CLT-P407Ser[Y][4]-MSDS_JAPAN-English-03.pdf

CLT-P407Ser[M][4]-MSDS_JAPAN-English-02.pdf

CLT-P407Ser[C][4]-MSDS_JAPAN-English-02.pdf

CLT-P407Ser[K][4]-MSDS_JAPAN-English-02.pdf

安全データシート

1. 化学品及び会社情報

化学品の名称 (製品名) CLT-P407Ser[Y][4]

推奨用途及び使用上の制限

使用上の制限 互換性のないプリンタでは使用しないでください。

HP Japan Inc.
5F Ojima2-2-1 Koto-ku
Tokyo, Japan 136-8711

毒物情報センターの電話番号 0120-50-3024

電話番号 (+81) 3 5628-1101

HP Inc. health effects line

米国内通話料無料 1-800-457-4209

(直通) 1-760-710-0048

HP Inc. Customer Care Line

米国内通話料無料 1-800-474-6836

(直通) 1-208-323-2551

電子メール hpcustomer.inquiries@hp.com

推奨用途及び使用上の制限

推奨用途 この製品は印刷システムの中で使用されるトナー混合物です。

2. 危険有害性の要約

ＧＨＳ分類

GHS分類基準に該当しない。

GHSラベル要素

記号 なし。

注意喚起語 なし。

危険有害性情報 なし。

注意書き

安全対策 なし。

応急措置 なし。

保管 なし。

廃棄 なし。

GHS分類に該当しない他の危険有害性 未知

その他の情報 なし。

3. 組成、成分情報

化学物質・混合物の区別 混合物

成分	CAS番号	官報公示整理番号 化審法	官報公示整理番号 安衛法	含有量 (%)
パラフィンワックスおよびハイドロカーボンワックス	8002-74-2	(2)-10, (8)-414	(2)-10, (8)-414	<10
二酸化チタン	13463-67-7	(1)-558, (5)-5225	(1)-558, (5)-5225, 2-(3)-509	<2.5

化学式 O2-Ti (13463-67-7), O2-Ti (13463-67-7)

4. 応急措置

吸入した場合 患者をすぐに新鮮な空気のある場所に移動させること。 刺激が続く場合は、医師の診察を受けること。

皮膚に付着した場合	接触した部分を石鹸および水で洗うこと。 刺激が進行しているか継続している場合には、医師の診断を受けてください。
目に入った場合	眼を擦らないこと。 直ちに大量のきれいな温水(低水圧)で15分以上または粒子が洗い流されるまで洗浄すること。 刺激が続く場合は、医師の診察を受けること。
飲み込んだ場合	口を水ですすぐこと。 水を1~2杯飲んでください。 無理に嘔吐させてはならない。ただちに医師の診察を受ける。
急性症状及び遅発性症状の最も重要な徴候症状	呼吸の困難。 咳。
応急措置をする者の保護	医療スタッフに物質が何であるかを伝え、自身の保護措置にも気をつけさせる。
医師への注意事項	症状にあった治療を施す。

5. 火災時の措置

消火剤	粉末消火剤、泡、二酸化炭素、水霧
使ってはならない消火剤	消火に水噴射をしない。これは火災を拡散することになる。
火災時の特有の危険有害性	火災の際は健康に有害なガスが生成されることがある。
特有の消火方法	危険でなければ、火災区域から容器を移動させる。
消火を行う者の保護	消防員は自給式呼吸装置を含む完全な保護服を着用すること。
一般的な火災の危険性	異常な火災や爆発の危険性は知られていない。
特定の消火方法	通常の消火手順を用いる。影響を受けた他の物質の有害性を考慮する。

