

RETARDER PX

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SAFETY DATA SHEET

RETARDER PX

Section 1. Identification

GHS product identifier : RETARDER PX

Chemical name: MixtureCAS number: MixtureOther means of identification: FO20030511Product type: liquid

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications. Plastics.

Supplier's details : POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone number

(with hours of operation)

CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or

accident).

Section 2. Hazards identification

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. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

Classification of the substance or

mixture

ACUTE TOXICITY (oral) - Category 4

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

Supplemental label elements : None known. **Hazards not otherwise classified** : None known.



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Section 3. Composition/information on ingredients

Substance/mixture : Mixture Chemical name : Mixture Other means of identification : FO20030511

CAS number/other identifiers

Ingredient name	%	CAS number
Phthalic Anhydride	60 - 100	85-44-9
Petroleum distillates, hydrotreated light naphthenic	5 - 10	64742-53-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If



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material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.

Ingestion: Harmful if swallowed. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering

redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist

immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without

suitable training. It may be dangerous to the person providing aid to

give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures



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Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media In case of fire, use water spray (fog), foam, dry chemical or CO_2 .

: None known.

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

Special protective actions for firefighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any

personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated

in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without

suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is

inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of

any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil,

waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil

or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with

water and mop up if water-soluble. Alternatively, or if water-

insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal

contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach



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release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
-	



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Level 6 mg/m3 1 ppm Level 12 mg/m3 2 ppm WA) 6 mg/m3 1 ppm
VA) 6 mg/m3 1 ppm
VA) 6 mg/m3 1 ppm
t Value - Time weighted average PEL:
6.1 mg/m3 1 ppm
t Value - Time weighted average PEL:
ē ē
5 mg/m3 Form: Inhalable fraction
it

Appropriate engineering controls

Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be



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different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves

cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based

on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures

should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this

product.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying

with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits

of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state liquid [Paste.] Color WHITE Odor Not available. Not available. **Odor threshold** Not available. pН **Melting point** Not available. **Boiling** point Not available. Flash point Not available. **Burning time** Not available. **Burning** rate Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not available.

Lower and upper explosive : Lower: Not available. (flammable) limits : Upper: Not available.

Vapor pressure

Vapor density

Relative density

Solubility

Solubility in water

Partition coefficient: n
Not available.

Not available.

Not available.

Not available.

Not available.

octanol/water

Auto-ignition temperature: Not available.Decomposition temperature: Not available.SADT: Not available.

Viscosity : Dynamic: Not available.



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Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or

its ingredients.

Chemical stability : Stable under recommended storage and handling conditions (see

Section 7).

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will

not occur.

Conditions to avoid : Keep away from extreme heat and oxidizing agents.

Incompatible materials : Keep away from strong acids.

Oxidizer.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition

products should not be produced.

Section 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.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
Phthalic Anhydride					
	LD50 Oral	Rat	1,530 mg/kg	-	
Petroleum distillates, hydrotreated light naphthenic					
	LD50 Oral	Rat	5,000 mg/kg	-	
	LC50 Inhalation	Rat	2 mg/l	4 h	

Conclusion/Summary: Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Phthalic Anhydride	Eyes - Moderate irritant	Rabbit		24 hrs	-
Petroleum distillates, hydrotreated light naphthenic	Skin - Severe irritant	Rabbit			-
	Skin -	Rabbit		24 hrs	-



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Moderate irritant

Conclusion/Summary

Skin Mixture. Not fully tested. **Eyes** Mixture.Not fully tested. Respiratory Mixture.Not fully tested.

Sensitization

Conclusion/Summary

Mixture.Not fully tested. Skin Mixture.Not fully tested. Respiratory

Mutagenicity

Conclusion/Summary Mixture.Not fully tested.

Carcinogenicity

Mixture.Not fully tested. **Conclusion/Summary**

Reproductive toxicity

Conclusion/Summary Mixture.Not fully tested.

Teratogenicity

Mixture.Not fully tested. **Conclusion/Summary**

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

exposure

Information on the likely routes of :

Not available.

Potential acute health effects

Eye contact Causes serious eye irritation.

No known significant effects or critical hazards. Inhalation



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Skin contact: No known significant effects or critical hazards.

Ingestion: Harmful if swallowed., Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Mixture. Not fully tested.

