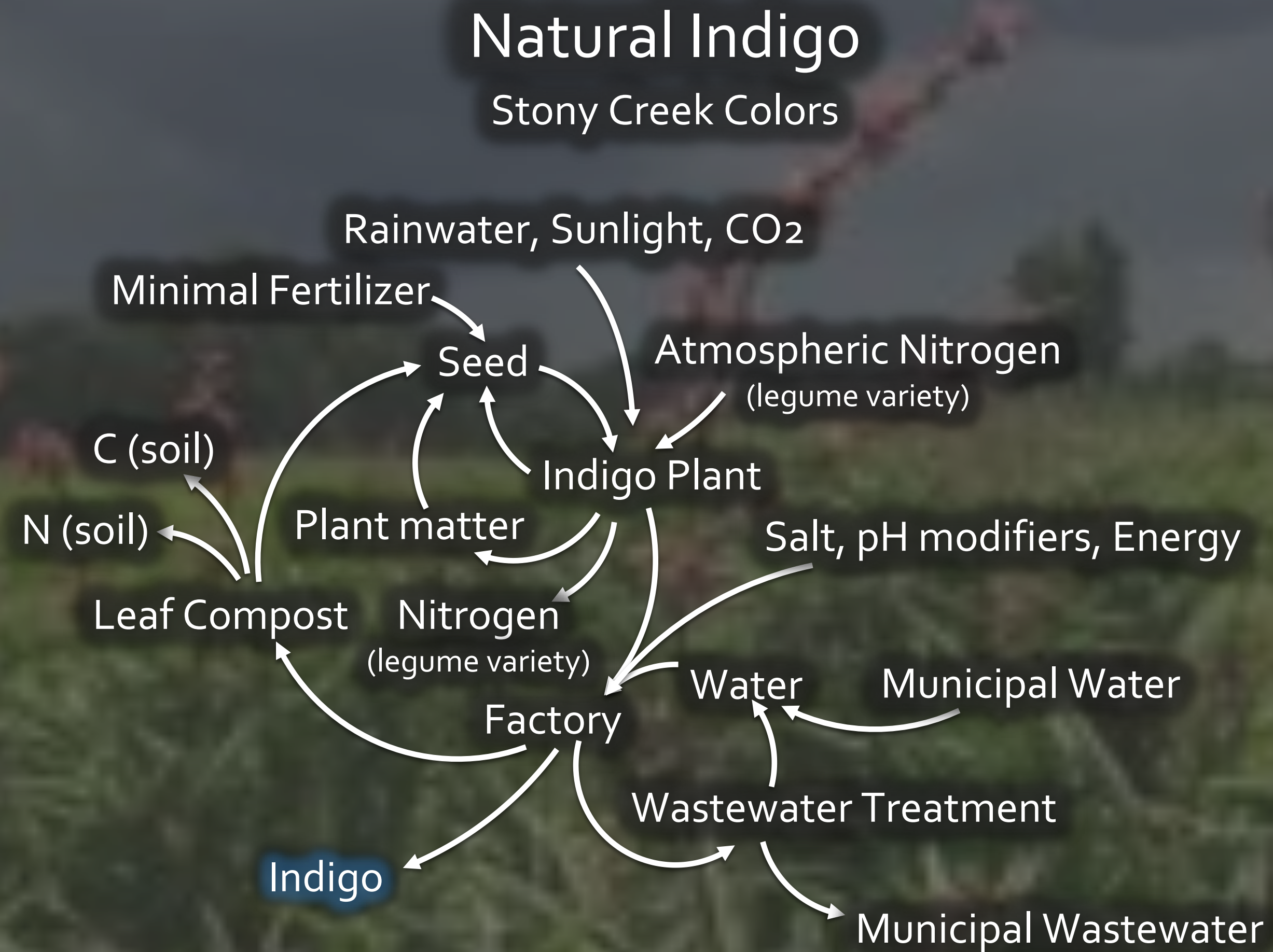


Synthetic Indigo chemicals

CHEMICAL PRECURSOR	per mol benzene	per mol benzene	per pound indigo	
	MOL USED/[PRODUCED]	USED/[PRODUCED]	USED/[PRODUCED]	
Benzene (C6H6)	## 0.08912 L	0.02354 gal	0.113 gal	Carcinogen "Flammable, Toxic, Carcinogen, M
Nitric acid (HNO3)	## 0.05000 L	0.01321 gal	0.063 gal	"Very toxic, Corrosive, Oxidizing Agent"
{Sulfuric acid (H2SO4) - present}	## 0.01000 L	0.00264 gal	0.013 gal	"Corrosive"
(Aniline (C6H5NH2))	## 0.09115 L	0.02408 gal	0.115 gal	"Toxic, Corrosive, Dangerous to environment (
Formaldehyde (HCHO)	## 0.08130 L	0.02148 gal	0.103 gal	"Toxic, Corrosive, Carcinogen"
Sodium Cyanide (NaCN)	## 49.00720 gm	0.10804 lb	0.518 lb	Rapidly acting poison - LD 200mg, "Very Toxic,
Sodium Bisulfite (NaHSO3)	## 120.06000 gm	0.26469 lb	1.268 lb	"Harmful (Xn)"
Sodium Hydroxide (NaOH)	## 0.05280 L	0.01395 gal	0.067 gal	"Corrosive"
--> [Sodium Sulfite (Na2SO3)]	## 126.04300 gm	0.27788 lb	1.331 lb	
--> [Ammonia (NH3)]	## 1.70310 L	0.44991 gal	2.155 gal	"Toxic, Corrosive, Dangerous to environment (
(N-phenylglycine) (sodium salt)	## 120.92800 gm	0.26660 lb	1.277 lb	
{Sodium Hydroxide (NaOH) - present}	## 0.00528 L	0.00139 gal	0.007 gal	"Corrosive"
{Potassium Hydroxide (KOH) - present}	## 0.00856 L	0.00226 gal	0.011 gal	"Corrosive, Harmful (Xn)"
Sodamide (NaNH2)	## 39.01000 gm	0.08600 lb	0.412 lb	"Flammable, Corrosive, Dangerous to environr
--> [Sodium Hydroxide (NaOH)]	## 0.05280 L	0.01395 gal	0.067 gal	"Corrosive"
--> [Ammonia (NH3)]	## 1.70310 L	0.44991 gal	2.155 gal	"Toxic, Corrosive, Dangerous to environment (
(indoxyl)	## 101.19172 gm	0.22309 lb	1.069 lb	
(indigo)	## 94.67947 gm	0.20873 lb	1.000 lb	

1 lb synthetic indigo

The Two Indigos: Plant-based





Natural Indigo “at Scale”

Stony Creek Colors provides the market’s only high-quality natural indigo suitable for mainstream denim mills

- Developed & manage the entire natural indigo value chain
 - Genetics and plant breeding – more yield per acre naturally
 - Seedling production and transplanting
