

## Safety Data Sheet acc. to OSHA HCS

Printing date 04/20/2018

Version 5

Reviewed on 04/20/2018

### 1 Identification

- **Product identifier** Bright platinum
- **Trade name:**
- **Product ID#:** **BRUSHING BRIGHT PALLADIUM** **PBC6875**
- **Product Use:** Coating compound/ Surface coating/ paint
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Johnson Matthey Inc.  
498 Acorn Lane  
Downingtown, PA 19335  
tel. 1 610 873-3200  
fax. 1 610 873-3255
- **Information department:** Product Safety Department 1 (610) 873-3200 M-F 8am-5pm
- **Emergency telephone number:** 1 856 384-7050

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2      H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Muta. 1B      H340 May cause genetic defects.

Carc. 1B      H350 May cause cancer.



GHS09 Environment

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



GHS07

Skin Irrit. 2      H315 Causes skin irritation.

Skin Sens. 1      H317 May cause an allergic skin reaction.

Aquatic Acute 2    H401 Toxic to aquatic life.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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- **Hazard pictograms** GHS02, GHS07, GHS08, GHS09
- **Signal word** Danger
- **Hazard-determining components of labeling:**  
isooctyl-3-mercaptopropionate  
Solvent naphtha (petroleum), light arom.  
formaldehyde, polymer with 4-(1,1-dimethyl-ethyl)phenol  
Turpentine, oil
- **Hazard statements**  
H225 Highly flammable liquid and vapor.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H340 May cause genetic defects.  
H350 May cause cancer.  
H401 Toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.
- **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.  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 Wash thoroughly after handling.  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P321 Specific treatment (see on this label).  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.  
P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.  
P391 Collect spillage.  
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.
- **Hazard description:**
- **Canadian Hazard Symbols**  
B2 - Flammable liquid  
D2B - Toxic material causing other toxic effects



- **American Hazard Description** Based upon the components the following hazards may exist:

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1  
Fire = 4  
Reactivity = 0

- **HMIS ratings (scale 0 - 4)**



Health = \*1  
Fire = 4  
Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:**

Solution of organo(precious) metal compounds and resins / waxes in a mixture of organic solvents and essential oils

- **Hazardous components:**

CAS: 8002-09-3 EC number: 304-455-9	pine oil ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Flam. Liq. 4, H227	>19-<20%
CAS: 68365-87-7 EINECS: 269-858-3	aurio(1+) 2,6,6-trimethylbicyclo[3.1.1]heptanethiolate ⚠ Flam. Sol. 2, H228	>7.5-<8%
	Sulphurized Terpeneol and Turpentine ⚠ STOT SE 3, H335; Flam. Liq. 4, H227	>4-<4.25%
CAS: 108-94-1 EINECS: 203-631-1 RTECS: GW 1050000	cyclohexanone ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H332	>2-<2.1%
CAS: 30374-01-7 EINECS: 250-157-6	isooctyl-3-mercaptopropionate ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Sens. 1A, H317	>1.7-<1.8%
CAS: 125-12-2 EINECS: 204-727-6	iso-bornyl acetate Flam. Liq. 4, H227	>1.6-<1.7%
CAS: 84961-50-2 EINECS: 284-638-7	clove, ext. ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; ⚠ Skin Irrit. 2, H315	>1.6-<1.7%
CAS: 92-52-4 EINECS: 202-163-5 RTECS: DU 8050000	biphenyl ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	≥0.25-≤1%
CAS: 1330-20-7 EINECS: 215-535-7 RTECS: ZE 2100000	xylene, mixture of isomers ⚠ Flam. Liq. 3, H226; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	>0.9-<1%

