

Printing date 01/06/2023

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**1 Identification****Product identifier**Trade name: **P-413C Baked Phenolic Coating****Application of the substance / the mixture** Heat-cured phenolic coating for products fabricated of light gauge metal.**Uses advised against** None specified.**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

HERESITE PROTECTIVE COATINGS, LLC

Liquid Coatings Division

822 SOUTH 14TH ST.

MANITOWOC, WI 54220, USA

TELEPHONE NUMBER: +1 (920) 684-6646

FAX NUMBER: +1 (920) 684-0110

**Emergency telephone number** CHEMTREC 800-424-9300**2 Hazard(s) identification****Classification of the substance or mixture**

GHS02

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS08

Germ Cell Mutagenicity 2

H341 Suspected of causing genetic defects.

Carcinogenicity 1A

H350 May cause cancer.

Toxic to Reproduction 2

H361 Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure 1

H370 Causes damage to organs.

Specific Target Organ Toxicity - Repeated Exposure 2

H373 May cause damage to organs through prolonged or repeated exposure.



GHS05

Eye Damage 1

H318 Causes serious eye damage.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

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**Trade name: P-413C Baked Phenolic Coating**

Acute Toxicity - Inhalation 4

H332 Harmful if inhaled.

Skin Irritation 2

H315 Causes skin irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

**Label elements****GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS02

GHS05

GHS07

GHS08

**Signal word** Danger**Hazard-determining components of labeling:**

formaldehyde, oligomeric reaction products with phenol

phenol

Tricresyl phosphate

formaldehyde

**Hazard statements**

H225 Highly flammable liquid and vapor.

H302+H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H370 Causes damage to organs.

H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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P304+P340	IF INHALED: Remove person to fresh air and keep 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.
P310	Immediately call a poison center/doctor.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P370+P378	In case of fire: Use CO <sub>2</sub> , powder or water spray to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards****Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

**PBT:** Not applicable.

**vPvB:** Not applicable.

**\* 3 Composition/information on ingredients****Chemical characterization:**

Hazardous components:		
CAS: 64-17-5	ethyl alcohol	10-30%
	Flammable Liquids 2, H225 Eye Irritation 2A, H319	
CAS: 9003-35-4	formaldehyde, oligomeric reaction products with phenol	10-25%
	Eye Irritation 2A, H319; Sensitization - Skin 1, H317	
CAS: 1330-78-5	Tricresyl phosphate	7-13%
	Toxic to Reproduction 2, H361	
CAS: 108-95-2	phenol	1-5%
	Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331 Germ Cell Mutagenicity 2, H341; Specific Target Organ Toxicity - Repeated Exposure 2, H373 Skin Corrosion 1B, H314	
CAS: 71-36-3	butan-1-ol	1-5%
	Flammable Liquids 3, H226 Eye Damage 1, H318 Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H335-H336	
CAS: 67-56-1	methanol	0.7-1.5%
	Flammable Liquids 2, H225 Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331 Specific Target Organ Toxicity - Single Exposure 1, H370	

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**Trade name: P-413C Baked Phenolic Coating**

CAS: 14808-60-7	quartz (SiO <sub>2</sub> )	0.1-<1%
	Carcinogenicity 1A, H350; Specific Target Organ Toxicity - Repeated Exposure 1, H372-H373 Specific Target Organ Toxicity - Single Exposure 3, H335	
CAS: 50-00-0	formaldehyde	0.2-<1%
	Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 2, H330 Germ Cell Mutagenicity 2, H341; Carcinogenicity 1B, H350 Skin Corrosion 1B, H314 Sensitization - Skin 1, H317	
CAS: 123-42-2	4-hydroxy-4-methylpentan-2-one	0.5-1.5%
	Flammable Liquids 3, H226 Toxic to Reproduction 2, H361 Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335	
CAS: 108-10-1	4-methylpentan-2-one	0.1-1%
	Flammable Liquids 2, H225 Carcinogenicity 2, H351 Acute Toxicity - Inhalation 4, H332; Specific Target Organ Toxicity - Single Exposure 3, H335-H336	

**Additional information:**

In accordance with paragraph (i) of §1910.1200, the exact percentage (concentration) of composition of the mixture ingredients has been withheld as a trade secret.

