

MATERIAL SAFETY DATA SHEET

Blue Sub

 Version Number 1.2
 Page 1 of 8

 Revision Date 01/20/2004
 Print Date 11/13/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY : Product Stewardship (770) 271-5902

TELEPHONE

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

number or accident).

Product name : Blue Sub
Product code : CC10005786
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dimethyl-7-oxo-, 2-ethylhexyl ester	57583-35-4	1 - 5
Stannane, methyltris(2-ethylhexyloxycarbonylmethylth io)-	57583-34-3	1 - 5
Carbon black	1333-86-4	5 - 10
Chromium (III) oxide	1308-38-9	5 - 10

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 : Particulates, like other inert materials can be mechanically irritating.

Excessive inhalation of product vapors, especially during heating or

processing, may be irritating to respiratory system.

Ingestion : May be harmful if swallowed.



MATERIAL SAFETY DATA SHEET

Blue Sub

 Version Number 1.2
 Page 2 of 8

 Revision Date 01/20/2004
 Print Date 11/13/2011

Eyes : Particulates, like other inert materials can be mechanically irritating.

Skin : 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. FIRE-FIGHTING MEASURES

Flash point : Not applicable

Flammable Limits

Upper explosion limit : Not applicable Lower explosion limit : Not applicable Autoignition temperature : Not applicable

Suitable extinguishing media : Carbon dioxide blanket, water spray, dry powder, foamnone.

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. May

emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire

conditions.

6. ACCIDENTAL 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.



MATERIAL SAFETY DATA SHEET

Blue Sub

 Version Number 1.2
 Page 3 of 8

 Revision Date 01/20/2004
 Print Date 11/13/2011

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.

Storage : Keep containers dry and tightly closed to avoid moisture absorption

and contamination. Keep in a dry, cool place.

8. EXPOSURE 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.

Exposure limit(s)



MATERIAL SAFETY DATA SHEET

Blue Sub

 Version Number 1.2
 Page 4 of 8

 Revision Date 01/20/2004
 Print Date 11/13/2011

Components	Value	Exposure time	Exposure type	List:
8-Oxa-3,5-dithia-4-sta nnatetradecanoic acid, 10-ethyl-4,4-dimethyl- 7-oxo-, 2-ethylhexyl ester	0.1 mg/m3	PEL:	as Sn	OSHA Z1
	0.1 mg/m3	Time Weighted Average (TWA):	as Sn	ACGIH
	0.2 mg/m3	Short Term Exposure Limit (STEL):	as Sn	ACGIH
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):	Total dust. as carbon black	ACGIH
	3.5 mg/m3	PEL:	Total dust. as carbon black	OSHA Z1
Chromium (III) oxide	0.5 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	1 mg/m3	PEL:	as Cr	OSHA Z1
Stannane, methyltris(2-ethylhexy loxycarbonylmethylthi o)-	0.1 mg/m3	PEL:	as Sn	OSHA Z1
	0.1 mg/m3	Time Weighted Average (TWA):	as Sn	ACGIH
	0.2 mg/m3	Short Term Exposure Limit (STEL):	as Sn	ACGIH

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid Evaporation rate : Not applicable Appearance : Pellets Specific Gravity: : Not determined Color : BLUE Bulk density : Not established : Very faint Odor Vapor pressure : Not applicable Melting point/range : Not determined Vapour density : Not applicable Boiling Point: : Not applicable : Not applicable pH

Water solubility : Insoluble

10. STABILITY AND REACTIVITY

Stability : Stable.

Hazardous Polymerization : Will not occur.

Conditions to avoid : Keep away from oxidizing agents and open flame. To avoid thermal

decomposition, do not overheat.

Incompatible Materials : Avoid contact with strong oxidizers. Also, avoid contact with acetal or

acetal copolymers and with amine containing materials during processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace



MATERIAL SAFETY DATA SHEET

Blue Sub

 Version Number 1.2
 Page 5 of 8

 Revision Date 01/20/2004
 Print Date 11/13/2011

quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks.

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.

<u>Toxicity Overview</u>

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

CAS-No.	Chemical Name	Effect	Target Organ
57583-35-4	8-Oxa-3,5-dithia-4-stannat	Irritant	Eyes, Skin.
	etradecanoic acid,		
	10-ethyl-4,4-dimethyl-7-o		
	xo-, 2-ethylhexyl ester		
57583-34-3	Stannane,	Irritant	Eyes, Skin.
	methyltris(2-ethylhexylox		
	ycarbonylmethylthio)-		
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	Skin.

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
57583-34-3	Stannane, methyltris(2-ethylhexylox ycarbonylmethylthio)-	Oral LD50	920 mg/kg	rat
1333-86-4	Carbon black	Oral LD50 Dermal LD50	> 15,400 mg/kg > 3 gm/kg	rat rabbit

Additional Health Hazard Information:



MATERIAL SAFETY DATA SHEET

Blue Sub

 Version Number 1.2
 Page 6 of 8

 Revision Date 01/20/2004
 Print Date 11/13/2011

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.

Additional Health Hazard Information:

Chromium (III) oxide 1308-38-9 The bi and trivalent forms of chrome have a low order of acute toxicity but may cause skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) componds are not considered carcinogenic in animals or humans.

12. ECOLOGICAL INFORMATION

Persistence and degradability : Not readily biodegradable.

Environmental Toxicity : Chemicals are not readily available as they are bound within the matrix

of the polymer.

Bioaccumulation Potential : Chemicals are not readily available as they are bound within the matrix

of the polymer.

Additional advice : No data available

13. DISPOSAL CONSIDERATIONS

Product : Like most thermoplastic plastics the product can be recycled. Where

possible recycling is preferred to disposal or incineration. The 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 material

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. DOT Classification : Not regulated for transportation.

ICAO/IATA (air) : Refer to specific regulation.

IMO / IMDG (maritime) : Refer to specific regulation.



MATERIAL SAFETY DATA SHEET

Blue Sub

 Version Number 1.2
 Page 7 of 8

 Revision Date 01/20/2004
 Print Date 11/13/2011

15. REGULATORY INFORMATION

US Regulations:

OSHA Status : Classified as hazardous based on components.

TSCA Status : All components of this product are listed on or exempt from the TSCA

Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Not applicable

California Proposition : WARNING! This product contains a chemical known to the State of

California to cause cancer.

SARA Title III Section 302 Extremely Hazardous Substance

Not applicable

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
CHROMIUM III COMPOUNDS	1308-38-9	7.30

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Chromium (III) oxide	1308-38-9	7.30	68

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
57583-35-4
1333-86-4
1308-38-9
57583-34-3

DSL : All components of this product are on the Canadian Domestic

Substances List (DSL) or are exempt.



MATERIAL SAFETY DATA SHEET

Blue Sub

 Version Number 1.2
 Page 8 of 8

 Revision Date 01/20/2004
 Print Date 11/13/2011

National Inventories:

Australia AICS : Not determined

China IECS : Not determined

Europe EINECS : Not determined

Japan ENCS : Not determined

Korea KECI : Not determined

Philippines PICCS : Not determined

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 when used in combination with any other materials and/or in any particular process or processing conditions.