6. 漏出時の措置

人体に対する注意事項、保護具及び緊急時措置	関係者以外の立ち入りを禁止する。 清掃中は適切な保護具および防護服を着用する。 曝露限界を超えたレベルの塵や煙に曝される可能性がある場合、NIOSH/MSHA の承認を受けたマスクを用いる。 保護具についてはSDS第 8 項を参照。
環境に対する注意事項	下水や水路、地面に排出しない。
封じ込め及び浄化の方法及び機材	清掃中、じん埃を発生させないでください。 防爆型の電気設備を使用する。 HEPAフィルタを備えた掃除機を使用して粉塵を集める。 この製品は水と混合せず、水の表面を拡散する。 リスクを伴わずに可能なら、物質の流れを遮断する。 こぼれたものは、掃きとるか掃除機で吸い取り、適切な容器に移し、廃棄する。

7. 取扱い及び保管上の注意

取扱い

技術的対策 (局所排気、全体換気等)	データなし。
安全取扱注意事項	データなし。
衛生措置	飲食物や動物飼料から離しておきます。 休憩前や製品取扱い直後には手を洗う。

保管

安全な保管条件	元の容器に密閉して保管する。 換気の良い場所で保管すること。 混蝕禁止物質 (SDSのセクション10を参照) から離して保管すること。
安全な容器包装材料	データなし。

8. 暴露防止及び保護措置

職業暴露限度

日本産業衛生学会 - 許容濃度

成分	タイプ	値	形式
二酸化チタン (CAS 13463-67-7)	TWA	4 mg/m3	総粉塵
		1 mg/m3 0.3 mg/m3	呼吸性粉塵

ACGIH

成分	タイプ	値	形式
パラフィンワックスおよびハイドロカーボンワックス (CAS 8002-74-2)	TWA	2 mg/m3	フューム。
二酸化チタン (CAS 13463-67-7)	TWA	10 mg/m3	

設備対策	良好で一般的な換気設備を使用してください。換気率は条件に合わせてください。必要な場合は、プロセスに対する遮蔽物、現場での排気装置、作業管理設備を利用して、気中浮遊レベルを推奨される曝露限界以下に維持してください。曝露限界が確立されていない場合は、気中浮遊レベルを容認できるレベルに維持してください。 エンジニアリング基準によりダスト微粒子の濃度をOEL以下に十分維持できない場合、呼吸器官を保護しなければなりません。 物質を研削や切削したり、粉塵が発生する可能性がある作業に使う場合は、適切な局地換気を行い暴露を推奨暴露限界未満に維持すること。
保護設備	
呼吸器の保護具	通常の使用においては、個人で呼吸用保護具を用いる必要はない。
手の保護具	ゴム手袋が望ましい。 取り扱った後、手を洗うこと。
眼の保護具	サイドシールドのついた安全眼鏡（またはゴーグル）を着用する。
皮膚及び身体の保護具	保護衣を着用しなければならない。

9. 物理的及び化学的性質

外観	
物理的状態	データなし。
形式	固体。 微粉
色	黄色.
匂い	無臭
臭いの閾値	情報なし
pH	該当しません
融点・凝固点	情報なし
沸点、初留点、及び沸騰範囲	該当しません
引火点	該当しません
燃焼又は爆発範囲	
燃焼範囲の下限(%)	不燃性
燃焼範囲の上限(%)	データなし。
爆発下限界（％）	データなし。
爆発上限界（％）	データなし。
蒸気圧	該当しません
比重	1.2 g/ml
溶解度	
水溶性	水に不溶。
溶解性(その他)	Partially soluble in toluene, chloroform and tetrahydrofurane
n-オクタノール / 水分配係数	データなし。
自然発火温度（発火点）	データなし
分解温度	> 200 °C (> 392 °F)
粘度（粘性率）	該当しません
その他の情報	
酸化性	情報なし
揮発物濃度	0 % 推定値

10. 安定性及び反応性

反応性	製品は、使用、保管、輸送の通常条件下で安定および非反応性です。
化学安定度	通常の保管条件では安定
危険有害反応可能性	データなし。
避けるべき条件	分解温度を超える温度を避ける。 混触危険物質との接触。
混触危険物質	本生成物は強い酸化剤と反応する可能性があります。
危険な分解生成物	一酸化炭素と二酸化炭素

11. 有害性情報

急性毒性
入手可能なデータに基づき、分類基準にあてはまらない。
LD50/経口/ラット>5000mg/kg.

