

MATERIAL SAFETY DATA SHEET

0928190 TAMP3522 2B5A BLACK INK

Version Number 1.0 Revision Date 06/10/2002 Page 1 of 6 Print Date 11/4/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 2700 Papin Street, St. Louis, MO 63103

NON-EMERGENCY TELEPHONE	:	Product Stewardship, (314) 771-1800
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	0928190 TAMP3522 2B5A BLACK INK
Product code	:	FO0000301
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Carbon black	1333-86-4	0.1 - 1

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation Ingestion Eyes Skin	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritating. Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.
Medical Conditions Aggravated by Exposure:	: None known.



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Inhalation	:	Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist, or in all cases of doubt, seek medical advice.
Ingestion	:	Do not induce vomiting without medical advice. When symptoms persist, or in all cases of doubt, seek medical advice.
Eyes	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention.
Skin	:	Wash off with soap and plenty of water. If skin irritation persists seek medical attention.
		5. FIRE-FIGHTING MEASURES
Flash point	:	Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	::	Not applicable Not applicable Not relevant Carbon dioxide blanket, Water spray, dry powder, foam.
Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	:	Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.
	6. A	CCIDENTAL RELEASE MEASURES
Personal precautions	:	Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
Environmental precautions	:	Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil.
Methods for cleaning up	:	Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal. Refer to Section 13 of this MSDS for proper disposal methods.
		7. HANDLING AND STORAGE
Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of



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	th	ese materials.		
Storage		eep containers dry and tightly ad contamination. Keep in a		absorption
8. H	EXPOSURE	CONTROLS / PERSONAI	PROTECTION	
Respiratory protection		o personal respiratory protec usty conditions occur wear ap		
Eye/Face Protection	: Sa	afety glasses with side-shield	s.	
Hand protection	: Pi	rotective gloves.		
Skin and body protection	: L	ong sleeved clothing.		
Additional Protective Measures	: Sa	afety shoes.		
General Hygiene Considerations		andle in accordance with goo /ash hands before breaks and		afety practic
Engineering measures		eat only in areas with approp ppropriate exhaust ventilatior		Provide
Exposure limit(s)	Valua	Exposure time	Exposure type	List
Components	Value 3.5 mg/m3	Exposure time Time Weighted Average	Exposure type Total dust, as carbon	List: ACGIH
	Value 3.5 mg/m3	Exposure time Time Weighted Average (TWA):	Exposure type Total dust. as carbon black	
Components		Time Weighted Average	Total dust. as carbon	ACGIH
Components Carbon black	3.5 mg/m3 3.5 mg/m3	Time Weighted Average (TWA): PEL:	Total dust. as carbon black Total dust. as carbon black	ACGIH
Components Carbon black	3.5 mg/m3 3.5 mg/m3 9. PHYSIC	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR	Total dust. as carbon black Total dust. as carbon black OPERTIES	ACGIH OSHA Z
Components Carbon black Carbon black Form	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not	ACGIH OSHA Z applicable.
Components Carbon black Carbon black Form Appearance	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid : powd	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap ler, granular Speci	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not fic Gravity : Not	ACGIH OSHA Z applicable. determined
Components Carbon black Carbon black Form Appearance Color	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid : powd : BLA	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap ler, granular Speci CK Bulk	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not fic Gravity : Not density : Not	ACGIH OSHA Z applicable. determined determined
Components Carbon black Carbon black Form Appearance Color Odor	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid : powo : BLA : Very	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap ler, granular Speci CK Bulk faint Vapo	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not	ACGIH OSHA Z applicable. determined determined applicable
Components Carbon black Carbon black Carbon black Form Appearance Color Odor Melting point/range	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid : powo : BLA : Very : Not o	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap ler, granular Speci CK Bulk faint Vapo letermined Vapo	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not fic Gravity fic Gravity : Not density r pressure : Not r density r density : Not	ACGIH OSHA Z applicable. determined determined applicable applicable
Components Carbon black Carbon black Form Appearance Color Odor	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid : powo : BLA : Very : Not o	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap ler, granular Speci CK Bulk faint Vapo letermined Vapo upplicable pH	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not fic Gravity fic Gravity : Not density r pressure : Not r density r density : Not	ACGIH OSHA Z applicable. determined determined applicable
Components Carbon black Carbon black Carbon black Form Appearance Color Odor Melting point/range Boiling Point:	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid : powd : BLA : Very : Not d : Not a : Insol	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap ler, granular Speci CK Bulk faint Vapo letermined Vapo upplicable pH	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not fic Gravity oration rate : Not density r pressure : Not r density : Not	ACGIH OSHA Z applicable. determined determined applicable applicable
Components Carbon black Carbon black Carbon black Form Appearance Color Odor Melting point/range Boiling Point:	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid : powd : BLA : Very : Not d : Not a : Insol	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap ler, granular Speci CK Bulk faint Vapo letermined Vapo upplicable pH uble	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not fic Gravity oration rate : Not density r pressure : Not r density : Not	ACGIH OSHA Z applicable. determined determined applicable applicable
Components Carbon black Carbon black Carbon black Form Appearance Color Odor Melting point/range Boiling Point: Water solubility	3.5 mg/m3 3.5 mg/m3 9. PHYSIC : Solid : powd : BLA : Very : Not d : Not a : Insol 10. S : St	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR Evap ler, granular Speci CK Bulk faint Vapo letermined Vapo upplicable pH uble TABILITY AND REACTI	Total dust. as carbon black Total dust. as carbon black OPERTIES oration rate : Not fic Gravity oration rate : Not density r pressure : Not r density : Not	ACGIH OSHA Z applicable. determined determined applicable applicable



