Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 07/19/2015 Reviewed on 07/19/2015

* 1 Identification

· **Product identifier**

· **Trade name: Penofin 100 VOC Knotwood**
· **Relevant identified uses of the substance or mixture and uses advised against**
· **Product description** Semi-transparent stain for use on wood.

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Performance Coating, Inc.
P.O. Box 1569
360 Lake Mendocino Drive
Ukiah, CA 95482
Phone: (707) 462-3023
Fax: (707) 462-6139
· **Emergency telephone number:** Chemtrec 1-800-424-9300 or outside USA 1-703-527-3887

* 2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS08 Health hazard

STOT RE 1 H372 Causes damage to the central nervous system through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.


GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Flam. Liq. 4 H227 Combustible liquid.

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


GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Solvent naphtha (petroleum), medium aliph.
2-butanone oxime
· **Hazard statements**
Combustible liquid.
Harmful if swallowed.
May cause an allergic skin reaction.
Causes damage to the central nervous system through prolonged or repeated exposure.

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May be fatal if swallowed and enters airways.

· ***Precautionary statements***

Keep away from flames and hot surfaces. – No smoking.
Do not breathe dust/fume/gas/mist/vapors/spray.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves / eye protection / face protection.
Wear protective gloves.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the workplace.
If swallowed: Immediately call a poison center/doctor.
If swallowed: Call a poison center/doctor if you feel unwell.
Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Rinse mouth.
Do NOT induce vomiting.
In case of fire: Use for extinction: CO2, powder or water spray.
If on skin: Wash with plenty of water.
Store locked up.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· ***Unknown acute toxicity:***

58.3 percent of the mixture consists of ingredient(s) of unknown toxicity.

· ***Classification system:***

· ***NFPA ratings (scale 0 - 4)***

Health = 0
Fire = 2
Reactivity = 0

· ***HMIS-ratings (scale 0 - 4)***

Health = *0
Fire = 2
Reactivity = 0

· ***Hazard(s) not otherwise classified (HNOC):*** None known

*
3 Composition/information on ingredients

· ***Description:*** Mixture of substances listed below with nonhazardous additions.

· ***Dangerous Components:***

CAS: 64742-88-7	Solvent naphtha (petroleum), medium aliph. Flam. Liq. 3, H226; STOT RE 1, H372; Asp. Tox. 1, H304	5-20%
CAS: 1330-20-7 RTECS: ZE 2100000	Xylene, mixture of isomers Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	2-12%
CAS: 112-80-1 RTECS: RG 2275000	Oleic acid, pure Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	2-12%

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CAS: 100-41-4 RTECS: DA 0700000	Ethylbenzene Flam. Liq. 2, H225; Carc. 2, H351; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	<2.5%
CAS: 64742-48-9	A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C6 through C13 and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F). Asp. Tox. 1, H304; Flam. Liq. 4, H227	<2.5%
CAS: 96-29-7	2-butanone oxime Carc. 2, H351; Eye Dam. 1, H318; Acute Tox. 4, H312; Skin Sens. 1, H317; Flam. Liq. 4, H227	<2.5%
CAS: 8052-41-3 RTECS: WJ 8925000	Stoddard solvent Flam. Liq. 3, H226; Muta. 1B, H340; Carc. 1B, H350; STOT RE 1, H372; Asp. Tox. 1, H304	<2.5%

*

4 First-aid measures

· ***Description of first aid measures***
· ***General information:***
Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· ***After inhalation:*** In case of unconsciousness, place patient securely on side position for transportation.
· ***After skin contact:***
Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.
· ***After eye contact:***
Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.
· ***After swallowing:*** Do not induce vomiting; immediately call for medical help.
· ***Information for doctor:***
· ***Most important symptoms and effects, both acute and delayed:*** No further relevant information available.
· ***Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

*

5 Fire-fighting measures

· ***Extinguishing media***
· ***Suitable extinguishing agents:*** Use fire fighting measures that suit the environment.
· ***Special hazards arising from the substance or mixture*** No further relevant information available.
· ***Advice for firefighters***
· ***Protective equipment:***
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

*

6 Accidental release measures

· ***Personal precautions, protective equipment and emergency procedures*** Not required.
· ***Environmental precautions:*** Do not allow to enter sewers/ surface or ground water.
· ***Methods and material for containment and cleaning up:***
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.

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· ***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.

*
7 Handling and storage

· ***Handling:***
· ***Precautions for safe handling***
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· ***Information about protection against explosions and fires:***
Protect from heat.
Keep protective respiratory device available.