皮膚腐食性及び皮膚刺激性
入手可能なデータに基づき、分類基準にあてはまらない。
既知の刺激性物質ではない (OECD 404).

眼に対する重篤な損傷性又は眼刺激性
入手可能なデータに基づき、分類基準にあてはまらない。
既知の刺激性物質ではない (OECD 405).

呼吸器または皮膚感作性

呼吸器感作性
呼吸器感作性物質でない。

皮膚感作性
この製品は、皮膚感作を引き起こすとは思われない。

生殖細胞変異原性
入手可能なデータに基づき、分類基準にあてはまらない。
Ames試験：陰性 (菌株： Salmonella typhimurium).

発癌性
入手可能なデータに基づき、分類基準にあてはまらない。

ACGIH発がん性物質

二酸化チタン (CAS 13463-67-7)	A4 ヒトに対する発がん性について分類されない。

IARC発がん性評価モノグラフ

二酸化チタン (CAS 13463-67-7)	2B ヒトに対する発がん性が疑われる。

日本産業衛生学会 - 発がん性物質

二酸化チタンナノ粒子 (CAS 13463-67-7)	2B ヒトに対する発がん性が疑われる。

生殖毒性
この製品は、生殖影響または発生影響を引き起こすとは予想されない。

特定標的臓器毒性 (単回暴露)
入手可能なデータに基づき、分類基準にあてはまらない。

特定標的臓器毒性 (反復暴露)
入手可能なデータに基づき、分類基準にあてはまらない。

吸引性呼吸器有害性
入手可能なデータに基づき、分類基準にあてはまらない。

その他の情報
本製品に関する詳細毒性データなし。
健康に及ぼす影響についてはセクション 2、応急措置についてはセクション 4 を参照。

In a study in rats (H.Muhle) by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration(16mg/m3) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m3) exposure group. But no pulmonary changes was reported in the lowest (1mg/m3) exposure group, the most relevant level to potential human exposures.

12. 環境影響情報

生態毒性
この製品は環境に有害であるとは分類されていない。しかし、大量の流出や繰り返しの流出が環境に有害な影響を及ぼさないとは限らない。

残留性/分解性
No data is available on the degradability of any ingredients in the mixture.

生体蓄積性
データなし。

土壌中の移動性
データなし。

オゾン層への有害性
データなし。

13. 廃棄上の注意

地域の廃棄規制
廃棄する際は、国または地域の法律、条例に従って行うこと。 トナー カートリッジのシュレッダー処理は粉塵爆発防止措置を講じていなければ実施しないこと。 toner containerを火中に投じないでください。加熱したtoner containerは重大なやけどの原因となるおそれがあります。 焼却しないこと。 本物質を下水 / 水道供給経路に流入させてはならない。

HP Planet Partners (trademark) では、HP 製 Inkjet および LaserJet 関連製品などを簡単にリサイクルできるようにするリサイクル プログラムを提供しています。本サービスの詳細およびお客様のお住まいの地域で本サービスをご利用になれるかどうかについては
、http://www.hp.com/recycle を参照してください。

14. 輸送上の注意

DOT
危険物には該当しない。

IATA

危険物には該当しない。

IMDG

危険物には該当しない。

ADR

危険物には該当しない。

詳細情報 米国 DOT、IATA、ADR、IMDG、RID では、危険物として規定されていません。

15. 規制情報

労働安全衛生法

通知対象物

固形パラフィン	別表第9 政令番号 170	0 - 10 %
酸化チタン(IV)	別表第9 政令番号 191	0 - 2.5 %

表示対象物

酸化チタン(IV)	0 - 2.5 %

毒物及び劇物取締法

特定毒物

該当せず。

毒物

該当せず。

劇物

該当せず。

化学物質の審査及び製造等の規制に関する法律

第一種特定化学物質

該当せず。

第二種特定化学物質

該当せず。

監視化学物質

該当せず。

優先評価化学物質

該当せず。

届出不要物質

酸化チタン(IV)