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CAS: 95-50-1 EINECS: 202-425-9 RTECS: CZ 4500000	1,2-dichlorobenzene ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; Flam. Liq. 4, H227	>0.8-<0.9%
CAS: 25085-50-1 polymer	formaldehyde, polymer with 4-(1,1-dimethyl-ethyl)phenol ⚠ Skin Sens. 1, H317	>0.8-<0.9%
CAS: 95-63-6 EINECS: 202-436-9	1,2,4-trimethylbenzene ⚠ Flam. Liq. 3, H226; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	>0.4-<0.5%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. ⚠ Flam. Liq. 3, H226; ⚠ Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304	>0.1-<0.2%
CAS: 8006-64-2 EINECS: 232-350-7 RTECS: YO8400000	Turpentine, oil ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; Aquatic Acute 2, H401	>0.1-<0.2%
CAS: 84604-14-8 EINECS: 283-291-9	rosemary extr. ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Sens. 1, H317; Aquatic Acute 2, H401	>0.1-<0.2%

• **Main components:**

CAS: 8002-09-3 EC number: 304-455-9	pine oil ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Flam. Liq. 4, H227	>19-<20%
CAS: 68365-87-7 EINECS: 269-858-3	aurio(1+) 2,6,6-trimethylbicyclo[3.1.1]heptanethiolate ⚠ Flam. Sol. 2, H228	>7.5-<8%
	Sulphurized Terpeneol and Turpentine ⚠ STOT SE 3, H335; Flam. Liq. 4, H227	>4-<4.25%
CAS: 65997-05-9 NLP: 500-163-2	polymerised rosin	≥0.1-≤2.5%
CAS: 108-94-1 EINECS: 203-631-1 RTECS: GW 1050000	cyclohexanone ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H332	>2-<2.1%
CAS: 30374-01-7 EINECS: 250-157-6	isooctyl-3-mercaptopropionate ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Sens. 1A, H317	>1.7-<1.8%
CAS: 125-12-2 EINECS: 204-727-6	iso-bornyl acetate Flam. Liq. 4, H227	>1.6-<1.7%
CAS: 84961-50-2 EINECS: 284-638-7	clove, ext. ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; ⚠ Skin Irrit. 2, H315	>1.6-<1.7%

• **Additional information:**

For the wording of the listed hazard phrases refer to section 16.

Note P applies to a solvent naphtha in this product - its benzene content does not exceed 0.1%.

## 4 First-aid measures

• **Description of first aid measures**

• **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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- **After inhalation:**  
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen.  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Remove contaminated clothing and wash skin with soap and water. Wash or clean clothing before reuse.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Immediately call a doctor.
- **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:** CO2, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:**  
Water  
Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear full firefighting gear and SCBA

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Prevent seepage into sewage system, workpits and cellars.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

108-94-1	cyclohexanone	60 ppm
92-52-4	biphenyl	0.87 ppm

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· PAC-2:		
108-94-1	cyclohexanone	830 ppm
92-52-4	biphenyl	9.6 ppm
· PAC-3:		
108-94-1	cyclohexanone	5000* ppm
92-52-4	biphenyl	300 ppm

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect from heat.  
Protect against electrostatic charges.  
Fumes can combine with air to form an explosive mixture.

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

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:**  
The application of this product requires well exhausted firing kilns and efficient ventilation of working areas.
- **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.  
At this time, the other constituents have no known exposure limits.  
There is no PEL established for this mixture. Recommend monitoring based upon the components in the mixture.

92-52-4 biphenyl	
PEL	Long-term value: 1 mg/m <sup>3</sup> , 0.2 ppm
REL	Long-term value: 1 mg/m <sup>3</sup> , 0.2 ppm
TLV	Long-term value: 1.3 mg/m <sup>3</sup> , 0.2 ppm
1330-20-7 xylene, mixture of isomers	
PEL	Long-term value: 435 mg/m <sup>3</sup> , 100 ppm

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REL	Short-term value: 655 mg/m <sup>3</sup> , 150 ppm Long-term value: 435 mg/m <sup>3</sup> , 100 ppm
TLV	Short-term value: 651 mg/m <sup>3</sup> , 150 ppm Long-term value: 434 mg/m <sup>3</sup> , 100 ppm BEI

**95-50-1 1,2-dichlorobenzene**

PEL	Ceiling limit value: 300 mg/m <sup>3</sup> , 50 ppm
REL	Ceiling limit value: 300 mg/m <sup>3</sup> , 50 ppm
TLV	Short-term value: 301 mg/m <sup>3</sup> , 50 ppm Long-term value: 150 mg/m <sup>3</sup> , 25 ppm

**95-63-6 1,2,4-trimethylbenzene**

REL	Long-term value: 125 mg/m <sup>3</sup> , 25 ppm
TLV	Long-term value: 123 mg/m <sup>3</sup> , 25 ppm
TWA	Long-term value: 123 mg/m <sup>3</sup> , 25 ppm

- **Ingredients with biological limit values:**

**1330-20-7 xylene, mixture of isomers**

BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
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- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
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 skin.