· ***Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:*** No special requirements.
· ***Information about storage in one common storage facility:*** Not required.
· ***Further information about storage conditions:***
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
· ***Specific end use(s)*** No further relevant information available.

*
8 Exposure controls/personal protection

· ***Additional information about design of technical systems:*** No further data; see section 7.

· ***Control parameters***

· ***Components with occupational exposure limits:***	
8001-26-1 Linseed oil	
TWA	Short-term value: 5 mg/m³ Long-term value: 10 mg/m³
1330-20-7 Xylene, mixture of isomers	
PEL	Long-term value: 435 mg/m³, 100 ppm
REL	Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm
TLV	Short-term value: 651 mg/m³, 150 ppm Long-term value: 434 mg/m³, 100 ppm BEI
8052-41-3 Stoddard solvent	
PEL	Long-term value: 2900 mg/m³, 500 ppm
REL	Long-term value: 350 mg/m³ Ceiling limit value: 1800* mg/m³ *15-min
TLV	Long-term value: 525 mg/m³, 100 ppm

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· **Ingredients with biological limit values:**	
1330-20-7 Xylene, mixture of isomers	
BEI	1.5 g/g creatinine urine end of shift Methylhippuric acids

· ***Additional information:*** The lists that were valid during the creation of this SDS were used as basis.

· ***Exposure controls***
· ***Personal protective equipment:***
· ***General protective and hygienic measures:***
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
· ***Breathing equipment:*** Not required.
· ***Protection of hands:***

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Select glove material based on penetration times, rates of diffusion and degradation.
· ***Material of gloves***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
· ***Penetration time of glove material***
The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.
· ***Eye protection:***

Tightly sealed goggles

* 9 Physical and chemical properties

<100 gram/liter

· ***Information on basic physical and chemical properties***
· ***General Information***
· ***Appearance:***

Form:	Liquid
Color:	Colored
· ***Odor:***	Solvent / Mineral Spirits
· ***Odor threshold:***	Not determined.

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Trade name: Penofin 100 VOC Knotwood

· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	136 °C (277 °F)
· **Flash point:**	122 °C (252 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	265 °C (509 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not self-igniting.
· **Danger of explosion:**	Not determined.
· **Explosion limits:**	
Lower:	0.6 Vol %
Upper:	6.5 Vol %
· **Vapor pressure @ 20 °C (68 °F):**	6.6 hPa (5 mm Hg)
· **Density:**	
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
· **Solubility in / Miscibility with**	
Water:	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	17.2 %
VOC content:	17.2 %
Solids content:	Not Determined
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability** Stable under normal conditions.
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

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* 11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
64742-88-7 Solvent naphtha (petroleum), medium aliph.		
Oral	LD50	>6500 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)
Inhalative	LC50/4 h	>14 mg/l (rat)
13463-67-7 Titanium Dioxide		
Oral	LD50	>10000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalative	LC50/4 h	>6.82 mg/l (rat)
1330-20-7 Xylene, mixture of isomers		
Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	1700 mg/kg (rabbit)
Inhalative	LC50/4 h	5000 mg/l (rat)
112-80-1 Oleic acid, pure		
Oral	LD50	74000 mg/kg (rat)
100-41-4 Ethylbenzene		
Oral	LD50	3500 mg/kg (rat)
Dermal	LD50	15433 mg/kg (rabbit)
64742-48-9 A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C6 through C13 and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F).		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)
96-29-7 2-butanone oxime		
Oral	LD50	3700 mg/kg (rat)
Dermal	LD50	200-2000 mg/kg (rat)
Inhalative	LC50/4 h	20 mg/l (rat)
8052-41-3 Stoddard solvent		
Oral	LD50	>7000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:**
Irritant to skin and mucous membranes.
May cause an allergic skin reaction.
· **on the eye:**
Irritating effect.
Causes serious eye irritation.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

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Toxic
Irritant
Carcinogenic.
The product can cause inheritable damage.

· ***Carcinogenic categories***
· ***IARC (International Agency for Research on Cancer)***
None of the ingredients are listed.
(a) Although IARC has classified titanium dioxide as possible carcinogenic to human (2B), their summary concludes: “No significant exposure to titanium dioxide is thought to occur during the use of products which titanium dioxide is bound to other materials, such as in cosmetics or in paints.”
(b) OSHA does not regulate Titanium Dioxide as a carcinogen. However, under 29 CFR 1910.1200 the SDS must convey the fact that Titanium Dioxide is a potential carcinogen to rats.

13463-67-7	Titanium Dioxide	2B
1330-20-7	Xylene, mixture of isomers	3
100-41-4	Ethylbenzene	2B

· ***NTP (National Toxicology Program)***
None of the ingredients are listed.