**\* 4 First-aid measures****Description of first aid measures**

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

**After inhalation:**

If not breathing, give artificial respiration.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Avoid breathing dust/fume/gas/mist/vapors/spray

Call a poison center/doctor if you feel unwell.

**After skin contact:**

Flush contaminated skin with large amounts of water while removing contaminated clothing.

Continue to rinse for at least 10 minutes.

If skin irritation occurs: Get medical advice/attention.

Wash clothes before reusing.

Clean shoes thoroughly before reuse.

**After eye contact:**

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Obtain medical attention immediately, as a precaution.

**After swallowing:**

If swallowed: Call a poison center/doctor if you feel unwell.

If person is conscious, give them several glasses of water to drink.

Do not induce vomiting unless directed to do so by medical personnel.

Obtain immediate medical attention.

**Most important symptoms and effects, both acute and delayed**

Any additional important symptoms and effects are described in Section 11: Toxicological Information

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**Trade name: P-413C Baked Phenolic Coating****Indication of any immediate medical attention and special treatment needed** Consult a physician.**\* 5 Fire-fighting measures****Extinguishing media****Suitable extinguishing agents:** Carbon dioxide (CO<sub>2</sub>), dry chemical, foam.**For safety reasons unsuitable extinguishing agents:** Water with full jet**Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.**Advice for firefighters****Protective equipment:**

Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Additional information** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.**\* 6 Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation.

Wear protective equipment.

Keep unprotected persons away.

Keep away from ignition sources

**Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform authorities in case of release.

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Keep contaminated washing water and dispose of appropriately.

Prevent seepage into sewage system, workpits and cellars.

**Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation and proper training.

Clean the accident area carefully.

Send for recovery or disposal in suitable containers.

**Reference to other sections**

See section 2 for Hazard Identification.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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**Trade name: P-413C Baked Phenolic Coating****\* 7 Handling and storage****Precautions for safe handling:**

Do not handle until all safety precautions have been read and understood.  
 Ensure adequate ventilation.  
 Prevent the formation of aerosols.  
 Use solvent-proof equipment.  
 Avoid jolting, friction and impact.  
 Do not breathe mist/vapours/spray.  
 Take off contaminated clothing and wash it before reuse.  
 Do not eat, drink or smoke when using this product.

**Information about protection against explosions and fires:**

Highly flammable liquid and vapor.  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Protect against electrostatic charges.  
 Use explosion-proof apparatus / fittings and spark-proof tools.  
 Ground/bond container and receiving equipment.

**Conditions for safe storage, including any incompatibilities****Requirements to be met by storerooms and receptacles:**

Store in a cool, well ventilated area.  
 Keep container tightly closed.  
 Protect from heat and direct sunlight.

**Information about storage in one common storage facility:**

Store away from incompatible materials. See Section 10.  
 Store locked up.

**Further information about storage conditions:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

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

**\* 8 Exposure controls/personal protection****Additional information about design of technical systems:**

Technical measures and the application of adequate working methods take priority over the use of personal protection equipment.  
 Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Control parameters****Components with limit values that require monitoring at the workplace:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

