

CRAYVALLAC® PA4 WDA 12**1. PRODUCT AND COMPANY IDENTIFICATION****Company**

Arkema Inc.
900 First Avenue
King of Prussia, Pennsylvania 19406

Arkema Coating Resins

Customer Service Telephone Number: (877) 331-6696
(Monday through Friday, 8:00 AM to 5:00 PM EST)

Emergency Information

Transportation: CHEMTREC: (800) 424-9300
(24 hrs., 7 days a week)
Medical: Rocky Mountain Poison Center: (866) 767-5089
(24 hrs., 7 days a week)

Product Information

Product name: CRAYVALLAC® PA4 WDA 12
Synonyms: Not available
Molecular formula: Complex mixture
Chemical family: Amide wax
Product use: Additive for :Coatings, Inks, Paints, Adhesives

2. HAZARDS IDENTIFICATION**Emergency Overview**

Color: off-white
Physical state: solid
Form: Pasty solid
Odor: Petroleum solvents

***Classification of the substance or mixture:**

Eye irritation, Category 2A, H319
Skin sensitisation, Category 1, H317

*For the full text of the H-Statements mentioned in this Section, see Section 16.

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GHS-Labeling

Hazard pictograms:



Signal word:

Warning**Hazard statements:**

H317 : May cause an allergic skin reaction.

H319 : Causes serious eye irritation.

Supplemental Hazard Statements:

Processing may release vapors and/or fumes which cause eye, skin and respiratory tract irritation.

Precautionary statements:**Prevention:**

P261 : Avoid breathing gas/mist/vapours/spray.

P264 : Wash skin thoroughly after handling.

P272 : Contaminated work clothing should not be allowed out of the workplace.

P280 : Wear eye protection/ face protection.

P280 : Wear protective gloves.

Response:

P302 + P352 : IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 : If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 : If eye irritation persists: Get medical advice/ attention.

P363 : Wash contaminated clothing before reuse.

Disposal:

P501 : Dispose of contents/ container to an approved waste disposal plant.

Supplemental information:**Potential Health Effects:**

Due to the presence of the solvent : Prolonged or repeated skin contact may cause defatting resulting in drying, redness and rash. Contains high molecular weight polymer(s). Effects due to processing releases: Irritating to eyes, respiratory system and skin.

Prolonged or repeated exposure may cause: headache, drowsiness, nausea, weakness, (severity of effects depends on extent of exposure).

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Other:

Dried product may stick to the skin causing irritation upon removal. This product may release fume and/or vapor of variable composition depending on processing time and temperature.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Wt/Wt	GHS Classification**
NAPHITHA (PETROLEUM), HYDROTREATED HEAVY	64742-48-9	>= 60 - < 80 %	H226, H304
Benzenemethanol	100-51-6	>= 10 - < 30 %	H319, H302
Amide wax	Proprietary*	>= 10 - < 30 %	H317, H413

*The specific chemical identity is withheld because it is trade secret information of Arkema Inc.

**For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1. Description of necessary first-aid measures:

Inhalation:

If inhaled, remove victim to fresh air.

Skin:

In case of contact, immediately flush skin with soap and plenty of water. If molten polymer gets on the skin, cool rapidly with cold water. Do not peel solidified product off the skin. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion:

If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

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4.2. Most important symptoms/effects, acute and delayed:

For most important symptoms and effects (acute and delayed), see Section 2 (Hazard Statements and Supplemental Information) and Section 11 (Toxicology Information) of this SDS.

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

Unless otherwise noted in Notes to Physician, no specific treatment noted; treat symptomatically.

5. FIREFIGHTING MEASURES**Extinguishing media (suitable):**

Water spray, Carbon dioxide (CO₂), Foam, Dry chemical

Protective equipment:

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand / NIOSH approved or equivalent).

Further firefighting advice:

Fire fighting equipment should be thoroughly decontaminated after use.

Fire and explosion hazards:

When burned, the following hazardous products of combustion can occur:

Carbon oxides

Nitrogen oxides

Hazardous organic compounds

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, Emergency procedures, Methods and materials for containment/clean-up:**

Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid dust formation and dispersal of dust in the air. Sweep or scoop up using non-sparking tools and place into suitable properly labeled containers for prompt disposal. The sweepings should be wetted down with water. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Protective equipment:

Appropriate personal protective equipment is set forth in Section 8.

