MATERIAL SAFETY DATA SHEET SDS CODE: HY5 Page 1 of 5

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MSDS CODE: Date Revised: Prepared By:

HY5 10/01/2014 Nick Paris

Reason for Revision:

See Section 16

1. CHEMICAL, PRODUCT AND COMPANY IDENTIFICATION:

Product Code(s): Product Name: Chemical Family: Synonyms: C.A.S. Number: Color Index Name: Color Index Number: A8090, D826, D886, D873 Hydrotint® Liquid Black Mixture Aqueous suspension of Carbon, Hydrojet, Co-Mo-Blak 1333-86-4 Pigment Black 7 77266

Manufacturer's Name/Address:

Huntsman, 7011 Muirkirk Road, Beltsville, Maryland, USA 20705Business Tel:(301) 210-7800 9a-5p (0900-1700) EST M-FHuntsman, 3700 East Olympic Boulevard, Los Angeles, California, USA 90023Business Tel:(323) 269-7311 9am-5pm (0900-1700) PST M-F

24 Hour Emergency (Chemtrec): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

OSHA Hazardous Ingredients (29CFR1910.1200):			Exposure Limits (8 Hrs.TWA)		Vapor Pressure (mm Hg)
Components:	C.A.S.	%	OSHA PEL	ACGIH TLV	
Ethylene Glycol*	107-21-1	(1-2)	50 ppm	25 ppm	0.6 20°C (68°F)
Carbon Black pigment	1333-86-4	(20-25)	3.5 mg/m^3	3.5 mg/m^{3}	Not applicable
*Indicates toxic chemicals subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.					

Non-Hazardous Ingredients:			Exposure Limits	s (8 Hrs.TWA)	Vapor Pressure (mm Hg)
Components:	C.A.S.	%	OSHA PEL	ACGIH TLV	
Water	7732-18-5	(70-75)	Not established.	Not established.	17.0 20°C (68°F)
Surfactants	(In TSCA)	(<2)	Not established.	Not established.	Not applicable

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Black liquid or paste of thick consistency with mild ammonia-like odor. Inhalation of vapor or mist can cause headache, nausea, and irritation of nose, throat, and lungs. Will not burn or combust. Packaging material can burn or melt in fire, producing toxic smoke and fumes.

HMIS Codes: H=1, F=0, R=0, P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe)

The following information is based on the hazard profiles of other aqueous pigment suspensions that are compositionally similar to this product. Typical data are: Potential Health Effects:

- Eyes: Mild irritant. Effects are temporary and reversible. May cause irritation, redness, blurred vision, and tearing.
- Skin: Not absorbed into the skin. Will not irritate skin and is not likely to cause allergic skin reaction. If allowed to remain on the skin without being rinsed off with water, a thin film of dried pigment may form. Injury or irritation of the skin can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dried liquid.
- Ingestion: May be harmful if swallowed. Ingestion may cause nausea, vomiting, diarrhea, and gastrointestinal irritation. Consult a physician.
- Inhalation: Mild irritant. Effects are temporary and reversible. Vapor or mist can cause headache, nausea, and irritation of nose, throat, and lungs. Use in well-ventilated area and avoid breathing vapors.

Human Effects and symptoms of overexposure:

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Acute: Chronic: Other Effects:	Repeated skin contact may result in the development of an allergic skin reaction in a small number of individuals. Individual hazardous constituents listed in Section 2 of this MSDS can have a different acute and chronic effect depending on the health condition of a person. Prolonged inhalation of vapor or mist may cause brain, lung, and other organ damage. No other chronic effects have been studied.			
Medical Conditions Aggravated by Exposure:	Information available on chemically similar products show that overexposure is unlikely to aggravate any medical condition.			
Carcinogenicity:	IARC: Listed Group 2B/Possible NTP: Product is not a known OSHA: Not regulated Human Carcinogen carcinogen			
Other:	There is limited evidence that Carbon Black pigment in dry powder form may be carcinogenic if inhaled for long periods of time. Since this product is in liquid form, exposure to Carbon Black pigment dust from inhalation cannot occur.			

4. FIRST AID MEASURES

Eyes: Flush eyes with water, lifting eyelids periodically. Remove contact lenses. Continue flushing for 15 minutes or until eyes return to normal. Get medical attention if irritation develops or persists.

