

#### MATERIAL SAFETY DATA SHEET

#### 5050 326 MASTERBATCH #5

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone : Product Stewardship (770) 590-3500 x.3563

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

or accident).

Product name : 5050 326 MASTERBATCH #5

Product code : FO00012142 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

#### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Zinc di(benzothiazol-2-yl) disulphide	155-04-4	1 - 5
Zinc bis dibutyldithiocarbamate	136-23-2	5 - 10
Zinc oxide	1314-13-2	30 - 60

#### 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

This product is a water based mixture with an ammonia odor. The 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. The product is not combustible, but it will burn if involved in a fire, releasing hydrocarbon products of combustion. Inhalation of the ammonia from this product may cause respiratory irritation, coughing, sore throat, and labored breathing.

#### POTENTIAL HEALTH EFFECTS

**Routes of Exposure:** : Skin contact, Inhalation, Ingestion

Acute exposure

Inhalation : Symptoms of breathing ammonia vapor concentrated from this product

may include laryngitis, tracheitis, pulmonary edema, dyspnea, bronchospasms, and chest pains or pneumonitis. Symptoms are

typically reversible.

Ingestion : May be harmful if swallowed.

Eyes : Liquid, aerosol, or vapors of this product are irritating and may cause

tearing, reddening, and swelling accompanied by a stinging sensation

and/or a feeling like that of fine dust in the eyes.

Skin : Skin contact may cause redness, irritation, and burns.



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**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 vapors or 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. Never give anything

by mouth to an unconscious person. Seek medical attention if

necessary.

Eyes : Rinse immediately with plenty of water 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 : no data available

Flammable Limits

Upper explosion limit : no data available Lower explosion limit : no data available Autoignition temperature : no data available

Suitable extinguishing media : Carbon dioxide (CO2), Water, Foam, Dry chemical.

Special Fire Fighting

Procedures

Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne

contaminants. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water

courses.

Unusual Fire/Explosion

Hazards

Burning dry latex produces dense black smoke with the possibility of

toxic vapors. Residual latex material contained in empty drums may decompose when burned producing toxic or irritating fumes. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx),

other hazardous materials, and smoke are all possible.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Ensure response personnel are properly protected (see section 8 for

respiratory or other protection guidelines.) Use caution as floors may

be slippery.



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Environmental precautions : The product should not be allowed to enter drains, water courses or

the soil.

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder, sawdust). Sweep up and shovel into suitable

containers for disposal.

7. HANDLING AND STORAGE

Handling : Use only in area provided with appropriate exhaust ventilation.

Prolonged heating may result in product degradation. Material may settle during storage. Careful mixing without introduction of air may

be necessary before use.

Storage : Containers which are opened must be carefully resealed and kept

upright to prevent leakage. Keep in a dry, cool place. Keep from

freezing and temperature extremes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection : A respirator is normally not required for routine handling of product

in areas of good general ventilation and adequate local exhaust at processing equipment during routine operation. If using a cartridge respirator, an ammonia cartridge is required to filter out potential

excess ammonia vapors.

Eye/Face Protection : Safety glasses with side-shields Wear goggles or face shield during

operations that present a splash potential.

Hand protection : Impervious gloves such as rubber or PVC

Skin and body protection : Long sleeved shirts and long pants are adequate for normal handling.

Where operations present a splash or spill potential, employees should wear chemically resistant clothing, boots, apron, gloves, and

eye/face protection.

Additional Protective

Measures

: Safety shoes

General Hygiene

Considerations

Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and

safety practices.

Engineering measures : Adequate ventilation and/or appropriate respiratory protection may

also be necessary to minimize employee exposure to processing

vapors.

