ADVANCED MATERIALS

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.09.2022

Version number 3

Revision: 16.09.2022

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

· 1.1 Product identifier

· Trade name: EP-799 Two-Part Black Potting Compound - A Side

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Sector of Use SU16 Manufacture of computer, electronic and optical products, electrical equipment
- · Application of the substance / the mixture Black potting compound component
- \cdot 1.3 Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Kayaku Advanced Materials, Inc. 200 Flanders Road Westborough, MA 01581 Tel: (617) 965-5511 Fax: (617) 965-5818

Further information obtainable from: Product Safety
Email: productsafety@kayakuAM.com
1.4 Emergency telephone number: Kayaku Advanced Materials : 617-965-5511 Chemtrec USA Emergency : 800-424-9300 (24 hr) Chemtrec International Emergency : 703-527-3887 (24 hr)

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture · Classification according to Regulation (EC) No 1272/2008

GHS08 he

GHS08 health hazard

Muta. 1B	H340 May cause genetic defects.
Carc. 1B	H350 May cause cancer.
STOT RE 1	H372 Causes damage to organs through prolonged or repeated exposure.

GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H335 May cause respiratory irritation.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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(Contd. of page 1) · Hazard pictograms GHS07 GHS08 GHS09 · Signal word Danger · Hazard-determining components of labelling: Epoxy Resin Solvent naphtha (petroleum), light arom. Proprietary Resin · Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H340 May cause genetic defects. H350 May cause cancer. H335 May cause respiratory irritation. H372 Causes damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. · Precautionary statements P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P273 Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P280 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. *P301+P310* IF ON SKIN: Wash with plenty of soap and water. P302+P352 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position *P304+P341 comfortable for breathing.* 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. If eye irritation persists: Get medical advice/attention. *P337+P313* P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. • Additional information: Restricted to professional users. · 2.3 Other hazards · Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

• Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

0	1		
		Proprietary Resin	25-50%
		Aquatic Chronic 2, H411; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
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	Epoxy Resin	td. of page 25-50%
	STOT RE 1, H372; OSkin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 64742-95-6 EINECS: 265-199-0 Index number: 649-356-00-4	Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226; Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304; Acute Tox. 4, H332	1-5%
Additional Components:		
Inorganic pigment		1-5%

• Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:

Wash eyes immediately with a large amount of water or normal saline, occasionally lifting upper and lower eye lids until no evidence of chemical remains (about 20 minutes). Remove contact lenses if present and easy to remove. Seek immediate medical attention.

· After swallowing: If symptoms persist consult doctor.

• 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

• 4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:
- Alcohol resistant foam

Fire-extinguishing powder

- ABC powder
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
- 6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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Ensure adequate ventilation. • **6.4 Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaust at the workplace. Open and handle receptacle with care. Prevent formation of aerosols.

• Information about fire - and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.

· 7.2 Conditions for safe storage, including any incompatibilities

- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.

• Information about storage in one common storage facility: Do not store together with alkalis (caustic solutions). Do not store together with oxidising and acidic materials.

• Further information about storage conditions: Store in cool, dry conditions in well sealed containers. Protect from heat and direct sunlight. Store receptacle in a well ventilated area.

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from food and beverages. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work.

- Store protective clothing separately.
- Avoid contact with the eyes and skin.
- Respiratory protection:

In case of low exposure use cartridge respirator. In case of intensive or longer exposure use self-contained respiratory protective device.

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^{· 8.1} Control parameters



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· Protection of hands:



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- *Material of gloves* Nitrile rubber, NBR
- · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

SECTION 9: Physical and chemical properties

Appearance: Form:	Liquid	
Form: Colour:	Liquid Black	
Odour:	Characteristic	
Odour: Odour threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling range:	Undetermined.	
Flash point:	260 °C	
Flammability (solid, gas):	Not applicable.	
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	
Explosive properties:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapour pressure:	Not determined.	
Density:	Not determined.	
Relative density	Not determined.	
Vapour density	Not determined.	
Solubility in / Miscibility with		
water:	Not miscible or difficult to mix.	

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· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	2.9 %	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability Stable
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid
- *Heat, flames and sparks. Extremes of temperature and direct sunlight. Contact with incompatible materials.*
- 10.5 Incompatible materials: Strong Oxidizing Agents, Strong Acids, Strong Bases
- 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

• Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

Proprieta	ry Resin		
Oral	LD50	30000 mg/kg (Rat)	
Dermal	LD50	>1200 mg/kg (Rat)	
64742-95	-6 Solvent	naphtha (petroleum), light arom.	
Oral	LD50	>6800 mg/kg (Rat)	
Dermal	LD50	>3400 mg/kg (rab)	
Inhalative	e LC50/4 h	>10.2 mg/l (Rat)	
Serious e Causes se Respirato May caus Additiona CMR effe Germ cell	e an allergi al toxicolog acts (carcin l mutagenic e genetic de enicity	irritation ritation. censitisation cc skin reaction. ical information: ogenity, mutagenicity and toxicity for reproduction) rity	
may caus	e cuncer.		(Contd. on page 7

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- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure
- May cause respiratory irritation.
- · STOT-repeated exposure
- Causes damage to organs through prolonged or repeated exposure.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB**: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made in accordance with International, National, and regional regulations.

- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

· 14.1 UN-Number · ADR, IMDG, IATA	UN3082	
· 14.2 UN proper shipping name · ADR, IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (4,4'-Isopropylidenediphenol- Epichlorohydri. Copolymer)	





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Trade name: EP-799 Two-Part Black Potting Compound - A Side (Contd. of page 7) · IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-Isopropylidenediphenol- Epichlorohydrin Copolymer), MARINE POLLUTANT · 14.3 Transport hazard class(es) · ADR, IMDG, IATA · Class 9 Miscellaneous dangerous substances and articles. · Label 9 · 14.4 Packing group · ADR, IMDG, IATA Ш Product contains environmentally hazardous substances: 4,4'-· 14.5 Environmental hazards: Isopropylidenediphenol- Epichlorohydrin Copolymer · 14.6 Special precautions for user Warning: Miscellaneous dangerous substances and articles. 90 · Hazard identification number (Kemler code): · EMS Number: F-A, S-F· Stowage Category A · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. • Transport/Additional information: $\cdot ADR$ · Limited quantities (LO) 5L• Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml · Transport category 3 • Tunnel restriction code Ε ·IMDG

 Limited quantities (LQ)
 Excepted quantities (EQ)
 Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
 UN "Model Regulation":
 UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN COPOLYMER), 9, III

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

• Seveso category E2 Hazardous to the Aquatic Environment

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- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 28, 29

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H340 May cause genetic defects. H350 May cause cancer. H372 Causes damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. · Classification according to Regulation (EC) No 1272/2008 Art. 9(1) of Regulation (EC) No. 1272/2008 was used for classification purposes. · Department issuing SDS: Product safety department • *Contact:* Tom Cole, EHS Manager (tcole@kayakuAM.com) • **Revision History:** The manufacturer information in Section 1 has been updated. · Abbreviations and acronyms: ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 3: Flammable liquids – Category 3 Acute Tox. 4: Acute toxicity - Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Skin Sens. 1: Skin sensitisation - Category 1 Muta. 1B: Germ cell mutagenicity – Category 1B Carc. 1B: Carcinogenicity - Category 1B STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2