- Skin: Wash with soap and water. Not likely to be skin irritant. Get medical attention in the unlikely event that irritation develops or persists. Remove contaminated clothing immediately. Wash clothing before re-use.
- Ingestion: Do not induce vomiting. Contact medical personnel or poison control center immediately. If conscious, give two glasses or more of water. Do not give anything by mouth to an unconscious person.
- Inhalation: If exposed to excessive levels of fumes, move from work area to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

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Flammable Properties:	Not Flammable. Non-combustible in as-sold form.
Flash Point:	>110°C (230°F) Method used: SCC [Setaflash Closed Cup]
Upper Explosive Limit (UEL):	Not Explosive
Lower Explosive Limit (LEL):	Not Explosive
Auto-ignition Temperature:	Exposure to heat greater than 100°C (212°F) builds up pressure in closed
	container, cool with water spray. Excessive heat will cause product to boil or splatter.
Extinguishing Media:	This product is not combustible or flammable. Use extinguishing agents that are suitable for the surrounding fire: water spray, dry chemical, foam, or CO ₂ .
Fire fighting Instructions:	Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes and smoke inhalation.
Unusual Fire and Explosion Hazards:	Exposure to heat builds up pressure in closed container. Cool with water spray. This product is non-combustible.

6. ACCIDENTAL RELEASE MEASURES

Small Spill: Sprinkle spill with dry absorbent powder, such as cement, dried clay or other absorbent material and mix with broom until mixture is dry. Sweep-up material with vacuum or use a shovel or scoop. Dispose in DOT approved waste container.

Large Spill: Contain spill with dike made of cement, sand, soil or other absorbent material. Sprinkle spill with dry absorbent powder, such as cement, dried clay or other absorbent material and mix with broom until mixture is dry. Vacuum or scoop material into an appropriately marked container for disposal. Sprinkle spill with dry absorbent powder, such as cement, dried clay or other absorbent material and mix with broom until mixture is dry. Keep out of sewers, storm drains, surface waters, and soil.

7. HANDLING AND STORAGE

Storage: Store dry at ambient temperature away from food and beverages, excessive heat or flame



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sources (furnace, kilns, boilers etc.). Avoid freezing. Rotate stock to use older product first. Inspect container for leaks or cracks.

Handling:

Avoid prolonged or repeated breathing of vapors. Avoid getting in eyes or on skin. Wash thoroughly after handling. Avoid contact with moisture. Re-seal container immediately after use. Shipping pallets are wrapped in polyethylene plastic. Removal may cause an electrostatic spark; therefore removal of the wrap should not be in the presence of flammable vapors.

	ontainer away from heat. If empty container due (vapors, liquids or solids), handle ject to hazard precautions given in this
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Local exhaust ventilation is recommended. General mechanical ventilation is usually
	sufficient to keep product vapor below threshold limit values.
Eyes:	Eye goggles or face shields are recommended to protect against splash or splatters.
Skin:	Body-covering clothing. Rubber, plastic or other solvent-impervious gloves are recommended. gloves are recommended.
Respiratory Protection:	In typical uses of this product, no respiratory protection is required. However, if strong odor is present, work ambient vapor concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved respirator with 700 ppm vapor prefilter should be worn. Types: CCROVF; GMOV; SAF or SCBAF.
Other:	Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous chemicals. Remove contaminated clothing immediately. Wash clothing before re-use.
Work/Hygiene Practices:	Employees should wash their hands and face before eating, drinking or using tobacco products.

9. PHYSICAL AND CHEMICAL PROPERTIES

AppearanceOdorPhysical StatepHVapor PressureVapor Density. (Air=1)Boiling PointFreezing PointSolubility in WaterSpecific Gravity (H2O=1)Evaporation RateVolatile Organic Compounds (VOC)Chemical FormulaWeight per Gallon (lbs)Pigment Content (%)Surfactant Type	Sweet, Glycol-like Liquid 9 - 10 24 MM HG @ 25°C(77°F) Lighter than air >100°C (212°F) 0°C (32°F) Major portion is insoluble 1.13 - 1.16 Slower than Ether 92 gr/l (A8090 & D886) 44 gr/l (D826 & D873) Mixture 9.2 (A8090 & D886) 10.6 (D826) 9.7 (D873) 25-35%
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10. STABILITY AND REACTIVITY

Chemical Stability (Conditions to Avoid):

Stable. Keep away from flames and heat. Exposure to excessive heat greater than 100°C (212°F) can cause product to boil or splatter. Avoid freezing.