Avoid contact with the eyes and skin.

- **Breathing equipment:** Not required.

- **Protection of hands:** Protective gloves

- **Material of gloves**

Nitrile rubber, NBR  
Chemical resistant gloves

- **Eye protection:** Tightly sealed goggles

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## 9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

Form:	Fluid
Color:	According to product specification

- Odor: Characteristic

- Odor threshold: Not determined.

- pH-value: Neutral

- Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	137 °C (278.6 °F)

- Flash point: 21 °C (69.8 °F) (ISO 3679)

- Flammability (solid, gaseous): Not applicable.

- Ignition temperature: 500 °C (932 °F)

- Decomposition temperature: Not determined.

- Auto igniting: Product is not selfigniting.

- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

- Vapor pressure: Not determined.

- Density: Not determined.

- Relative density: Not determined.

- Vapor density: Not determined.

- Evaporation rate: 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:	26.5 %
Solvent (USA):	26.45 %
	264.5 g/l / 2.21 lb/gal

- Solids content: 65.2 %

- Other information: No further relevant information available.

## 10 Stability and reactivity

- Reactivity: No further relevant information available.

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- **Chemical stability**
- **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.

## 11 Toxicological information

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

- **LD/LC50 values that are relevant for classification:**

### 8002-09-3 pine oil

Oral	LD50	2,000 mg/kg (rat)
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### 108-94-1 cyclohexanone

Oral	LD50	1,900 mg/kg (rat)
Dermal	LD50	948 mg/kg (rabbit)
Inhalative	LC50/4 h	8,000 mg/L (rat)

### 30374-01-7 isooctyl-3-mercaptopropionate

Oral	LD50	674 mg/kg (rat) (OECD Test Guideline 401)
Dermal	LD50	>2,000 mg/kg (rat)

### 92-52-4 biphenyl

Oral	LD50	3,280 mg/kg (rat)
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### 95-50-1 1,2-dichlorobenzene

Oral	LD50	500 mg/kg (rat)
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### 64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	3,592 mg/kg (rat) (OECD Test Guideline 401)
Dermal	LD50	>3,160 mg/kg (rabbit) (OECD Test Guideline 402)
Inhalative	LC50/4 h	>6,193,000 mg/L (rat) (OECD Test Guideline 403)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful  
Irritant  
The product can cause inheritable damage.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

108-94-1	cyclohexanone	3
1330-20-7	xylene, mixture of isomers	3
95-50-1	1,2-dichlorobenzene	3

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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

**108-94-1 cyclohexanone**

Oral	LC50/96 h (dynamic)	527 mg/L (fish)
	LC50/48 h	536 mg/L (fish)
	EC50/48 h	820 mg/L (daphnia)

**30374-01-7 isooctyl-3-mercaptopropionate**

Oral	LC50/96 h	0.04 mg/L (fish) (OECD Test Guideline 203) Oncorhynchus mykiss
	EC50/24 h	1 mg/L (algae) (OECD Test Guideline 201)
	EC50/48 h	0.31 mg/L (daphnia) (OECD Test Guideline 202)

**92-52-4 biphenyl**

Oral	LC50/48 h	2.1 mg/L (daphnia)
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**64742-95-6 Solvent naphtha (petroleum), light arom.**

Oral	LC50/96 h	9.2 mg/L (fish) (OECD Test Guideline 203)
	EC50/48 h	3.2 mg/L (daphnia) (OECD Test Guideline 202)
	EC50/72 h	2,900 µg/L (algae) (OECD Test Guideline 201) Pseudokirchneriella subcapitata
	NOEC	1 mg/L (algae) Pseudokirchneriella subcapitata

- **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.