CRAYVALLAC® PA4 WDA 12**7. HANDLING AND STORAGE****Handling****General information on handling:**

Avoid breathing processing fumes or vapors.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.
Keep container closed.
Wash thoroughly after handling.
Emptied container retains product residue.
Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Storage**General information on storage conditions:**

Keep in a dry, cool place. Store in closed containers, in a secure area to prevent container damage and subsequent spillage.

Storage incompatibility – General:

Store separate from:
Acids
Oxidizing agents

Temperature tolerance – Do not store above:

100 °F (38 °C)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Airborne Exposure Guidelines:****NAPHITHA (PETROLEUM), HYDROTREATED HEAVY (64742-48-9)**

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 100 ppm (400 mg/m³)

Benzenemethanol (100-51-6)

US. OARS. WEELs Workplace Environmental Exposure Level Guide

Time weighted average 10 ppm (44.20 mg/m³)

Remarks: Listed

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required. Limits with a sensitizer designation above mean that exposure to this material may cause allergic reactions.

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Engineering controls:

Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Respiratory protection:

Avoid breathing processing fumes or vapors. Avoid breathing dust. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Skin protection:

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing immediately and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling.

Eye protection:

Where there is potential for eye contact, wear a face shield, chemical goggles, and have eye flushing equipment immediately available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	off-white
Physical state:	solid
Form:	Pasty solid
Odor:	Petroleum solvents
Odor threshold:	No data available
Flash point	No data available
Auto-ignition temperature:	>446 °F (230 °C)
Lower flammable limit (LFL):	No data available
Upper flammable limit (UFL):	No data available

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pH:	Not applicable
Density:	No data available
Specific Gravity (Relative density):	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Boiling point/boiling range:	No data available
Melting point/range:	No data available.
Freezing point:	No data available.
Evaporation rate:	No data available
Solubility in water:	insoluble
Solubility in other solvents: [qualitative and quantitative]	Soluble in most organic solvents
Viscosity, dynamic:	No data available
Oil/water partition coefficient:	(No data available)
Thermal decomposition:	No data available
Flammability:	See GHS Classification in Section 2

10. STABILITY AND REACTIVITY

Stability:

This material is chemically stable under normal and anticipated storage, handling and processing conditions.

Hazardous reactions:

Hazardous polymerisation does not occur.

Materials to avoid:

Oxidizing agents
Acids

Conditions / hazards to avoid:

Keep away from heat and sources of ignition.

Hazardous decomposition products:

Thermal decomposition giving flammable and toxic products :

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Carbon oxides
Nitrogen oxides
Hazardous organic compounds

11. TOXICOLOGICAL INFORMATION

Data on this material and/or its components are summarized below.

Data for CRAYVALLAC® PA4 WDA 12**Acute toxicity****Oral:**

Acute toxicity estimate 2,778 mg/kg.

Dermal:

Acute toxicity estimate > 5,000 mg/kg.

Data for NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (64742-48-9)**Acute toxicity****Oral:**

Practically nontoxic. (rat) LD0 > 5,000 mg/kg.

Dermal:

No deaths occurred. (rabbit) LD0 > 2,000 mg/kg.

Inhalation:

No deaths occurred. (rat) 4 h LC0 > 5.6 mg/l. signs: Central nervous system effects, respiratory irritation (vapor)

Skin Irritation:

Causes mild skin irritation. (rabbit)

Eye Irritation:

Causes mild eye irritation. (rabbit)

Skin Sensitization:

Not a sensitizer. Repeated skin exposure. (guinea pig) No skin allergy was observed

Repeated dose toxicity

Repeated oral, inhalation administration to rat / affected organ(s): kidney / signs: hyaline droplet nephropathy / (not considered relevant to humans)

Repeated dermal administration to rat / signs: Local irritation

Carcinogenicity

Chronic dermal administration to mouse / No increase in tumor incidence was reported.

Genotoxicity**Assessment in Vitro:**

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No genetic changes were observed in a laboratory test using: bacteria, animal cells

Genotoxicity**Assessment in Vivo:**

No genetic changes were observed in a laboratory test using: rats, mice

Developmental toxicity

Two-generation study. Inhalation (rat) / No teratogenic effects

Reproductive effects

Two-generation study. Inhalation (rat) / No toxicity to reproduction.

Other information

The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.

Data for Benzenemethanol (100-51-6)**Acute toxicity****Oral:**

Harmful if swallowed. (rat) LD50 = 1,620 mg/kg.