Incompatibility (materials to avoid):

Strong oxidizing agents. Materials that react with water. Avoid strong acids and alkalines.



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Decomposition Temperature C° (F°): Hazardous Decomposition Products: Hazardous Polymerization:

Does not decompose Produces Carbon Dioxide and/or Carbon Monoxide on combustion. Will not occur.

11. TOXICOLOGICAL INFORMATION

The following information is based on the toxicity profiles of other products that are compositionally similar to this product. Typical data are:

Eyes:	Not irritating to rabbit eyes
Skin:	Not irritating to rabbit skin Dermal, LD 50 not established for product
Ingestion:	Non irritating. The oral, LD50 for rats is greater than 5000 mg/Kg
Inhalation:	Non irritating. LC 50 not established for product
Subchronic:	Data not established for product
Chronic/Carcinogenicity:	IARC: Group 2B/Possible Human Carcinogen
Other (Mutagenic, Teratogenic, Reproductive Tests):	Not available

12. ECOLOGICAL INFORMATION

The following information is based on the toxicity profiles of other products that are compositionally similar to this product. Typical data are:

Ecotoxicological Information: Fish toxicity: Golden Orfe (Leuciscus idus) LCo greater than 1000 mg/l

Chemical Fate Information:

No appreciable bioconcentration is expected in the environment.

13. DISPOSAL CONSIDERATIONS

Material which cannot be re-used should be disposed in accordance with federal, state and local environmental control regulations at an authorized site. This product when discarded as sold is not a RCRA hazardous waste. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40CFR 261.20-24).

Container Disposal: Triple rinse with water, then dispose of in licensed landfill, if allowed by local regulation.

14. TRANSPORT INFORMATION

DOT Shipping Name	:	Not regulated
Technical Shipping Name	:	
DOT Hazardous Classification	:	Not regulated
DOT Hazard Class	:	Not regulated
DOT Identification Number	:	Not regulated
DOT Labels required	:	Not regulated
DOT Placards required	:	Not regulated
UN Class	:	Not available
UN/NA Number	:	Not available
Freight Class	:	55
Harmonized Tariff Number	:	3206.49.40

15. REGULATORY INFORMATION

U.S. Federal Regulations

OSHA: This product is considered Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200) due to content of ethylene glycol and Carbon Black pigment. (40 CFR 117,302) Reportable Quantity (RQ): CERCLA/SUPERFUND: Not Reportable, however, we recommend you contact local authorities to verify requirements for your site.

Superfund Amendments and Reauthorization Act (SARA), Title III:

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Section 302 (Extremely Section 311/312 (Haza Section 313 (Reportabl Chemical Name:	d Categories):	s): None Delayed Health C.A.		ncentration	
Ethylene Glycol		107-2		1-2%	
T.S.C.A.: This	product class is listed of	n TSCA Inventory.			
*******	Interna	ational Regulations	********	*****	
Canadian WHMIS: Canadian Environmental Prote EINECS:	ection Act (CEPA):	Substances List (E provisions of CEPA All components of t	of this product are c DSL), and acceptable for	or use under the uropean Inventory	
******	Sta	ate Regulations	********	*****	
California Proposition 65 War	ning:		ains chemicals known se cancer and birth		
 CA = California Safe Drinking Water and Toxic Enforce Act (Proposition 65) MA = Massachusetts Hazardous Substance List NJ4 = New Jersey Other- included in 5 predominant ingredients >1% PA3 = Pennsylvania Non-hazardous present at 3% or greater 					
Chemical Name: Ethylene Glycol Carbon Black pigment	C.A.S 107-21 1333-86	-1	centration S 1-2% 0-25%	State Code CA, NJ4 NJ4	
Note: This information based on random sample analyses. Actual content may vary from batch to batch.					
16. OTHER INFORMATION Reason for revision: New MSDS format, re-issue. 2/22/2001 - Revised section 6 concerning spills. 7/23/2003 - Changed product to OSHA hazardous classification due to ethylene glycol and Carbon Black pigment content. Changed Carbon Black pigment to hazardous classification. 01/11/2006 - Update review date. 06/08/2009 - Update review date. 10/16/2012 - Change Rockwood logo. Update review date. 10/01/2014 - Adapt MSDS format to Huntsman.					
HMIS Codes: H=1, F=	0, R=0, P=0 (0)=Minimal, 1=Slight, 2=	=Moderate, 3=Serious, 4	=Severe)	

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