MATERIAL SAFETY DATA SHEET **2T5A EXPRESSO/LP/SB891**

Version Number 1.0 Revision Date 08/08/2013 Page 1 of 8 Print Date 8/8/2013

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	2T5A EXPRESSO/LP/SB891
Product code	:	CC10185348
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Decanedioic acid, bis(2,2,6,6-tetramethyl-4-	52829-07-9	1 - 5
piperidinyl) ester		
Iron oxide	1309-37-1	5 - 10
Rutile, antimony chromium buff	68186-90-3	5 - 10
Titanium dioxide	13463-67-7	5 - 10
Carbon black	1333-86-4	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors 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.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion Eyes	May be harmful if swallowed.Resin particles, like other inert materials, are mechanically irritating to

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MATERIAL SAFETY DATA SHEET **2T5A EXPRESSO/LP/SB891**

Version Number 1.0 Revision Date 08/08/2013 Page 2 of 8 Print Date 8/8/2013

Skin	eyes. : 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.
	4. FIRST AID MEASURES
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. FIREFIGHTING MEASURES
Flash point	: not applicable
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam.
Special Fire Fighting Procedures	: Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.
Unusual Fire/Explosion Hazards	: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.
	6. ACCIDENTAL RELEASE MEASURES
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
	: Should not be released into the environment. The product should not
Environmental precautions	be allowed to enter drains, water courses or the soil.

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MATERIAL SAFETY DATA SHEET **2T5A EXPRESSO/LP/SB891**

Version Number 1.0 Revision Date 08/08/2013 Page 3 of 8 Print Date 8/8/2013

Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EX	POSU	RE CONTROLS/PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required.
Eye/Face Protection	:	Safety glasses with side-shields
Hand protection	:	Protective gloves
Skin and body protection	:	Long sleeved clothing
Additional Protective Measures	:	Safety shoes
General Hygiene Considerations	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Engineering measures	:	Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.

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MATERIAL SAFETY DATA SHEET **2T5A EXPRESSO/LP/SB891**

Version Number 1.0 Revision Date 08/08/2013 Page 4 of 8 Print Date 8/8/2013

Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.1 mg/m3	Recommended exposure limit (REL):		NIOSH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
Iron oxide	10 mg/m3	PEL:	Fume.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	as Fe	MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):	as Fe	MX OEL
	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
Rutile, antimony chromium buff	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour : solid: pellets: BROWN: very faint

Evapouration rate Specific Gravity Bulk density Vapour pressure

Not applicableNot determinedNot establishednot applicable

MATERIAL SAFETY DATA SHEET **2T5A EXPRESSO/LP/SB891**

Version Number 1.0 Revision Date 08/08/2013

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Melting point/range Boiling Point: Water solubility	: 1	Not determined not applicable insoluble	Vapour density pH	:	not applicable not applicable
		10. STABILITY AND RE	CACTIVITY		
Stability	:	The product is stable if s	stored and handled as p	oresc	cribed.
Hazardous Polymerization	:	Will not occur.			
Conditions to avoid	:	Keep away from oxidizi decomposition, do not o	001	me.	To avoid thermal
Incompatible Materials	:	Incompatible with stron	g acids and oxidizing a	gen	ts.
Hazardous decomposition products	:	Carbon dioxide (CO2), (NOx), other hazardous			U

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
52829-07-9	Decanedioic acid,	Irritant	Eyes.
	bis(2,2,6,6-tetramethyl-4-		
	piperidinyl) ester		
1309-37-1	Iron oxide	Systemic effects	Respiratory system.
68186-90-3	Rutile, antimony	Irritant	Eyes, Skin, Respiratory
	chromium buff		system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
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
52829-07-9	Decanedioic acid, bis(2,2,6,6-tetramethyl-4- piperidinyl) ester	Oral LD50 Dermal LD50	3,700 mg/kg > 3,100 mg/kg	rat rabbit
1333-86-4	Carbon black	Oral LD50 Dermal LD50	> 15,400 mg/kg > 3 gm/kg	rat rabbit

Carcinogenicity

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

Page 5 of

Page 5 of 8 Print Date 8/8/2013

PolyOne.

MATERIAL SAFETY DATA SHEET **2T5A EXPRESSO/LP/SB891**

Version Number 1.0

Page 6 of 8 Print Date 8/8/2013

Revision Date	08/08/2013

CAS-No.	Chemical Name	OSHA	IARC	NTP
13463-67-7	Titanium dioxide	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:

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). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. 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

Not readily biodegradable.	
•	e as they are bound within the
-	e as they are bound within the
no data available	
DISPOSAL CONSIDERATION	NS
possible recycling is preferred to or generator of waste material has the	e responsibility for proper waste lisposal in accordance with
TT	l and local regulations.
: : : :	possible recycling is preferred to or generator of waste material has the classification, transportation and o

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MATERIAL SAFETY DATA SHEET **2T5A EXPRESSO/LP/SB891**

Version Number 1.0 Revision Date 08/08/2013 Page 7 of 8 Print Date *8/8/2013*

	1	4. TRANSPORT	INFOR	MATIO	N		
U.S. DOT Classification	:	Not regulated for	or transpo	rtation.			
ICAO/IATA	:	: Refer to specific regulation.					
IMO/IMDG (maritime)	:	Refer to specific	c regulation	on.			
	15	. REGULATOR	Y INFO	RMATI	ON		
US Regulations:							
OSHA Status	:	Classified as ha	zardous b	ased on a	componen	ts.	
TSCA Status	:	: All components of this product are listed on or exempt from the TSCA Inventory.					
US. EPA CERCLA Hazardo	us Subs	stances (40 CFR 3	302)				
not applicable							
65 SARA Title III Section 302 1	Extrem	ely Hazardous Su	bstance				
Unless specific chemicals ar	e identi	fied under this se	ction, this	s product	is Not Ap	plicable	under this regul
SARA Title III Section 313							
Unless specific chemicals are identified under this s Chemical Name			ction, this	s product CAS-N		Weight percent	
CHROMIUM III COMPC COMPOUNDSANTIMOI COMPOUNDSCHROMI	NY			68186-9		5.00 -	
Canadian Regulations:							
	lease Ir	ventory (NPRI)					
National Pollutant Re		• ` /	CACN	AS-No. Weig		t	NPRI ID#
National Pollutant Re Chemical Name			CAS-N	0.	percen	t	

MATERIAL SAFETY DATA SHEET **2T5A EXPRESSO/LP/SB891**

Version Number 1.0 Revision Date 08/08/2013 Page 8 of 8 Print Date 8/8/2013

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
1333-86-4	
1309-37-1	
68186-90-3	

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DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

Australia AICS	:	Listed
China IECS	:	Listed
Europe EINECS	:	Listed
Japan ENCS	:	Listed
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.