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Conditions to avoid	:	To avoid thermal decomposition, do not overheat. Keep away from oxidizing agents and open flame.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents. Avoid contact with acetal homopolymers and acetal copolymers during processing.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.

LC50 / LD50

This product contains the following components which in their pure form have the following toxicity data:

CAS-No.	Chemical Name	Route	Value	Species
1333-86-4	Carbon black	Oral LD50	> 15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

Carcinogenicity:

This product contains the following components which in their pure form have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
1333-86-4	Carbon black	no	2B	no

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

- 1 The component is known to be a human carcinogen.
- 2 The component is reasonably anticipated to be a human carcinogen.

Additional Health Hazard Information:



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Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

	12. ECOLOGICAL INFORMATION
Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Adverse ecological impact is not known or expected under normal use
Bioaccumulation Potential	: No data available.
Additional advice	: No data available.
	13. DISPOSAL CONSIDERATIONS
Product	: Where possible, recycling is preferred to disposal or incineration. Th generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
Contaminated packaging	: Recycling is preferred when possible. The generator of waste materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	14. TRANSPORT INFORMATION
U.S. D.O.T. / CA T.D.G. Classification (Non-bulk ground)	: Not regulated for transportation.
ICAO/IATA	: Not regulated for transportation.
IMO / IMDG	: Not regulated for transportation.
	15. REGULATORY INFORMATION
US Regulations:	
OSHA Status	: Classified as hazardous based on components.
TSCA Status	: All components of this product are listed on the TSCA inventory or ar

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Page 6 of 6 Version Number 1.0 Print Date 11/4/2011 Revision Date 06/10/2002 exempt. US. EPA CERCLA Hazardous Substances (40 CFR 302) Not applicable California Proposition : WARNING! This product contains a chemical known in the State of 65 California to cause cancer. Canadian Regulations: WHMIS Classification : D2A WHMIS Ingredient Disclosure List CAS-No. 1333-86-4 557-05-1 75-01-4 DSL : Listed. National Inventories: Australia AICS : Listed. China IECS Listed. · Europe EINECS : Not determined. Japan ENCS Not determined. : Korea KECI : Listed. **Philippines PICCS** : Listed. **16. OTHER INFORMATION**

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.