化学物質排出把握管理促進法

特定第一種指定化学物質(物質名、政令番号、含量)

該当せず。

第一種指定化学物質(物質名、政令番号、含量)

該当せず。

第二種指定化学物質(物質名、政令番号、含量)

該当せず。

消防法 消防法の危険物に該当しない。

船舶安全法・危規則 該当せず。

航空法・施行規則 該当せず。

火薬類取締法

該当せず。

海洋汚染防止法

パラフィンワックス	Y類
酸化チタン	Z類

規制情報 このHP 製品に含まれるすべての化学物質は、以下の国々における化学物質管理法の下で審査を受けたか、または通知を免除される： 米国（TSCA）、EU (EINECS/ELINCS), スイス, カナダ (DSL/NDSL), オーストラリア, 日本, フィリピン, 韓国, ニュージーランドおよび中国

16. その他の情報

この安全データシートのドキュメントはHPの顧客に無料で提供されています。データは、このドキュメントが作成された時点でHPが知りうる中で最新のものであり、かつ正確なものであると考えられています。これは製品の特定のプロパティを保証するものとして受け取られるべきでなく、また特定の用途に適していると受け取られるべきでもありません。このドキュメントは、上記セクション1で指定された司法管轄権の要件に対して作成されたものであり、他の国々における規制上の要件を満たしているわけではありません。

この安全性データシートは、HP純正のインク (トナー) サプライ品で提供されるHPインク (トナー) に関する情報を通知するために作成されています。当社の安全性データシートが、再充填品、再製造品、互換製品、その他のHP純正でないサプライ品に同梱されている場合、本書の情報は、そのような製品に関する情報を伝えるためのものではなく、本書の情報と購入された製品に関する情報には大きな差異があることにご注意ください。個人用保護具、曝露リスク、安全な取り扱いに関するガイダンスなどの該当する情報については、再充填品、再製造品、互換サプライ品の販売者にお問い合わせください。HPは、当社のリサイクルプログラムにおいて、再充填品、再製造品、互換サプライ品を受け入れません。

改訂情報 1. Product and Company Identification: その他の商標名

略語の説明

ACGIH	米国産業衛生専門家会議(American Conference of Governmental Industrial Hygienists)
CAS	ケミカル・アブストラクト・サービス
CERCLA	包括的環境対応補償責任法
CFR	連邦規制基準
COC	クリーブランド開放式
DOT	（米）運輸省　、　ＤＯＴ
EPCRA	緊急計画・地域社会の知る権利法
IARC	国際がん研究機関
NIOSH	国立労働安全衛生研究所
NTP	国家毒性プログラム
OSHA	労働安全衛生局
PEL	許容暴露限界
RCRA	米）資源保護回収法
REC	推奨
REL	推奨暴露限界
SARA	スーパーファンド改正・再承認法
STEL	短期暴露限界
TCLP: <値>	有害物質の溶出毒性試験法
管理濃度	しきい値限界値
TSCA	有害物質規制法
VOC	揮発性有機化合物

SAFETY DATA SHEET

Issue date: 26-May-2018
Version #: 01

1. Chemical and company identification

Name of chemical (Product name) CLT-P407Ser[M][4]

Recommended use of the chemical and restrictions on use

Restrictions on use Do not use with non compatible printer.

HP Japan Inc.
5F Ojima2-2-1 Koto-ku
Tokyo, Japan 136-8711

Poison Information Centre 0120-50-3024

Telephone (+81) 3 5628-1101

HP Inc. health effects line

(Toll-free within the US) 1-800-457-4209

(Direct) 1-760-710-0048

HP Inc. Customer Care Line

(Toll-free within the US) 1-800-474-6836

(Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

Recommended use of the chemical and restrictions on use

Intended use This product is a toner mixture that is used in printing systems.