**CAS: 64-17-5 ethyl alcohol**

PEL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
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REL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
TLV	Short-term value: 1000 ppm A3
<b>CAS: 108-95-2 phenol</b>	
PEL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Skin
REL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Ceiling limit value: 60* mg/m <sup>3</sup> , 15.6* ppm *15-min; Skin
TLV	Long-term value: 5 ppm Skin; BEI, A4
<b>CAS: 71-36-3 butan-1-ol</b>	
PEL	Long-term value: 300 mg/m <sup>3</sup> , 100 ppm
REL	Ceiling limit value: 150 mg/m <sup>3</sup> , 50 ppm
TLV	Long-term value: 20 ppm
<b>CAS: 67-56-1 methanol</b>	
PEL	Long-term value: 260 mg/m <sup>3</sup> , 200 ppm
REL	Short-term value: 325 mg/m <sup>3</sup> , 250 ppm Long-term value: 260 mg/m <sup>3</sup> , 200 ppm Skin
TLV	Short-term value: 250 ppm Long-term value: 200 ppm Skin; BEI
<b>CAS: 14808-60-7 quartz (SiO<sub>2</sub>)</b>	
PEL	Long-term value: 0.05* mg/m <sup>3</sup> *resp. dust; 30mg/m <sup>3</sup> /%SiO <sub>2</sub> +2
REL	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m <sup>3</sup> *respirable particulate matter, A2
<b>CAS: 50-00-0 formaldehyde</b>	
PEL	Short-term value: 2 ppm Long-term value: 0.75 ppm see 29 CFR 1910.1048(c)
REL	Long-term value: 0.016 ppm Ceiling limit value: 0.1* ppm *15-min; See Pocket Guide App. A
TLV	Short-term value: 0.3 ppm Long-term value: 0.1 ppm DSEN; RSEN, A1

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**Trade name: P-413C Baked Phenolic Coating**

<b>CAS: 123-42-2 4-hydroxy-4-methylpentan-2-one</b>	
PEL	Long-term value: 240 mg/m <sup>3</sup> , 50 ppm
REL	Long-term value: 240 mg/m <sup>3</sup> , 50 ppm
TLV	Long-term value: 50 ppm
<b>CAS: 108-10-1 4-methylpentan-2-one</b>	
PEL	Long-term value: 410 mg/m <sup>3</sup> , 100 ppm
REL	Short-term value: 300 mg/m <sup>3</sup> , 75 ppm Long-term value: 205 mg/m <sup>3</sup> , 50 ppm
TLV	Short-term value: 75 ppm Long-term value: 20 ppm BEI, A3

**Regulatory information**

PEL: Guide to Occupational Exposure Values (OSHA PELs)

REL: Guide to Occupational Exposure Values (NIOSH RELs)

TLV: Guide to Occupational Exposure Values (TLV)

<b>Ingredients with biological limit values:</b>	
<b>CAS: 108-95-2 phenol</b>	
BEI	250 mg/g creatinine Medium: urine Time: end of shift Parameter: Phenol with hydrolysis (background, nonspecific)
<b>CAS: 67-56-1 methanol</b>	
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
<b>CAS: 108-10-1 4-methylpentan-2-one</b>	
BEI	1 mg/L Medium: urine Time: end of shift Parameter: MIBK

**Regulatory information**

Monitoring of substance concentrations in air at the workplace may be necessary to ensure compliance with official exposure limit values and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. For further information contact the supplier or the competent authorities.

BEI: Guide to Occupational Exposure Values (BEI)

**Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

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**Trade name: P-413C Baked Phenolic Coating**

Take off contaminated clothing and wash it before reuse.  
Contaminated work clothing must not be allowed out of the workplace.  
Wash hands thoroughly after handling.  
Avoid any contact with skin and eyes.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Do not eat, drink or smoke when using this product.

**Breathing equipment:**

Engineering controls should be used as primary means to control exposures. Local exhaust ventilation is required unless used in a closed system. For laboratory use, handle in a lab fume hood.  
If the applicable Occupational Exposure Level (OEL) is exceeded, wear a NIOSH certified respiratory protection equipment meeting US requirements (1910.134 Occupational Safety and Health Administration, Personal Protective Equipment, Respiratory Protection) with a protection factor sufficient to control exposures to below the OEL.

**Protection of hands:**

**Material of gloves** chemical resistant gloves

**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:**

Safety glasses with side shields  
If splash potential exists, wear full face shield or chemical goggles.

