

1 Identification

- **Product identifier**
- **Trade name:** *BRIGHT PLATINUM GP PT05*
- **Article number:** 88008012
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Decoration materials or decoration aids for glass or porcelain ware.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Heraeus Precious Metals GmbH & Co. KG
Heraeusstr. 12-14
D-63450 Hanau
- **Information department:**
Electronic Materials Division
Telefon: 0049 6181-35 4217
Telefax: 0049 6181-35 16 4217
Mail: tfd-msds@heraeus.com
- **Emergency telephone number:**
24-h-Number:
0049 6132-84463

2 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Chemical Mixture

· **Dangerous components:**

68916-35-8	Platinum sulforesinate	10-25%
8050-09-7	Rosin	10-25%
76-22-2	bornan-2-one	10-25%
140-11-4	benzyl acetate	5-10%
108-94-1	cyclohexanone	5-10%
141-78-6	ethyl acetate	2.5-5%
98-55-5	p-menth-1-en-8-ol	2.5-5%
8000-25-7	Rosemary oil	2.5-5%
8006-64-2	Turpentine, oil	2.5-5%
8000-29-1	Oils, citronella	≤ 2.5%
100-51-6	Benzyl alcohol	≤ 2.5%
67874-71-9	Hexanoic acid, 2-ethyl-, bismuth(3+) salt	≤ 2.5%
8000-41-7	Terpineol	≤ 2.5%
138-86-3	dipentene	≤ 2.5%
97-53-0	Eugenol	≤ 1.0%
7785-26-4	(-)-pin-2(3)-ene	≤ 1.0%
586-62-9	Cyclohexene, 1-methyl-4-(1-methylethylidene)-	≤ 1.0%
4180-23-8	(E)-anethole	≤ 0.5%
8001-61-4	Balsams, copaiba	≤ 0.5%
77-58-7	dibutyltin dilaurate	≤ 0.5%

USA

(Contd. on page 2)

Printing date 01/19/2014

Version number 10

Reviewed on 01/19/2014

Trade name: BRIGHT PLATINUM GP PT05

(Contd. of page 1)

3 Hazard(s) identification

· **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 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



GHS07



GHS08

· **Signal word Warning**

· **Hazard-determining components of labeling:**

Platinum sulforesinate

Rosin

Turpentine, oil

dipentene

· **Hazard statements**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

· **Precautionary statements**

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

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

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 3)

USA

Printing date 01/19/2014

Version number 10

Reviewed on 01/19/2014

Trade name: BRIGHT PLATINUM GP PT05

(Contd. of page 2)

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



Health = 1
Fire = 2
Reactivity = 0

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



Health = *1
Fire = 2
Reactivity = 0

4 First-aid measures

- **After inhalation:**
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:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire-fighting measures

- **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.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Wear protective clothing.
- **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.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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

- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

(Contd. on page 4)

Printing date 01/19/2014

Version number 10

Reviewed on 01/19/2014

Trade name: BRIGHT PLATINUM GP PT05

(Contd. of page 3)

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

Storage:
Requirements to be met by storerooms and receptacles: Store only in the original receptacle.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions:

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

Prevent from drying out.

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 item 7.

Components with limit values that require monitoring at the workplace:
8050-09-7 Rosin

TLV () (SEN); L NIC-DSEN, RSEN

76-22-2 bornan-2-one

 PEL () Long-term value: 2 mg/m³

 REL () Long-term value: 2 mg/m³

 TLV () Short-term value: 19 mg/m³, 3 ppm
 Long-term value: 12 mg/m³, 2 ppm

140-11-4 benzyl acetate

 TLV () Long-term value: 61 mg/m³, 10 ppm

108-94-1 cyclohexanone

 PEL () Long-term value: 200 mg/m³, 50 ppm

 REL () Long-term value: 100 mg/m³, 25 ppm
 Skin

 TLV () Long-term value: 50 mg/m³, 20 ppm
 Skin

141-78-6 ethyl acetate

 PEL () Long-term value: 1400 mg/m³, 400 ppm

 REL () Long-term value: 1400 mg/m³, 400 ppm

 TLV () Long-term value: 1440 mg/m³, 400 ppm

8006-64-2 Turpentine, oil

 PEL () Long-term value: 560 mg/m³, 100 ppm

 REL () Long-term value: 560 mg/m³, 100 ppm

 TLV () Long-term value: 112 mg/m³, 20 ppm
 (SEN) NIC-DSEN

100-51-6 Benzyl alcohol

WEEL () Long-term value: 10 ppm

138-86-3 dipentene

WEEL () Long-term value: 30 ppm

77-58-7 dibutyltin dilaurate

 PEL () Long-term value: 0.1 mg/m³
 as Sn

(Contd. on page 5)