Exposure limit(s)



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Components	Components Value Exposure time		Exposure type	List:	
Zinc oxide	2 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH	
	10 mg/m3	Short Term Exposure Limit (STEL):	Respirable fraction.	ACGIH	
	5 mg/m3	Recommended exposure limit (REL):	Fume.	NIOSH	
	5 mg/m3	Recommended exposure limit (REL):	Dust.	NIOSH	
	15 mg/m3	Ceiling Limit Value and Time Period (if specified):	Dust.	NIOSH	
	10 mg/m3	Short Term Exposure Limit (STEL):	Fume.	NIOSH	
	5 mg/m3	PEL:	Fume.	OSHA Z1	
	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1	
15	15 mg/m3	PEL:	Total dust.	OSHA Z1	
	5 mg/m3	Time Weighted Average (TWA):	Fume.	OSHA Z1A	
	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	OSHA Z1A	
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A	
	10 mg/m3	Short Term Exposure Limit (STEL):	Fume.	OSHA Z1A	
	5 mg/m3	Time Weighted Average (TWA):	Fume.	MX OEL	
	10 mg/m3	Time Weighted Average (TWA):	Dust.	MX OEL	
	10 mg/m3	Short Term Exposure Limit (STEL):	Fume.	MX OEL	

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid Evaporation rate : Slower than Butyl

Acetate

Appearance : liquid Specific Gravity : Not determined Colour : YELLOW Bulk density : Not applicable Odour : Slight ammonia Vapour pressure : Not established Melting point/range : not applicable Vapour density Heavier than air. **Boiling Point:** : Not established Not determined pН

Water solubility : completely miscible

# 10. STABILITY AND REACTIVITY

Stability : Stable

Hazardous Polymerization Will not occur.

Conditions to avoid : Extremes of temperature and direct sunlight. Keep from freezing.



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Incompatible Materials : Acids, metal salts, and solvents

Hazardous decomposition

products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.

# 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
155-04-4	Zinc di(benzothiazol-2-yl)	sensitizer	Skin.
	disulphide		
136-23-2	Zinc bis	Irritant	Eyes, Skin, Respiratory
	dibutyldithiocarbamate		system.
1314-13-2	Zinc oxide	Systemic effects	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
155-04-4	Zinc di(benzothiazol-2-yl)	Oral LD50	540 mg/kg	rat
	disulphide			
136-23-2	Zinc bis	Oral LD50	5,000 mg/kg	rat
	dibutyldithiocarbamate	Dermal LD50	2,000 mg/kg	rabbit
1314-13-2	Zinc oxide	LC50	2500 mg/m3	mouse
		Oral LD50	7,950 mg/kg	mouse

#### **Additional Health Hazard Information:**

Zinc bis dibutyldithiocarbamate 136-23-2 This material if ingested may cause an Antabuse response when alcohol is ingested. This Antabuse effect includes nausea, vomiting, abdominal cramps and/or flushing.

#### 12. ECOLOGICAL INFORMATION

Persistence and degradability : no data available

Environmental Toxicity : no data available

Bioaccumulation Potential : no data available

Additional advice : no data available

#### 13. DISPOSAL CONSIDERATIONS

Product : Where possible recycling is preferred to disposal or incineration. The



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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 : Refer to specific regulation.

ICAO/IATA : Refer to specific regulation.

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

#### 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 : Not applicable

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SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Chemical Name	CAS-No.	Weight percent
ZINC COMPOUNDS	1314-13-2	30.00 - 60.00
ZINC COMPOUNDS	136-23-2	5.00 - 10.00
ZINC COMPOUNDS	155-04-4	1.00 - 5.00



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#### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
2-Mercaptobenzothiazole	149-30-4	0.10 - 1.00	
Methyl alcohol	67-56-1	0.10 - 1.00	
Zinc oxide	1314-13-2	30.00 - 60.00	
Zinc bis dibutyldithiocarbamate	136-23-2	5.00 - 10.00	
Zinc di(benzothiazol-2-yl) disulphide	155-04-4	1.00 - 5.00	

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No. 1314-13-2

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

Substances List (DSL) or are exempt.

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 used in combination with any other materials or in any process, unless specified in the text.