SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US - OSHA Hazard Communication Standard (29 CFR 1910.1200)

Issuing Date 14-Sep-2020 **Revision Date** 14-Sep-2020 **Revision Number** 1

1. Identification

Product identifier

Product Name Creosote (P1/P13)

Other means of identification

Product Code(s) P1/P13

UN/ID no UN3082

Synonyms AWPA P1/P13, EPA Registration No. 73408-1

Recommended use of the chemical and restrictions on use

Recommended use Pressure treatment of wood as prescribed by the American Wood Protection Association (AWPA), as set forth in the most recent edition

Restrictions on use Pesticide regulated under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), restricted-use pesticides are limited to use by pesticide applicators who are certified, or to people working under the supervision of a certified applicator

Details of the supplier of the safety data sheet

Supplier Address
Arbor Preservative Systems, LLC
1471 Channel Avenue
Memphis, TN 38106
Tel: 901-942-3326

E-mail jeffw@arborpreservative.com

Emergency telephone number

Emergency telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Carcinogenicity	Category 1B

Hazards not otherwise classified (HNOC)
Not applicable.
Label elements

Danger

Hazard statements

May cause cancer.

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other information
Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms AWPA P1/P13, EPA Registration No. 73408-1

Chemical name	CAS No	Weight-%	Trade secret
Creosote	8001-58-9	98	*
Phenanthrene	85-01-8	13.747	*
Naphthalene	91-20-3	6.833	*
2-Methylnaphthalene	91-57-6	5.53	*
Pyrene	129-00-0	5.418	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. All personnel handling treated wood or handling treating equipment that has come into contact with preservative must wear appropriate personal protective equipment (PPE), including washable or disposable coveralls or long- sleeved shirt and long pants, chemical resistant gloves, and socks plus industrial grade safety boots with chemical resistant soles. All personnel cleaning or maintaining the treatment cylinder gasket/equipment or working with concentrate or wood treatment preservative, must wear the PPE listed above as well as a full face shield. In the event of equipment malfunction, prior to cylinder ventilation, all personnel within 15 feet of the cylinder opening must also wear a properly fitting half mask elastomeric respirator with appropriate cartridges and/or filters. Personnel must leave aprons, protective coveralls, chemical resistant gloves, work

footwear, and any other material contaminated with preservative at the treatment facility. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them. Eating, drinking, smoking are prohibited in the treatment cylinder load-out area, drip pad area, and engineering control room of the wood treatment facilities. EXCEPTION: Where treating operator control rooms are isolated from the treating cylinders, drip pad, and work tanks; eating, drinking, and tobacco use (depending on local restrictions) are permitted.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Phenanthrene 85-01-8	-	TWA: 0.2 mg/m^3	-
Naphthalene 91-20-3	TWA: 10 ppm S*	TWA: 10 ppm TWA: 50 mg/m^3 (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m^3 (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m^3	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m^3 STEL: 15 ppm STEL: 75 mg/m^3
2-Methylnaphthalene 91-57-6	TWA: 0.5 ppm S*	-	-
Pyrene 129-00-0	-	TWA: 0.2 mg/m^3	-

Biological occupational exposure limits

Chemical name	ACGIH
Naphthalene 91-20-3	- (1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis) - end of shift

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection Use appropriate respiratory protection.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Brown to Black Liquid
Physical state	Liquid
Color	Brown to Black
Odor	Mild
Odor threshold	No data available

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	<6.7 °C	None known
Boiling point / boiling range	No data available	None known
Flash point	>96 °C	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	50 cF 100 °F	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Incompatible materials.

Incompatible materials Oxidizing agent.

Hazardous decomposition products Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Product Information .

Inhalation May be harmful if inhaled.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact May be harmful in contact with skin.

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

Product Information

Oral LD50 >2197 mg/kg (rat)
Dermal LD50 >2000 mg/kg (rabbit)
Inhalation LC50 >5.3 mg/l (rat, 4 hr)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Creosote 8001-58-9	= 725 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Naphthalene 91-20-3	= 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit)	> 340 mg/m^3 (Rat) 1 h
2-Methylnaphthalene 91-57-6	= 1630 mg/kg (Rat)	-	-
Pyrene 129-00-0	= 2700 mg/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Creosote 8001-58-9	-	Group 2A	-	X
Phenanthrene 85-01-8	-	Group 3	-	-
Naphthalene	A3	Group 2B	Reasonably	X

91-20-3			Anticipated	
Pyrene 129-00-0	-	Group 3	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Liver. Kidney. Eyes. Skin. Central nervous system. Blood.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Creosote 8001-58-9	-	LC50: 2.6 - 6.6mg/L (96h, Brachydanio rerio) LC50: =0.57mg/L (96h, Oncorhynchus mykiss)	-	EC50: 0.065 - 0.082mg/L (48h, Daphnia magna) EC50: =1.04mg/L (48h, Daphnia magna)
Naphthalene 91-20-3	-	LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss) LC50: 5.74 - 6.44mg/L (96h, Pimephales promelas) LC50: =1.6mg/L (96h, Oncorhynchus mykiss) LC50: =1.99mg/L (96h, Pimephales promelas) LC50: =31.0265mg/L (96h, Lepomis macrochirus)	-	EC50: 1.09 - 3.4mg/L (48h, Daphnia magna) EC50: =1.96mg/L (48h, Daphnia magna) LC50: =2.16mg/L (48h, Daphnia magna)
Pyrene 129-00-0	-	-	-	EC50: =1.8mg/L (48h, water flea)

