

MATERIAL SAFETY DATA SHEET

NYLON HM DEWALT YELLOW

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (770) 271-5902

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

number or accident).

Product name : NYLON HM DEWALT YELLOW

Product code : CC10071389 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Cadmium selenide (CdSe)	1306-24-7	0.1 - 1
Barium sulfate	7727-43-7	1 - 5
Caprolactam	105-60-2	1 - 5
Zinc stearate	557-05-1	1 - 5
Cadmium sulfide	1306-23-6	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 : May be harmful if swallowed.

Eyes : Resin particles, like other inert materials, are mechanically irritating to

eyes.

Skin : Experience shows no unusual dermatitis hazard from routine handling.



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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 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.

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.

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



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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)



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Components	Value	Exposure time	Exposure type	List:
Barium sulfate	10 mg/m3	Time Weighted Average (TWA):	Total dust.	ACGIH
	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Cadmium selenide	0.005	Time Weighted Average	as Cd	OSHA
(CdSe)	mg/m3	(TWA):		
	0.0025	OSHA Action level:	as Cd	OSHA
	mg/m3			
	0.2 mg/m3	PEL:	as Se	OSHA Z1
	0.01	Time Weighted Average	as Cd	ACGIH
	mg/m3	(TWA):		
	0.2 mg/m3	Time Weighted Average (TWA):	as Se	ACGIH
	0.002	Time Weighted Average	Respirable fraction. as	ACGIH
	mg/m3	(TWA):	Cd	
	0.002	Time Weighted Average	Respirable dust. as Cd	MX OEL
	mg/m3	(TWA):		
	0.01	Time Weighted Average	Total dust. as Cd	MX OEL
	mg/m3	(TWA):		
Cadmium sulfide	0.005	Time Weighted Average	as Cd	OSHA
	mg/m3	(TWA):		
	0.0025	OSHA Action level:	as Cd	OSHA
	mg/m3	TD: XXX : 1 . 1 A	D : 11 C ::	A CCITI
	0.002	Time Weighted Average	Respirable fraction. as	ACGIH
	mg/m3	(TWA):	Cd	ACCIII
	0.01	Time Weighted Average	as Cd	ACGIH
	mg/m3 0.002	(TWA): Time Weighted Average	Respirable dust. as Cd	MX OEL
	mg/m3	(TWA):	Respirable dust, as Cu	MA OEL
	0.01	Time Weighted Average	Total dust. as Cd	MX OEL
	mg/m3	(TWA):	Total dust. as Cu	WIX OLL
Caprolactam	1 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
	5 ppm 23	Time Weighted Average	Vapor.	ACGIH
	mg/m3	(TWA):	<u> </u>	
	3 mg/m3	Short Term Exposure Limit (STEL):	Dust.	ACGIH
	10 ppm 46	Short Term Exposure Limit	Vapor.	ACGIH
	mg/m3	(STEL):	<u> </u>	
	5 mg/m3	Time Weighted Average (TWA):	Inhalable fraction and vapor	ACGIH
Zinc stearate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	as stearates	ACGIH
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL



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9. PHYSICAL AND CHEMICAL PROPERTIES

: Not applicable Form : Solid Evaporation rate : pellets Not determined Appearance Specific Gravity: Color : YELLOW Bulk density : Not established : Very faint Vapour pressure : Not applicable Odour Melting point/range : Not determined Vapour density : Not applicable **Boiling Point:** : Not applicable pН : Not applicable

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 : Incompatible with strong acids and oxidizing agents.

Hazardous decomposition

products

 $: \quad Carbon \ dioxide \ (CO2), \ carbon \ monoxide \ (CO), \ oxides \ of \ nitrogen$

(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
1306-24-7	Cadmium selenide (CdSe)	Highly Toxic	Refer to LC50 / LD50 Data on
			MSDS
		Systemic effects	Liver, central nervous system
			(CNS), Kidney.
7727-43-7	Barium sulfate	Irritant	Respiratory system.
		Systemic effects	Eyes, Respiratory system.
105-60-2	Caprolactam	Irritant	Skin, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system,
			Liver, Kidney, central nervous
			system (CNS), heart or
			circulatory system.
557-05-1	Zinc stearate	Systemic effects	Eyes, Skin, Respiratory system.
1306-23-6	Cadmium sulfide	Highly Toxic	Refer to LC50 / LD50 Data on
			MSDS

LC50 / LD50

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



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CAS-No.	Chemical Name	Route	Value	Species
105-60-2	Caprolactam	LC50	300 mg/m3	rat
		Oral LD50	1,210 mg/kg	rat
		Dermal LD50	1410 ul/kg	rabbit
557-05-1	Zinc stearate	Oral LD50	> 10 gm/kg	rat
1306-23-6	Cadmium sulfide	Oral LD50	7,080 mg/kg	rat

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
1306-24-7	Cadmium selenide (CdSe)	yes	1	1
1306-23-6	Cadmium sulfide	yes	1	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:

Cadmium selenide (CdSe) 1306-24-7 Can produce rapid and sometimes fatal pulmonary edema. Chronic absorption leads to liver and kidney damage.

Additional Health Hazard Information:

Cadmium sulfide 1306-23-6 Can produce rapid and sometimes fatal pulmonary edema. Chronic absorption leads to liver and kidney damage.

Persistence and degradability : Not readily biodegradable.

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

polymer matrix.

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

polymer matrix.

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

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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.

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 : WARN

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WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a

chemical known to the State of California to cause birth defects or

other reproductive harm.

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 %
CADMIUM COMPOUNDSSELENIUM COMPOUNDS	1306-24-7	0.10 - 1.00



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Chemical Name	CAS-No.	Weight %
CADMIUM COMPOUNDS	1306-23-6	10.00 - 30.00
ZINC COMPOUNDS	557-05-1	1.00 - 5.00
ZINC COMPOUNDS	1314-98-3	10.00 - 30.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Cadmium selenide (CdSe)	1306-24-7	0.10 - 1.00	243
		0.10 - 1.00	210
Cadmium sulfide	1306-23-6	10.00 - 30.00	233
Zinc stearate	557-05-1	1.00 - 5.00	231
Zinc sulfide	1314-98-3	10.00 - 30.00	231

WHMIS Classification : D1A

WHMIS Ingredient Disclosure List

CAS-No.	
1306-23-6	_
105-60-2	
557-05-1	_

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.