**Body protection:**

Protective work clothing  
Apron

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

<b>Form:</b>	Liquid
<b>Color:</b>	Brown
<b>Odor:</b>	Solvent-like odor
<b>Odor threshold:</b>	Not determined.
<b>pH-value:</b>	No data available.

**Change in condition**

<b>Melting point/Melting range:</b>	No data available.
<b>Boiling point/Boiling range:</b>	80-100 °C (176-212 °F)
<b>Flash point:</b>	12 °C (53.6 °F)
<b>Flammability (solid, gaseous):</b>	Highly flammable.
<b>Ignition temperature:</b>	425 °C (797 °F)
<b>Decomposition temperature:</b>	Not determined.

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**Trade name: P-413C Baked Phenolic Coating**

<b>Auto igniting:</b>	Not determined.
<b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
<b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	3.3 Vol %
<b>Oxidizing properties:</b>	No data available.
<b>Vapor pressure at 20 °C (68 °F):</b>	34.9 hPa (26.2 mm Hg)
<b>Density:</b>	Not determined.
<b>Relative density:</b>	Not determined.
<b>Vapour density:</b>	Not applicable.
<b>Evaporation rate:</b>	< Ether
<b>Solubility in / Miscibility with</b>	
<b>Water:</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Other information</b>	No further relevant information available.

**\*10 Stability and reactivity**

**Reactivity** The product is not reactive under standard conditions (temperature, pressure) of storage and handling.

**Chemical stability** Stable under normal conditions.

**Possibility of hazardous reactions** No dangerous reactions known.

**Conditions to avoid**

Heat, flame and ignition sources.

High Temperatures.

**Incompatible materials:**

Strong acids

Strong bases

Strong oxidizing agents

Metals

Alkalis / alkaline (earth) metals

Ammonia

Peroxides

Oxidising Materials

Bases

Halogens

Chlorates

**Hazardous decomposition products:** In case of fire: Carbon Dioxide, Carbon Monoxide, Hydrocarbons

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**Trade name: P-413C Baked Phenolic Coating****\*11 Toxicological information****Information on toxicological effects****Acute toxicity:****LD/LC50 values:**

Harmful if swallowed or if inhaled.

<b>CAS: 64-17-5 ethyl alcohol</b>		
Oral	LD50	10,470 mg/kg (rat)
Dermal	LD50	15,800 mg/kg /bw (rabbit)
Inhalative	LC50	124.7 mg/m <sup>3</sup> (rat)
<b>CAS: 9003-35-4 formaldehyde, oligomeric reaction products with phenol</b>		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50	>5 mg/L (rat)
<b>CAS: 108-95-2 phenol</b>		
Oral	LD50	340 mg/kg (rat)
Dermal	LD50	660 mg/kg (rabbit)
Inhalative	LC50	>900 mg/m <sup>3</sup> /8h (rat)
<b>CAS: 71-36-3 butan-1-ol</b>		
Oral	LD50	2,292 mg/kg (rat)
Dermal	LD50	3,430 mg/kg (rabbit)
<b>CAS: 67-56-1 methanol</b>		
Oral	LD50	1,187-2,769 mg/kg (rat)
Dermal	LD50	17.1 mg/kg (rabbit)
<b>CAS: 50-00-0 formaldehyde</b>		
Oral	LD50	460 mg/kg (rat)
Inhalative	LC50	490 ppm /4h (rat)
<b>CAS: 123-42-2 4-hydroxy-4-methylpentan-2-one</b>		
Oral	LD50	3,002 mg/kg (rat) (OECD 401)
Dermal	LD50	>1,875 mg/kg (rat) (OECD 402)
Inhalative	LC0	≥7.6 mg/L (rat)
<b>CAS: 108-10-1 4-methylpentan-2-one</b>		
Oral	LD50	2,080 mg/kg (rat)
		0.83 mg/kg (sediment marine water)
Dermal	LD50	>2,000 mg/kg (rat)

**Skin Corrosion/Irritation:** Causes skin irritation.**Serious eye damage/irritation:** Causes serious eye damage.

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**Trade name: P-413C Baked Phenolic Coating****Sensitization:**

May cause an allergic skin reaction.  
Sensitization possible through skin contact.

