

**PA-18**

Version 1.4

Revision Date 2016-06-06

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product information**

Product Name : PA-18  
Material : 1112683, 1112684, 1112290, 1110870, 1073622, 1073620, 1073623, 1074098, 1073624, 1074227, 1073616, 1074097, 1074099, 1074092, 1073613, 1073611, 1074100, 1073609, 1074101, 1073607, 1074223, 1073641, 1073629, 1073631, 1073633, 1073634, 1073635, 1073636, 1073602, 1073638, 1074803, 1073640, 1073625, 1073941, 1073628, 1073627, 1073626, 1073637, 1074093, 1074094, 1073639, 1074789, 1074823, 1074824, 1074825, 1074822, 1074791, 1074790, 1037088, 1037087

**Company** : Chevron Phillips Chemical Company LP  
Specialty Chemicals  
10001 Six Pines Drive  
The Woodlands, TX 77380

**Local** : Chevron Phillips Chemicals International N.V.  
Airport Plaza (Stockholm Building)  
Leonardo Da Vincilaan 19  
1831 Diegem  
Belgium

SDS Requests: (800) 852-5530  
Technical Information: (832) 813-4862  
Responsible Party: Product Safety Group  
Email:sds@cpchem.com

**Emergency telephone:****Health:**

866.442.9628 (North America)  
1.832.813.4984 (International)

**Transport:**

CHEMTREC 800.424.9300 or 703.527.3887(int'l)  
Asia: +800 CHEMCALL (+800 2436 2255) China:+86-21-22157316  
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group  
E-mail address : SDS@CPChem.com

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Website : www.CPChem.com

**SECTION 2: Hazards identification****Classification of the substance or mixture  
REGULATION (EC) No 1272/2008**

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

**Label elements****Labeling (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

**SECTION 3: Composition/information on ingredients**

Synonyms : Octadecene-1 polymer with 2,5-Furandione  
 PA-18, HV Commercial Grade  
 PA-18, HV Low Color Grade  
 PA-18, LV Low Color  
 PA-18, LV Commercial Grade  
 Maleic anhydride/octadecene copolymer  
 Poly(maleic anhydride-alt-1-octadecene)  
 Octadecene/MA copolymer

Molecular formula : (C<sub>18</sub>H<sub>36</sub>-C<sub>4</sub>H<sub>2</sub>O<sub>3</sub>)<sub>x</sub>**Mixtures****Hazardous ingredients**

Chemical name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
2,5-Furandione, polymer with 1-octadecene	25266-02-8		100
Contains no hazardous ingredients according to GHS. :			

**SECTION 4: First aid measures**

General advice : Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of eye contact : Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

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**SECTION 5: Firefighting measures**

Flash point	: No data available
Autoignition temperature	: Not applicable
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary.
Further information	: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire and explosion protection	: Provide appropriate exhaust ventilation at places where dust is formed.
Hazardous decomposition products	: Carbon oxides.

**SECTION 6: Accidental release measures**

Personal precautions	: Avoid dust formation.
Methods for cleaning up	: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**SECTION 7: Handling and storage****Handling**

Advice on safe handling	: Avoid formation of respirable particles. Avoid dust accumulation in enclosed space. Do not breathe vapors/dust. Smoking, eating and drinking should be prohibited in the application area. Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary, but may not by themselves be sufficient.
Advice on protection against fire and explosion	: Provide appropriate exhaust ventilation at places where dust is formed.

**Storage**

Requirements for storage areas and containers	: Electrical installations / working materials must comply with the technological safety standards.
Advice on common storage	: No materials to be especially mentioned.

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**SECTION 8: Exposure controls/personal protection****Engineering measures**

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

- |                          |   |  |
|--------------------------|---|--|
| Respiratory protection   | : | No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.   |
| Hand protection          | : | No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves. |
| Eye protection           | : | Safety glasses.  |
| Skin and body protection | : | Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Lightweight protective clothing.   |
| Hygiene measures         | : | General industrial hygiene practice.   |

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

- |                |   |                 |
|----------------|---|-----------------|
| Form           | : | Powder          |
| Physical state | : | Solid           |
| Color          | : | white to yellow |