Inhalation:

No deaths occurred. (rat) 4 h LC0 > 4.2 mg/l. (dust/mist)

Skin Irritation:

Practically non-irritating (rabbit) (4 h)

Eye Irritation:

Causes serious eye irritation. (rabbit)

Skin Sensitization:

Not a sensitizer. Guinea pig maximization test. No skin allergy was observed

Repeated dose toxicity

Subchronic oral administration to rat / affected organ(s): brain / signs: changes in organ structure or function

Repeated exposure inhalation administration to rat / No adverse effects reported.

Carcinogenicity

Chronic oral administration to rat and mouse / No increase in tumor incidence was reported.

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria

An equivocal response has been reported in a test using: animal cells

Genotoxicity

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Assessment in Vivo:

No genetic changes were observed in laboratory tests using: rats, mice, fruit flies

Developmental toxicity

Exposure during pregnancy. oral (Mouse) / No birth defects were observed. (delays in development, at doses that produce effects in mothers)

Human experience**Inhalation:**

Upper respiratory tract: irritation. (vapor) (repeated or prolonged exposure)

Human experience**Skin contact:**

Skin allergy was observed. Weak response

Human experience**Eye contact:**

Lachrymation. (vapor) (repeated or prolonged exposure)

Human experience**Ingestion:**

Abdominal pain, vomiting. (accidental ingestion or suicide attempts)

Data for Amide wax (Proprietary)**Acute toxicity****Oral:**

No deaths occurred. (rat) LD₀ > 2,000 mg/kg.

Dermal:

May be harmful in contact with skin. (rat) LD₅₀ > 2,000 mg/kg.

Inhalation:

No deaths occurred. (rat) 4 h LC₀ > 4.1 mg/l.

Skin Irritation:

Practically non-irritating. (rabbit) (4 h)

Eye Irritation:

Causes mild eye irritation. (rabbit)

Skin Sensitization:

May cause an allergic skin reaction. Guinea pig maximization test. Skin allergy was observed.

Not a sensitizer. LLNA: Local Lymph Node Assay. (mouse) No effect is reported.

Repeated dose toxicity

Repeated oral administration to rat / signs: no adverse effects

Genotoxicity**Assessment in Vitro:**

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No genetic changes were observed in laboratory tests using: bacteria, animal cells, human cells

12. ECOLOGICAL INFORMATION

Chemical Fate and Pathway

Data on this material and/or its components are summarized below.

Data for NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (64742-48-9)

Biodegradation:

Readily biodegradable. (28 d) biodegradation 77 %

Data for Benzenemethanol (100-51-6)

Biodegradation:

Readily biodegradable. (14 d) biodegradation 92 - 96 %

Octanol Water Partition Coefficient:

log Pow: = 0.87 - 1.1

Data for Amide wax (Proprietary)

Biodegradation:

Not readily biodegradable. (28 d) biodegradation 6 %

Octanol Water Partition Coefficient:

log Pow: > 6.5

Ecotoxicology

Data on this material and/or its components are summarized below.

Data for NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (64742-48-9)

The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.

Aquatic toxicity data:

Practically nontoxic. Oncorhynchus mykiss (rainbow trout) 96 h LL50 > 100 mg/l

Aquatic invertebrates:

Practically nontoxic. Daphnia magna (Water flea) 48 h LL50 > 100 mg/l

Algae:

Practically nontoxic. Pseudokirchneriella subcapitata (algae) 72 h ErL50 > > 100 mg/l

Chronic toxicity to aquatic plants:

Pseudokirchneriella subcapitata (green algae) 72 h NOEC r = 1000 mg/l

Data for Benzenemethanol (100-51-6)

Aquatic toxicity data:

Practically nontoxic. Pimephales promelas (fathead minnow) 96 h LC50 = 460 mg/l

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Aquatic invertebrates:

Practically nontoxic. Daphnia magna (Water flea) 48 h EC50 = 230 mg/l

Algae:

Practically nontoxic. Pseudokirchneriella subcapitata (microalgae) 72 h ErC50 = 770 mg/l

Microorganisms:

Nitrosomonas sp 24 h IC50 (Inhibition of nitrification in activated sludge) = 390 mg/l

Chronic toxicity to aquatic invertebrates:

Practically nontoxic. Daphnia magna (Water flea) 21 Days NOEC (reproduction) = 51 mg/l

Data for Amide wax (Proprietary)

Aquatic toxicity data:

No effect up to the limit of solubility. Oncorhynchus mykiss (rainbow trout) 96 h LC50 > 100 mg/l (nominal concentrations reported)

Aquatic invertebrates:

No effect up to the limit of solubility. Immobilization / Daphnia magna (Water flea) 48 h EC50 > 100 mg/l (nominal concentrations reported)

Algae:

No effect up to the limit of solubility. Selenastrum capricornutum 72 h EC50 (Inhibition of growth) > 100 mg/l (nominal concentrations reported)

Microorganisms:

Activated sludge 3 h EC50 > 100 mg/l

13. DISPOSAL CONSIDERATIONS

Waste disposal:

Disposal via incineration is recommended. Dispose of in accordance with federal, state and local regulations. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14. TRANSPORT INFORMATION

US Department of Transportation (DOT): not regulated

International Maritime Dangerous Goods Code (IMDG): not regulated

15. REGULATORY INFORMATION

Chemical Inventory Status

EU. EINECS	EINECS	Conforms to
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US. Toxic Substances Control Act	TSCA	The components of this product are all on the TSCA Inventory.
Australia. Industrial Chemical (Notification and Assessment) Act	AICS	Conforms to
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	DSL	All components of this product are on the Canadian DSL
Korea. Existing Chemicals Inventory (KECI)	KECI (KR)	Conforms to
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	PICCS (PH)	Conforms to
China. Inventory of Existing Chemical Substances	IECSC (CN)	Conforms to
Japan. ENCS - Existing and New Chemical Substances Inventory	ENCS (JP)	Does not conform

United States – Federal Regulations

SARA Title III – Section 302 Extremely Hazardous Chemicals:

The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

SARA Title III - Section 311/312 Hazard Categories:

Acute Health Hazard

SARA Title III – Section 313 Toxic Chemicals:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantity (RQ):

The components in this product are either not CERCLA regulated, regulated but present in negligible concentrations, or regulated with no assigned reportable quantity.

United States – State Regulations

New Jersey Right to Know

<u>Chemical name</u>	<u>CAS-No.</u>
NAPHITHA (PETROLEUM), HYDROTREATED HEAVY	64742-48-9

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New Jersey Right to Know – Special Health Hazard Substance(s)

<u>Chemical name</u>	<u>CAS-No.</u>
NAPHITHA (PÉTROLEUM), HYDROTREATED HEAVY	64742-48-9

Pennsylvania Right to Know

<u>Chemical name</u>	<u>CAS-No.</u>
NAPHITHA (PETROLEUM), HYDROTREATED HEAVY	64742-48-9

Benzenemethanol	100-51-6
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Amide wax	Proprietary
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California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive defects.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H413 May cause long lasting harmful effects to aquatic life.

Latest Revision(s):

Reference number:	200001066
Date of Revision:	05/03/2017
Date Printed:	05/03/2017

CRAYVALLAC® is a registered trademark of Arkema Inc.

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Arkema has implemented a Medical Policy regarding the use of Arkema products in Medical Devices applications that are in contact with the body or circulating bodily fluids (<http://www.arkema.com/en/social-responsibility/responsible-product-management/medical-device-policy/index.html>) Arkema has designated Medical grades to be used for such Medical Device applications. Products that have not been designated as Medical grades are not authorized by Arkema for use in Medical Device applications that are in contact with the body or circulating bodily fluids. In addition, Arkema strictly prohibits the use of any Arkema products in Medical Device applications that are implanted in the body or in contact with bodily fluids or tissues for greater than 30 days. The Arkema

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trademarks and the Arkema name shall not be used in conjunction with customers' medical devices, including without limitation, permanent or temporary implantable devices, and customers shall not represent to anyone else, that Arkema allows, endorses or permits the use of Arkema products in such medical devices.

It is the sole responsibility of the manufacturer of the medical device to determine the suitability (including biocompatibility) of all raw materials, products and components, including any medical grade Arkema products, in order to ensure that the final end-use product is safe for its end use; performs or functions as intended; and complies with all applicable legal and regulatory requirements (FDA or other national drug agencies) It is the sole responsibility of the manufacturer of the medical device to conduct all necessary tests and inspections and to evaluate the medical device under actual end-use requirements and to adequately advise and warn purchasers, users, and/or learned intermediaries (such as physicians) of pertinent risks and fulfill any postmarket surveillance obligations. Any decision regarding the appropriateness of a particular Arkema material in a particular medical device should be based on the judgment of the manufacturer, seller, the competent authority, and the treating physician.