2. Hazards identification

GHS classification

The product is not classified according to GHS.

GHS label elements

Symbols None.

Signal words None.

Hazard statement None.

Precautionary statement

Prevention None.

Response None.

Storage None.

Disposal None.

Other hazards which do not result in classification None known.

Supplemental information None.

3. Composition/information on ingredients

Substance or mixture Mixture

Components	CAS Number	Gazette notification ENCS no.	Gazette notification ISHL no.	Concentration (%)
Paraffin waxes and Hydrocarbon waxes	8002-74-2	(2)-10, (8)-414	(2)-10, (8)-414	<10
Titanium dioxide	13463-67-7	(1)-558, (5)-5225	(1)-558, (5)-5225, 2-(3)-509	<2.5

Chemical formula O2-Ti (13463-67-7), O2-Ti (13463-67-7)

4. First aid measures

If inhaled Move person to fresh air immediately. If irritation persists, consult a physician.

If on skin Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

If in eyes	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists, consult a physician.
If swallowed	Rinse mouth with water. Drink one to two glasses of water. DO NOT induce vomiting. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Difficulty in breathing. Coughing.
Protection of first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media	Dry chemical, foam, carbon dioxide, water fog.
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protection of fire-fighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
General fire hazards	No unusual fire or explosion hazards noted.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. See Section 8 of the SDS for Personal Protective Equipment.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods or materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Use explosion proof electric equipment. Collect dust using a vacuum cleaner equipped with HEPA filter. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation)	Not available.
Safe handling advice	Not available.
Hygiene measures	Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product.

Storage

Safe storage conditions	Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
Safe packaging materials	Not available.

8. Exposure controls/personal protection

Occupational exposure limits

Japan. OELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits)

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	4 mg/m3	Total dust.
		1 mg/m3	Respirable dust.
		0.3 mg/m3	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Paraffin waxes and Hydrocarbon waxes (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Engineering measures	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.
Personal protective equipment	
Respiratory protection	No personal respiratory protective equipment required under normal conditions of use.
Hand protection	Rubber gloves are recommended. Wash hands after handling.
Eye protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Protection suit must be worn.

9. Physical and chemical properties

Appearance	
Physical state	Not available.
Form	Solid. Fine powder
Color	Magenta
Odor	Odorless
pH	Not available.
Melting point/Freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Specific gravity	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	> 392 °F (> 200 °C)
Viscosity (Coefficient of viscosity)	Not available.
Other information	
Oxidizing properties	No information available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal storage conditions.
Possibility of hazardous reactions	Not available.
Conditions to avoid	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
Incompatible materials	This product may react with strong oxidizing agents.
Hazardous decomposition products	Carbon monoxide and carbon dioxide.

11. Toxicological information

Acute toxicity	Based on available data, the classification criteria are not met. LD50/oral/rat >5000 mg/kg.

Skin corrosion/irritation Based on available data, the classification criteria are not met.
Not a known irritant. (OECD 404).

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.
Not a known irritant. (OECD 405).

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Based on available data, the classification criteria are not met.
Negative Ames Test (Test strains: Salmonella typhimurium).

Carcinogenicity Based on available data, the classification criteria are not met.

ACGIH Carcinogens

Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

Japan Society for Occupational Health: Carcinogen

TITANIUM DIOXIDE (NANOPARTICLE, AS TI) (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

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

Other information Complete toxicity data are not available for this specific formulation
Refer to Section 2 for potential health effects and Section 4 for first aid measures.

In a study in rats (H.Muhle) by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration(16mg/m3) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m3) exposure group. But no pulmonary changes was reported in the lowest (1mg/m3) exposure group, the most relevant level to potential human exposures.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulation Not available.

Mobility in soil Not available.

Hazardous to the ozone layer Not available.

13. Disposal considerations

Local disposal regulations Dispose of in compliance with federal, state, and local regulations. Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Do not put toner container into fire; heated toner may cause severe burns. Do not incinerate. Do not allow this material to drain into sewers/water supplies.

HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit http://www.hp.com/recycle.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

Further information Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

15. Regulatory information

Industrial Safety and Health Act

Notifiable substances

SOLID PARAFFIN	Table 9 Ordinance No. 170	0 - 10 %
TITANIUM DIOXIDE	Table 9 Ordinance No. 191	0 - 2.5 %

Labeling substances

TITANIUM DIOXIDE	0 - 2.5 %

Poisonous and Deleterious Substances Control Act

Specified poisonous substances

Not regulated.

Poisonous substances

Not regulated.

Deleterious substances

Not regulated.

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Class I specified chemical substances

Not regulated.

Class II specified chemical substances

Not regulated.

Monitoring chemical substances

Not regulated.

Priority Assessment Chemical Substances (PACs)

Not regulated.

Reporting Exempted Substances

TITANIUM DIOXIDE

Law concerning Pollutant Release and Transfer Register

Specified class 1 substances (substance name, ordinance number and content)

Not regulated.

Class 1 substances (substance name, ordinance number and content)

Not regulated.

Class 2 substances (substance name, ordinance number and content)

Not regulated.

Fire Service Act	Not dangerous goods under Fire Service Law
Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule	Not regulated.
Air Law, Enforcement Rule	Not regulated.

Explosives Control Act

Not regulated.

Act on Prevention of Marine Pollution and Maritime Disaster

PARAFFIN WAX	Category: Y
TITANIUMOXIDE	Category: Z

Regulatory information	All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

16. Other information

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

Revision information	1. Product and Company Identification: Alternate Trade Names

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds

SAFETY DATA SHEET

1. Chemical and company identification

Name of chemical (Product name) CLT-P407Ser[C][4]

Recommended use of the chemical and restrictions on use

Restrictions on use Do not use with non compatible printer.

HP Japan Inc.
5F Ojima2-2-1 Koto-ku
Tokyo, Japan 136-8711

Poison Information Centre 0120-50-3024

Telephone (+81) 3 5628-1101

HP Inc. health effects line

(Toll-free within the US) 1-800-457-4209

(Direct) 1-760-710-0048

HP Inc. Customer Care Line

(Toll-free within the US) 1-800-474-6836

(Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

Recommended use of the chemical and restrictions on use

Intended use This product is a toner mixture that is used in printing systems.

2. Hazards identification

GHS classification

The product is not classified according to GHS.

GHS label elements

Symbols None.

Signal words None.

Hazard statement None.

Precautionary statement

Prevention None.

Response None.

Storage None.

Disposal None.

Other hazards which do not result in classification None known.

Supplemental information None.

3. Composition/information on ingredients

Substance or mixture Mixture

Components	CAS Number	Gazette notification ENCS no.	Gazette notification ISHL no.	Concentration (%)
Paraffin waxes and Hydrocarbon waxes	8002-74-2	(2)-10, (8)-414	(2)-10, (8)-414	<10
Titanium dioxide	13463-67-7	(1)-558, (5)-5225	(1)-558, (5)-5225, 2-(3)-509	<2.5

Chemical formula O2-Ti (13463-67-7), O2-Ti (13463-67-7)

4. First aid measures

If inhaled Move person to fresh air immediately. If irritation persists, consult a physician.

If on skin Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

If in eyes	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists, consult a physician.
If swallowed	Rinse mouth with water. Drink one to two glasses of water. DO NOT induce vomiting. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Difficulty in breathing. Coughing.
Protection of first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media	Dry chemical, foam, carbon dioxide, water fog.
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protection of fire-fighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
General fire hazards	No unusual fire or explosion hazards noted.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. See Section 8 of the SDS for Personal Protective Equipment.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods or materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Use explosion proof electric equipment. Collect dust using a vacuum cleaner equipped with HEPA filter. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation)	Not available.
Safe handling advice	Not available.
Hygiene measures	Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product.

Storage

Safe storage conditions	Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
Safe packaging materials	Not available.