- **Ecotoxicological effects:**

- **Remark:** Toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (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

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

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## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

<ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>DOT, IMDG, IATA</b></li> </ul>	UN1993
<ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT</b></li> <li>· <b>IMDG, IATA</b></li> </ul>	Flammable liquids, n.o.s. (RED DYE MEDIUM, Xylenes) FLAMMABLE LIQUID, N.O.S. (RED DYE MEDIUM, XYLENES)
<ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>DOT</b></li> </ul>	<div style="text-align: center;">  </div>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	3 Flammable liquids 3
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> </ul>	<div style="text-align: center;">  </div>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	3 Flammable liquids 3
<ul style="list-style-type: none"> <li>· <b>IATA</b></li> </ul>	<div style="text-align: center;">  </div>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	3 Flammable liquids 3
<ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>DOT, IMDG, IATA</b></li> </ul>	II
<ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>	Product contains environmentally hazardous substances: 1,2-dichlorobenzene Yes Symbol (fish and tree)

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· <b>Special marking (ADR):</b>	Symbol (fish and tree)
· <b>Special precautions for user</b>	Warning: Flammable liquids
· <b>Danger code (Kemler):</b>	33
· <b>EMS Number:</b>	F-E, <u>S-E</u>
· <b>Stowage Category</b>	B
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (RED DYE MEDIUM, XYLENES), 3, II, ENVIRONMENTALLY HAZARDOUS

## 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 is listed.

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

92-52-4 biphenyl

\*

### · TSCA (Toxic Substances Control Act):

All ingredients are listed.

### · TSCA new (21st Century Act) (Substances not listed)

68365-87-7 aurio(1+) 2,6,6-trimethylbicyclo[3.1.1]heptanethiolate

Sulphurized Terpeneol and Turpentine

84961-50-2 clove, ext.

25085-50-1 formaldehyde, polymer with 4-(1,1-dimethyl-ethyl)phenol

84604-14-8 rosemary extr.

### · Proposition 65

- **Warning: This product contains a chemical known to the State of California to cause cancer**

None of the ingredients is listed.

- **Warning: This product contains a chemical known to the State of California to cause female reproductive hazards.**

None of the ingredients is listed.

(Contd. on page 13)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/20/2018

Version 5

Reviewed on 04/20/2018

Product ID#: **BRUSHING BRIGHT PALLADIUM****PBC6875**

(Contd. of page 12)

• **Warning: This product contains a chemical known to the State of California to cause male reproductive hazards**

None of the ingredients is listed.

• **Warning: This product contains a chemical known to the State of California to cause development toxicity**

None of the ingredients is listed.

• **Canadian Ingredient disclosure list**

• **Limit 0,1%**

108-94-1 cyclohexanone

95-63-6 1,2,4-trimethylbenzene

• **Limit 1%**

92-52-4 biphenyl

• **Carcerogenity categories**

• **EPA (Environmental Protection Agency)**

92-52-4 biphenyl

SC

• **TLV (Threshold Limit Value established by ACGIH) notations**

108-94-1 cyclohexanone

A3

• **MAK (German Maximum Workplace Concentration)**

108-94-1 cyclohexanone

3B

2.086%

92-52-4 biphenyl

3B

1.0%

8006-64-2 Turpentine, oil

3A

0.182%

50-00-0 Formaldehyde

4

0.0025%

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

None of the ingredients is listed.

• **National regulations:**

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

• **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.

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

## 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 vapor.

H227 Combustible liquid.

H228 Flammable solid.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

(Contd. on page 14)

# Safety Data Sheet

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Product ID#: **BRUSHING BRIGHT PALLADIUM****PBC6875**

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H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H340 May cause genetic defects.  
 H350 May cause cancer.  
 H400 Very toxic to aquatic life.  
 H401 Toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.

- **Contact:**

S. Carter  
 EHS Specialist

- **Date of preparation / last revision 04/20/2018 / 4**

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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)

HMS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Flam. Liq. 4: Flammable liquids – Category 4

Flam. Sol. 2: Flammable solids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Muta. 1B: Germ cell mutagenicity – Category 1B

Carc. 1B: Carcinogenicity – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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

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