 - Mechanized harvest to stimulate regrowth and multiple cuttings
 - Extraction and chemical processing
- Proprietary aqueous extraction with no organic solvents
- Operations developed and supported by in-house R&D







Regenerative and Sustainable Agriculture

- SCC contract with former tobacco farmers to make transition to this sustainable crop possible
 - Provides equipment + labor for harvesting + processing at scale
 - Provides seed and transplants to farmers
 - Guarantee price per acre to farmers in pre-season contract
- Indigo is a valuable diversification crop for farmers
 - Legume variety fixes nitrogen
 - Returns significant carbon to soil
 - Nematode suppressing crop
 - Considerable interest as cotton rotation crop
 - Can be used with sustainable strip-till / no-till farming methods



Stony Creek Colors is leading with plant based indigo

- Chemically identical, natural alternative
 - Proven drop-in replacement for synthetic indigo
 - Batch blending to enable predictable consistent use at denim mills
 - Chemical Analysis of fabric or dye allows for brand and mill validation



- Plant-based colors have already swept food and cosmetics
 - Synthetic indigo contains residual impurities from synthesis including aniline – used today not only in denim but also as food colorant




Chemical manufacturing safe enough to exist in our own communities



Traceable from the field to the closet – if...



- Farmers partnering together helps bring scale, to allow access to traceable natural indigo at commercial quantities
- Significant challenges in the natural indigo market exist, from adulteration to cost
- Offtake agreements with brands would allow farmers to access better loan terms
- Ability to invest in growing infrastructure, equipment, cover crops etc



Whether looked at from its fueling of petrochemical economy and carbon impact, or from human safety concerns (workers and wearers), our textile choices today are reinforcing a system we may have never considered but we are perpetuating.