General:No known significant effects or critical hazards.Carcinogenicity:No known significant effects or critical hazards.Mutagenicity:No known significant effects or critical hazards.Teratogenicity:No known significant effects or critical hazards.Developmental effects:No known significant effects or critical hazards.Fertility effects:No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1,985 mg/kg
Route	ATE value
Inhalation (dusts and mists)	26.67 mg/l



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Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Phthalic Anhydride			
	Acute EC50 41,400 µg/l Fresh	Aquatic plants - Green	96 h
	water	algae	
	Acute EC50 147 µg/l Fresh water	Aquatic plants - Green	96 h
		algae	
	Acute EC50 78,530 µg/l Fresh	Aquatic plants - Green	96 h
	water	algae	

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Phthalic Anhydride	1.6	3.40	low

Mobility in soil

Soil/water partition coefficient

(KOC)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever

possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be



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disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Listed

Ingredient	CAS#	Status	Reference number
Phthalic Anhydride	85-44-9	Listed	

Section 14. Transport information

U.S. DOT Classification : Not regulated for transportation.

ICAO/IATA Consult mode specific transport rules

IMO/IMDG (maritime) : Consult mode specific transport rules

Section 15. Regulatory information

U.S. Federal regulations United States - TSCA 12(b) - Chemical export notification: None

of the components are listed.

United States - TSCA 4(a) - Proposed test rules: Not listed

United States - TSCA 5(a)2 - Final significant new use rules: Not

United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed

United States - TSCA 8(a) - Preliminary assessment report

(PAIR): Not listed

United States - TSCA 8(c) - Significant adverse reaction (SAR):

Not listed

United States - TSCA 8(d) - Health and safety studies: Not listed

United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Proposed significant new use rules:

Not listed

United States - TSCA 6 - Final risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed

United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not



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determined

United States - EPA Clean water act (CWA) section 307 - Priority

pollutants: Not listed

United States - EPA Clean water act (CWA) section 311 -

Hazardous substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental

release prevention - Flammable substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental

release prevention - Toxic substances: Not listed

United States - Department of commerce - Precursor chemical:

Not listed

Clean Air Act Section 112(b)

Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I

Substances

Clean Air Act Section 602 Class II

Substances

DEA List I Chemicals (Precursor

Chemicals)

DEA List II Chemicals (Essential

Chemicals)

Listed

Not listed

Not listed

Not listed

(Essential : Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for component
Phthalic Anhydride	85-44-9	5,000 lb(s) 2,270 kg

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Classification
Phthalic Anhydride	60 - 100	AH
·		
Petroleum distillates,	5 - 10	AH
hydrotreated light naphthenic		

SARA 313

	Product name	CAS number	%
Form R - Reporting	Phthalic Anhydride	85-44-9	60 - 100



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requirements			
Supplier notification	Phthalic Anhydride	85-44-9	60 - 100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed:

Phthalic Anhydride

Petroleum distillates, hydrotreated light naphthenic

New York : The following components are listed:

Phthalic Anhydride

New Jersey : The following components are listed:

Phthalic Anhydride

Pennsylvania : The following components are listed:

Phthalic Anhydride

California Prop. 65

This PolyOne product does not contain any chemical known to the State of California to cause cancer, or birth defects or other reproductive harm, in concentrations that require a warning notice under California's Proposition 65. This statement relies in part on information provided by the buyer of this PolyOne product. PolyOne does not control or have complete knowledge of the end uses to which that buyer or any other entity in the chain of distribution and marketing may put this PolyOne product. Therefore, the buyer of this PolyOne product, each entity that uses this PolyOne product in formulating another product, and each entity in the chain of distribution and marketing of any product that includes the material in this PolyOne product must make its own decision as to giving a Proposition 65 warning.

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

International regulations

International lists : Australia inventory (AICS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted.

Japan inventory: Not determined.

China inventory (IECSC): All components are listed or exempted.

Korea inventory: All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

Chemical Weapons Convention : Not listed



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List Schedule I Chemicals

Chemical Weapons Convention

List Schedule II Chemicals

Chemical Weapons Convention

List Schedule III Chemicals

Not listed

Not listed

Section 16. Other information

History

Date of printing: 10/29/2015Date of issue/Date of revision: 04/02/2015Date of previous issue: 12/13/2012

Version : 1.2

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of

Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine

pollution)

UN = United Nations

References : Not available.

Notice to reader

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