**Additional toxicological information:****Carcinogenic categories**

<b>IARC (International Agency for Research on Cancer)</b>		
CAS: 64-17-5	ethyl alcohol	1
CAS: 108-95-2	phenol	3
CAS: 14808-60-7	quartz (SiO <sub>2</sub> )	1
CAS: 50-00-0	formaldehyde	1
CAS: 108-10-1	4-methylpentan-2-one	2B
<b>NTP (National Toxicology Program)</b>		
CAS: 14808-60-7	quartz (SiO <sub>2</sub> )	K
CAS: 50-00-0	formaldehyde	K
<b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>		
CAS: 50-00-0	formaldehyde	

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

Germ Cell Mutagenicity 2, Carcinogenicity 1A, Toxic to Reproduction 2

**Germ cell mutagenicity** Suspected of causing genetic defects.

**Carcinogenicity** May cause cancer.

**Reproductive toxicity:** Suspected of damaging fertility or the unborn child.

**STOT-single exposure:** Causes damage to the nervous system (optic nerve, CNS)

**STOT-repeated exposure:**

May cause damage to organs through prolonged or repeated exposure (kidney, liver, skin, nervous system).

**Aspiration hazard:** Based on available data, the classification criteria are not met.

**\*12 Ecological information****Toxicity**

<b>Aquatic toxicity:</b>	
<b>CAS: 9003-35-4 formaldehyde, oligomeric reaction products with phenol</b>	
EC50	172 mg/L (Daphnia pulex) (48h) 575 mg/L (Scenedesmus quadricauda) (24h)
LC50	185 mg/L (Oncorhynchus mykiss) (48h)
<b>CAS: 1330-78-5 Tricresyl phosphate</b>	
NOEC	0.56 Rainbow trout mg/L (fish)
EC50	0.4042 mg/L /3 day (algae) 0.146 mg/L /2 day (Daphnia magna) 0.6 mg/L /4 day (fish)

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**Trade name: P-413C Baked Phenolic Coating**

<b>CAS: 108-95-2 phenol</b>	
EC50	3.1 mg/L /48h (Ceriodaphnia dubia) 61.1 mg/L /96h (Pseudokirchneriella subcapitata)
LC50	8.9 mg/L /96h (Oncorhynchus mykiss)
<b>CAS: 71-36-3 butan-1-ol</b>	
EC10	2,476 mg/L (Pseudomonas putida) (17h)
EC50	1,328 mg/L (Daphnia magna) (48h) 225 mg/L (Selenastrum capricornum) (96h)
LC50	1,376 mg/L (Pimephales promelas) (96h)
<b>CAS: 67-56-1 methanol</b>	
EC50	18,260 mg/L (Daphnia magna) (96h OECD Guideline 202) 22,000 mg/L (Pseudokirchneriella subcapitata) (96h)
LC50	87.5 mg/L /6h (rat)
<b>CAS: 123-42-2 4-hydroxy-4-methylpentan-2-one</b>	
EC50	>1,000 mg/L (activated sludge) (3h, OECD 209) >1,000 mg/L (Daphnia magna) (48h, OECD 202) >1,000 mg/L (Pseudokirchneriella subcapitata) (72h, OECD 201)
LC50	>100 mg/L (Oryzias latipes) (96h, OECD 203)
<b>CAS: 108-10-1 4-methylpentan-2-one</b>	
EC50	>200 mg/L (Daphnia magna) (OECD - Prüfrichtlinie 202) 275 mg/L (Pseudomonas putida)
LC50	>179 mg/L (Danio rerio) (OECD-Prüfrichtlinie 203)

**Persistence and degradability** No further relevant information available.**Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**\*13 Disposal considerations****Waste treatment methods****Recommendation:**

Waste material must be disposed of in accordance with Federal, State & Local environmental control regulations . Incineration is a recommended technology. Empty containers must be handled with care due to product residue. Decontaminate containers prior to disposal. Do not heat/cut empty container with electric or gas torch.