Printing date 01/19/2014

Version number 10

Reviewed on 01/19/2014

Trade name: BRIGHT PLATINUM GP PT05

(Contd. of page 4)

REL ()	Long-term value: 0.1 mg/m ³ as Sn, Skin
TLV ()	Short-term value: 0.2 mg/m ³ Long-term value: 0.1 mg/m ³ as Sn, Skin

Ingredients with biological limit values:
108-94-1 cyclohexanone

BEI ()	80 mg/L Medium: urine Time: end of shift at end of workweek Parameter: 1,2-Cyclohexanediol with hydrolysis (nonspecific, semi-quantitative)
	8 mg/L Medium: urine Time: end of shift Parameter: Cyclohexanol with hydrolysis (nonspecific, semi-quantitative)

• **Additional information:** The lists that were valid during the creation were used as basis.

• **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.
- Avoid contact with the eyes and skin.

• **Breathing equipment:**

- Use suitable respiratory protective device in case of insufficient ventilation.
- Filter A2B2P3

• **Protection of hands:**



Protective gloves

- Only use chemical-protective gloves with CE-labeling of category III.
- Check protective gloves prior to each use for their proper condition.
- After use of gloves apply skin-cleaning agents and skin cosmetics.

• **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 can not be calculated in advance and has therefore to be checked prior to the application.

For short use and minimal soiling we recommend disposable protective gloves made of special nitrile.

For longer use and stronger soiling we recommend 4H-Chemicals-Protective-Gloves from the company SETON.

• **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

• **Body protection:** Protective work clothing

USA

(Contd. on page 6)

Trade name: **BRIGHT PLATINUM GP PT05**

(Contd. of page 5)

9 Physical and chemical properties

· General Information
· Appearance:

Form:	Fluid
Color:	Brown
Odor:	Aromatic
Odour threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· Flash point: 38 °C (100 °F)

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 420 °C (788 °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 at 20 °C (68 °F): 0.3 hPa

· Density: Not determined.

· Relative density: Not determined.

· Vapour 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 at 20 °C (68 °F):	80 mPas
Kinematic:	Not determined.

· Solvent content:

Organic solvents:	20-30 %
Water:	0 %

Solids content: 50-60 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.
(< 100 °C)

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known.

USA

(Contd. on page 7)

Trade name: **BRIGHT PLATINUM GP PT05**

(Contd. of page 6)

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

8050-09-7 Rosin

Oral	LD50	-2800 mg/kg (rat)
Dermal	LD50	->2000 mg/kg (rat)

140-11-4 benzyl acetate

Oral	LD50	2490 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rbt)

108-94-1 cyclohexanone

Oral	LD50	1900 mg/kg (rat)
Dermal	LD50	948 mg/kg (rabbit)
Inhalative	LC50/4 h	8000 mg/l (rat)

141-78-6 ethyl acetate

Oral	LD50	5620 mg/kg (rbt)
Dermal	LD50	> 18000 mg/kg (rabbit)
Inhalative	LC50/1h	200 mg/l (rat)
	LC50/4 h	1600 mg/l (rat)

98-55-5 p-menth-1-en-8-ol

Oral	LD50	4300 mg/kg (rat)
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8006-64-2 Turpentine, oil

Oral	LD50	5760 mg/kg (rat)
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8000-29-1 Oils, citronella

Oral	LD50	4600 mg/kg (mouse)
		7200 mg/kg (rat)
Dermal	LD50	4700 mg/kg (rabbit)

100-51-6 Benzyl alcohol

Oral	LD50	1230 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rbt)
Inhalative	LC50/4 h	8.8 mg/l (rat)

8000-41-7 Terpeneol

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	> 5000 mg/kg (rabbit)

138-86-3 dipentene

Oral	LD50	5300 mg/kg (rat) (RTECS)
Dermal	LD50	> 2000 mg/kg (kan)

97-53-0 Eugenol

Oral	LD50	2680 mg/kg (rat)
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7785-26-4 (-)-pin-2(3)-ene

Oral	LD50	3700 mg/kg (rat)
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586-62-9 Cyclohexene, 1-methyl-4-(1-methylethylidene)-

Oral	LD50	4390 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)