**Safety data**

- |                          |   |   |
|--------------------------|---|---|
| Flash point              | : | No data available   |
| Lower explosion limit    | : | No data available   |
| Upper explosion limit    | : | No data available   |
| Oxidizing properties     | : | no  |
| Autoignition temperature | : | Not applicable  |
| Molecular formula        | : | (C <sub>18</sub> H <sub>36</sub> -C <sub>4</sub> H <sub>2</sub> O <sub>3</sub> ) <sub>x</sub> |

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Molecular weight	: No data available
pH	: Not applicable
Freezing point	: No data available
Pour point	No data available
Boiling point/boiling range	: No data available
Vapor pressure	: Not applicable
Relative density	: 0,97 at 15,6 °C (60,1 °F)
Water solubility	: Soluble in hydrocarbon solvents; insoluble in water.
Partition coefficient: n-octanol/water	: Not applicable
Viscosity, dynamic	: 2.500 cP
Relative vapor density	: Not applicable
Evaporation rate	: Not applicable
Percent volatile	: < 1 %

**SECTION 10: Stability and reactivity**

Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
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**Possibility of hazardous reactions**

Conditions to avoid	: Generation of Dusts.
Materials to avoid	: Avoid contact with strong oxidizing agents.
Hazardous decomposition products	: Carbon oxides
Other data	: Keep in a dry place. No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information****Acute oral toxicity**

2,5-Furandione, polymer with 1-octadecene	: LD50: > 8.000 mg/kg Species: Rat
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**Acute inhalation toxicity**

2,5-Furandione, polymer with : No data available  
1-octadecene

**Acute dermal toxicity**

2,5-Furandione, polymer with : LD50: > 2.000 mg/kg  
1-octadecene Species: Rat  
Method: OECD Test Guideline 402

**Skin irritation**

2,5-Furandione, polymer with : No skin irritation  
1-octadecene

**Eye irritation**

2,5-Furandione, polymer with : No eye irritation  
1-octadecene

**Repeated dose toxicity**

2,5-Furandione, polymer with : Species: Rat  
1-octadecene Application Route: oral gavage  
Dose: 0, 100, 500, 1000 mg/kg  
Exposure time: 4 wk  
Number of exposures: daily  
NOEL: > 1.000 mg/kg

Species: Rat  
Application Route: oral gavage  
Dose: 0, 250 mg/kg  
Exposure time: 13 wk  
Number of exposures: daily  
NOEL: > 250 mg/kg

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**Further information** : The product contains no substances which at their given concentration, are considered to be hazardous to health.

**SECTION 12: Ecological information****Toxicity to fish**

2,5-Furandione, polymer with : LC50: > 1.000 mg/l  
1-octadecene Exposure time: 96 h  
Species: Scophthalmus maximus (Flatfish, Flounder)  
semi-static test

**Toxicity to algae**

2,5-Furandione, polymer with : EL50: > 1.000 mg/l  
1-octadecene Exposure time: 72 h  
Species: Skeletonema costatum (Marine Algae)  
static test

Elimination information (persistence and degradability)

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Biodegradability : This material is not expected to be readily biodegradable.

**Ecotoxicology Assessment**

Additional ecological information : This material is not expected to be harmful to aquatic organisms.

**SECTION 13: Disposal considerations**

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: Transport information**

**The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).**

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

**US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

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**ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**SECTION 15: Regulatory information****National legislation**

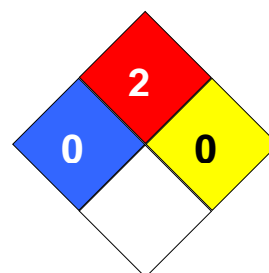
**Major Accident Hazard Legislation** : 96/82/EC      Update: 2003  
Directive 96/82/EC does not apply

**Notification status**

Europe REACH	:	On the inventory, or in compliance with the inventory
Switzerland CH INV	:	On the inventory, or in compliance with the inventory
United States of America TSCA	:	On TSCA Inventory
Canada DSL	:	All components of this product are on the Canadian DSL
Australia AICS	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	Not in compliance with the inventory
Japan ENCS	:	On the inventory, or in compliance with the inventory
Korea KECI	:	On the inventory, or in compliance with the inventory
Philippines PICCS	:	On the inventory, or in compliance with the inventory
China IECSC	:	On the inventory, or in compliance with the inventory

**SECTION 16: Other information**

**NFPA Classification** : Health Hazard: 0  
Fire Hazard: 2  
Reactivity Hazard: 0

**Further information**

Legacy SDS Number : PE0090

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.



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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.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		