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**Trade name: P-413C Baked Phenolic Coating**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**\*14 Transport information****UN-Number**

DOT, IMDG, IATA UN1263

**UN proper shipping name**

DOT	Paint
IMDG	PAINT, MARINE POLLUTANT
IATA	PAINT

**Transport hazard class(es)****DOT**

<b>Class</b>	3 Flammable liquids
<b>Label</b>	3
<b>IMDG</b>	



<b>Class</b>	3 Flammable liquids
<b>Label</b>	3
<b>IATA</b>	



<b>Class</b>	3 Flammable liquids
<b>Label</b>	3

**Packing group**

DOT, IMDG, IATA II

**Environmental hazards:**

Product contains environmentally hazardous substances: Tricresyl phosphate

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**Trade name: P-413C Baked Phenolic Coating**

**Marine pollutant:** Yes (DOT)  
Symbol (fish and tree)

**Special precautions for user** Warning: Flammable liquids  
**Hazard identification number (Kemler code):** 33  
**EMS Number:** F-E,S-D  
**Stowage Category** B

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not determined

**Transport/Additional information:****DOT**

**Quantity limitations** On passenger aircraft/rail: 5 L  
On cargo aircraft only: 60 L

**Remarks:** Special marking with the symbol (fish and tree).  
**Limited quantities (LQ)** 5L

**IMDG**

**Limited quantities (LQ)** 5L  
**Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

**UN "Model Regulation":** UN 1263 PAINT, 3, II, ENVIRONMENTALLY HAZARDOUS

**\*15 Regulatory information****TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**Hazardous Air Pollutants**

CAS: 108-95-2	phenol
CAS: 67-56-1	methanol
CAS: 50-00-0	formaldehyde
CAS: 108-10-1	4-methylpentan-2-one

**Proposition 65****Chemicals known to cause cancer:**

CAS: 14808-60-7	quartz (SiO <sub>2</sub> )
CAS: 50-00-0	formaldehyde
CAS: 108-10-1	4-methylpentan-2-one

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

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**Trade name: P-413C Baked Phenolic Coating****Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

CAS: 64-17-5 ethyl alcohol

CAS: 67-56-1 methanol

CAS: 108-10-1 4-methylpentan-2-one

**Chemical safety assessment****Seveso category**

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

**Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t**National regulations:****Additional classification according to Decree on Hazardous Materials:** Carcinogenic hazardous material group III (dangerous).**16 Other information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not valid for the new made-up material.

**Training hints**

The product should only be handled by persons, who were informed sufficiently about the nature of the product and about the necessary safety precautions.

**Date of preparation / last revision** 01/06/2023**Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

OSHA: Occupational Safety &amp; Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Flammable Liquids 3: Flammable liquids – Category 3

Acute Toxicity - Oral 3: Acute toxicity – Category 3

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Acute Toxicity - Inhalation 2: Acute toxicity – Category 2

Skin Corrosion 1B: Skin corrosion/irritation – Category 1B

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**Trade name: P-413C Baked Phenolic Coating**

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Skin Irritation 2: Skin corrosion/irritation – Category 2  
Eye Damage 1: Serious eye damage/eye irritation – Category 1  
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A  
Sensitization - Skin 1: Skin sensitisation – Category 1  
Germ Cell Mutagenicity 2: Germ cell mutagenicity – Category 2  
Carcinogenicity 1A: Carcinogenicity – Category 1A  
Carcinogenicity 1B: Carcinogenicity – Category 1B  
Carcinogenicity 2: Carcinogenicity – Category 2  
Toxic to Reproduction 2: Reproductive toxicity – Category 2  
Specific Target Organ Toxicity - Single Exposure 1: Specific target organ toxicity (single exposure) – Category 1  
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3  
Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1  
Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

**Sources** Data arise from reference works and literature.

**\* Data compared to the previous version altered.**