77-58-7 dibutyltin dilaurate

Oral	LD50	175 mg/kg (rat)
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(Contd. on page 8)

Printing date 01/19/2014

Version number 10

Reviewed on 01/19/2014

Trade name: BRIGHT PLATINUM GP PT05

(Contd. of page 7)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
- **Carcinogenic categories**

IARC (International Agency for Research on Cancer)

140-11-4	benzyl acetate	3
108-94-1	cyclohexanone	3
97-53-0	Eugenol	3
1330-20-7	xylene	3
108-88-3	toluene	3

NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

Aquatic toxicity:
108-94-1 cyclohexanone

EC50/48h 820 mg/l (daphnia)

LC50/96h 527 mg/l (fish)

141-78-6 ethyl acetate

EC10/18h 2900 mg/l (bak)

EC50/48h 717 mg/l (daphnia)

IC50/48h 3300 mg/l (algae)

LC50/48h 333 mg/l (fish)

LC50/96h 230 mg/l (fish)

8006-64-2 Turpentine, oil

EC50 14.1 mg/l (daphnia)

100-51-6 Benzyl alcohol

EC50/24h 400 mg/l (daphnia)

EC50/30min 71.4 mg/l (bak)

EC50/48h 854 mg/l (daphnia)

IC5/96h 640 mg/l (algae)

LC50/96h 10 mg/l (fish)

138-86-3 dipentene

EC50/48h 17 mg/l (daphnia) (ECOTOX Database)

LC50/96h 80 mg/l (fish) (Regenbogenforelle, ECOTOX Database)

97-53-0 Eugenol

EC50/48h 1.05 mg/l (daphnia)

- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Ecotoxicological effects:**

- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**

Water hazard class 2 (in accordance with VwVwS from 15.05.1999): 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.

(Contd. on page 9)

USA

Printing date 01/19/2014

Version number 10

Reviewed on 01/19/2014

Trade name: BRIGHT PLATINUM GP PT05

Harmful to aquatic organisms

(Contd. of page 8)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Contact manufacturer for recycling information.
- **Uncleaned packagings:**
- **Recommendation:** Contact manufacturer for recycling information.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1263
- **UN proper shipping name**
- **DOT** Paint
- **ADR** 1263 Paint, special provision 640E
- **IMDG, IATA** PAINT

- **Transport hazard class(es)**

- **DOT**



- **Class** 3 Flammable liquids.
- **Label** 3

- **ADR, IMDG, IATA**



- **Class** 3 Flammable liquids
- **Label** 3

- **Packing group**
- **DOT, ADR, IMDG, IATA** III

- **Environmental hazards:**
- **Marine pollutant:** No

- **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.

- **UN "Model Regulation":** UN1263, Paint, special provision 640E, 3, III

(Contd. on page 10)

Printing date 01/19/2014

Version number 10

Reviewed on 01/19/2014

Trade name: BRIGHT PLATINUM GP PT05

(Contd. of page 9)

15 Regulatory information

- Sara
- Section 355 (extremely hazardous substances):

None of the ingredient is listed.

- Section 313 (Specific toxic chemical listings):

1330-20-7 xylene

108-88-3 toluene

- TSCA (Toxic Substances Control Act):

All ingredients are listed.

- Proposition 65
- Chemicals known to cause cancer:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for females:

108-88-3 toluene

- Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

- Chemicals known to cause developmental toxicity:

108-88-3 toluene

- Cancerogenity categories
- EPA (Environmental Protection Agency)

1330-20-7 xylene

I

108-88-3 toluene

II

- TLV (Threshold Limit Value established by ACGIH)

76-22-2 bornan-2-one

A4

140-11-4 benzyl acetate

A4

108-94-1 cyclohexanone

A3

1330-20-7 xylene

A4

108-88-3 toluene

A4

77-58-7 dibutyltin dilaurate

A4

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

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- GHS label elements

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

- Hazard pictograms


GHS02

GHS07

GHS08

- Signal word Warning
- Hazard-determining components of labeling:

Platinum sulforesinate

Rosin

Turpentine, oil

dipentene

(Contd. on page 11)

Printing date 01/19/2014

Version number 10

Reviewed on 01/19/2014

Trade name: **BRIGHT PLATINUM GP PT05**

(Contd. of page 10)

Hazard statements

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H361 Suspected of damaging fertility or the unborn child.

Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

Department issuing MSDS: TFD-MSDS**Contact: Mr. Hesse****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)
- HMIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- (calc.): calculated

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

USA