· ***OSHA-Ca (Occupational Safety & Health Administration)***
None of the ingredients are listed.

12 Ecological information

· ***Toxicity***

· ***Aquatic toxicity:***	
13463-67-7 Titanium Dioxide	
EC50	>1000 mg/l (Water flea)
1330-20-7 Xylene, mixture of isomers	
EC50	72 mg/l (Green algae) 75.49 mg/l (daphnia)
100-41-4 Ethylbenzene	
EC50	4.9 mg/l (Green algae) 1.8-2.4 mg/l (Water flea)

· ***Persistence and degradability*** No further relevant information available.
· ***Behavior in environmental systems:***
· ***Bioaccumulative potential*** No further relevant information available.
· ***Mobility in soil*** No further relevant information available.
· ***Additional ecological information:***
· ***General notes:*** Not known to be hazardous to water.
· ***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:***
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

*
14 Transport information

· ***UN-Number***	
· ***ADR, IMDG, IATA***	UN1263
· ***UN proper shipping name***	
· ***ADR***	UN1263 Paint related material
· ***IMDG, IATA***	PAINT RELATED MATERIAL
· ***Transport hazard class(es)***	

· ***ADR***

· ***Class***	3 (F1) Flammable liquids
· ***Label***	3

· ***IMDG, IATA***

· ***Class***	3 Flammable liquids
· ***Label***	3
· ***Packing group***	
· ***ADR, IMDG, IATA***	III
· ***Environmental hazards:***	Not applicable.
· ***Special precautions for user***	Warning: Flammable liquids
· ***Danger code (Kemler):***	30
· ***EMS Number:***	F-E, S-E
· ***Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code***	Not applicable.

· ***Transport/Additional information:***

· ***DOT***

· ***Quantity limitations***	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
· ***Remarks:***	Non-Regulated

· ***ADR***

· ***Excepted quantities (EQ)***	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· ***IMDG***

· ***Limited quantities (LQ)***	5L
· ***Excepted quantities (EQ)***	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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· **UN "Model Regulation":** UN1263, Paint related material, 3, III

*
15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**
None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

1330-20-7	Xylene, mixture of isomers
100-41-4	Ethylbenzene

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

· **California Proposition 65**

· **Chemicals known to cause cancer:**

13463-67-7	Titanium Dioxide
100-41-4	Ethylbenzene

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

1330-20-7	Xylene, mixture of isomers	I
100-41-4	Ethylbenzene	D

· **TLV (Threshold Limit Value established by ACGIH)**

13463-67-7	Titanium Dioxide	A4
1330-20-7	Xylene, mixture of isomers	A4
100-41-4	Ethylbenzene	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

13463-67-7	Titanium Dioxide

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

GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Solvent naphtha (petroleum), medium aliph.

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2-butanone oxime

· ***Hazard statements***
Combustible liquid.
Harmful if swallowed.
May cause an allergic skin reaction.
Causes damage to the central nervous system through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

· ***Precautionary statements***
Keep away from flames and hot surfaces. – No smoking.
Do not breathe dust/fume/gas/mist/vapors/spray.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves / eye protection / face protection.
Wear protective gloves.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the workplace.
If swallowed: Immediately call a poison center/doctor.
If swallowed: Call a poison center/doctor if you feel unwell.
Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Rinse mouth.
Do NOT induce vomiting.
In case of fire: Use for extinction: CO2, powder or water spray.
If on skin: Wash with plenty of water.
Store locked up.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· ***National regulations:***

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· ***State Right to Know***

CAS: 64742-88-7	Solvent naphtha (petroleum), medium aliph. Flam. Liq. 3, H226; STOT RE 1, H372; Asp. Tox. 1, H304	2-20%
CAS: 1330-20-7 RTECS: ZE 2100000	Xylene, mixture of isomers Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	2-12%
CAS: 112-80-1 RTECS: RG 2275000	Oleic acid, pure Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	2-12%

All ingredients are listed.

· ***Chemical safety assessment:*** A Chemical Safety Assessment has not been carried out.

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· ***Date of preparation / last revision*** 07/19/2015 / 17

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· ***Abbreviations and acronyms:***
ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Flam. Liq. 4: Flammable liquids, Hazard Category 4
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Muta. 1B: Germ cell mutagenicity, Hazard Category 1B
Carc. 1B: Carcinogenicity, Hazard Category 1B
Carc. 2: Carcinogenicity, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Asp. Tox. 1: Aspiration hazard, Hazard Category 1

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

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