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Phenanthrene 85-01-8	4.5
Naphthalene 91-20-3	3.6
2-Methylnaphthalene 91-57-6	3.86
Pyrene 129-00-0	4.88

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). In case of spillage, stop the flow of material and block any potential routes to water systems. Absorb (with sand, earth, etc.) discharged material and dispose of in accordance with applicable Federal, State and local regulations. If spill is large, be prepared to isolate the hazard area. Deny access to the spill area to persons who are not involved in the cleanup and/or who have not been properly trained in spill management of hazardous liquids.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number U051 U120 U165

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Creosote 8001-58-9	U051	Included in waste streams: K001, K035	-	U051
Phenanthrene 85-01-8	-	Included in waste stream: F039	-	-
Naphthalene 91-20-3	U165	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145	-	U165
Pyrene 129-00-0	-	Included in waste stream: F039	-	-

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Naphthalene 91-20-3	-	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic	-

			hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Naphthalene 91-20-3	Toxic

14. Transport information

DOT

UN/ID no	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
Reportable Quantity (RQ)	(Creosote: RQ (kg)= 0.454, Phenanthrene: RQ (kg)= 2270.00, Acenaphthene: RQ (kg)= 45.40, Naphthalene: RQ (kg)= 45.40, Fluoranthene: RQ (kg)= 45.40, Dibenzofuran: RQ (kg)= 45.40) Creosote: RQ (lb)= 1, Phenanthrene: RQ (lb)= 5000.00, Acenaphthene: RQ (lb)= 100.00, Naphthalene: RQ (lb)= 100.00, Fluoranthene: RQ (lb)= 100.00, Dibenzofuran: RQ (lb)= 100.00
DOT reportable quantity kg (calculated)	Creosote: RQ (kg)= 0, Phenanthrene: RQ (kg)= 16513.00, Acenaphthene: RQ (kg)= 607.00, Naphthalene: RQ (kg)= 664.00, Fluoranthene: RQ (kg)= 714.00, Dibenzofuran: RQ (kg)= 1101.00
DOT Reportable Quantity lbs. (calculated)	Creosote: RQ (lb)= 1, Phenanthrene: RQ (lb)= 36372.00, Acenaphthene: RQ (lb)= 1337.00, Naphthalene: RQ (lb)= 1463.00, Fluoranthene: RQ (lb)= 1574.00, Dibenzofuran: RQ (lb)= 2425.00
Special Provisions	8, 146, 173, 335, IB3, T4, TP1, TP29
DOT Marine Pollutant	I
Marine pollutant	Creosote, Naphthalene
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Creosote, Naphthalene), 9, III, Marine pollutant
Emergency Response Guide Number	171

IATA

UN number or ID number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III
ERG Code	9L
Special Provisions	A97, A158, A197
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Creosote, Naphthalene), 9, III

IMDG Not regulated

UN number or ID number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
EmS-No	F-A, S-F
Marine pollutant	P
Marine pollutant	Creosote, Naphthalene

Special Provisions 274, 335, 969
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Creosote, Naphthalene), 9, III, (0°C C.C.), Marine pollutant

15. Regulatory information

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Creosote	8001-58-9	Present	Active
Phenanthrene	85-01-8	Present	Active
Acenaphthene	83-32-9	Present	Active
Naphthalene	91-20-3	Present	Active
Fluoranthene	206-44-0	Present	Active
2-Methylnaphthalene	91-57-6	Present	Active
Pyrene	129-00-0	Present	Active
Dibenzofuran	132-64-9	Present	Active

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Creosote - 8001-58-9	0.1
Phenanthrene - 85-01-8	1.0
Naphthalene - 91-20-3	0.1
Pyrene - 129-00-0	0.1

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenanthrene 85-01-8	-	-	X	-
Naphthalene 91-20-3	100 lb	X	X	X
Pyrene 129-00-0	-	-	X	-

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Creosote 8001-58-9	1 lb	-
Phenanthrene 85-01-8	5000 lb	-
Naphthalene 91-20-3	100 lb	-
Pyrene 129-00-0	5000 lb	5000 lb

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Creosote - 8001-58-9	Carcinogen
Naphthalene - 91-20-3	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Creosote 8001-58-9	X	X	X
Phenanthrene 85-01-8	X	X	X
Acenaphthene 83-32-9	X	X	X
Naphthalene 91-20-3	X	X	X
Fluoranthene 206-44-0	X	X	X
2-Methylnaphthalene 91-57-6	X	-	-
Pyrene 129-00-0	X	X	X
Dibenzofuran 132-64-9	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards**	3	**Flammability**	0	**Instability**	0	**Special hazards**	-
HMIS	**Health hazards**	2 *	**Flammability**	0	**Physical hazards**	0	**Personal protection**	X

Chronic Hazard Star Legend ** = Chronic Health Hazard*

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Disclaimer

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.

End of Safety Data Sheet