8. Exposure controls/personal protection

Occupational exposure limits

Japan. OELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits)

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	4 mg/m3	Total dust.
		1 mg/m3	Respirable dust.
		0.3 mg/m3	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Paraffin waxes and Hydrocarbon waxes (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Engineering measures	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.
Personal protective equipment	
Respiratory protection	No personal respiratory protective equipment required under normal conditions of use.
Hand protection	Rubber gloves are recommended. Wash hands after handling.
Eye protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Protection suit must be worn.

9. Physical and chemical properties

Appearance	
Physical state	Not available.
Form	Solid. Fine powder
Color	Cyan
Odor	Odorless
pH	Not available.
Melting point/Freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Specific gravity	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	> 392 °F (> 200 °C)
Viscosity (Coefficient of viscosity)	Not available.
Other information	
Oxidizing properties	No information available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal storage conditions.
Possibility of hazardous reactions	Not available.
Conditions to avoid	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
Incompatible materials	This product may react with strong oxidizing agents.
Hazardous decomposition products	Carbon monoxide and carbon dioxide.

11. Toxicological information

Acute toxicity	Based on available data, the classification criteria are not met. LD50/oral/rat >5000 mg/kg.

Skin corrosion/irritation Based on available data, the classification criteria are not met.
Not a known irritant. (OECD 404).

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.
Not a known irritant. (OECD 405).

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Based on available data, the classification criteria are not met.
Negative Ames Test (Test strains: Salmonella typhimurium).

Carcinogenicity Based on available data, the classification criteria are not met.

ACGIH Carcinogens

Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

Japan Society for Occupational Health: Carcinogen

TITANIUM DIOXIDE (NANOPARTICLE, AS TI) (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

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

Other information Complete toxicity data are not available for this specific formulation
Refer to Section 2 for potential health effects and Section 4 for first aid measures.

In a study in rats (H.Muhle) by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration(16mg/m3) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m3) exposure group. But no pulmonary changes was reported in the lowest (1mg/m3) exposure group, the most relevant level to potential human exposures.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulation Not available.

Mobility in soil Not available.

Hazardous to the ozone layer Not available.

13. Disposal considerations

Local disposal regulations Dispose of in compliance with federal, state, and local regulations. Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Do not put toner container into fire; heated toner may cause severe burns. Do not incinerate. Do not allow this material to drain into sewers/water supplies.

HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit http://www.hp.com/recycle.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

Further information Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

15. Regulatory information

Industrial Safety and Health Act

Notifiable substances

SOLID PARAFFIN	Table 9 Ordinance No. 170	0 - 10 %
TITANIUM DIOXIDE	Table 9 Ordinance No. 191	0 - 2.5 %

Labeling substances

TITANIUM DIOXIDE	0 - 2.5 %

Poisonous and Deleterious Substances Control Act

Specified poisonous substances

Not regulated.

Poisonous substances

Not regulated.

Deleterious substances

Not regulated.

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Class I specified chemical substances

Not regulated.

Class II specified chemical substances

Not regulated.

Monitoring chemical substances

Not regulated.

Priority Assessment Chemical Substances (PACs)

Not regulated.

Reporting Exempted Substances

TITANIUM DIOXIDE

Law concerning Pollutant Release and Transfer Register

Specified class 1 substances (substance name, ordinance number and content)

Not regulated.

Class 1 substances (substance name, ordinance number and content)

Not regulated.

Class 2 substances (substance name, ordinance number and content)

Not regulated.

Fire Service Act	Not dangerous goods under Fire Service Law
Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule	Not regulated.
Air Law, Enforcement Rule	Not regulated.

Explosives Control Act

Not regulated.

Act on Prevention of Marine Pollution and Maritime Disaster

PARAFFIN WAX	Category: Y
TITANIUMOXIDE	Category: Z

Regulatory information	All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

16. Other information

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

Revision information	1. Product and Company Identification: Alternate Trade Names

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds

SAFETY DATA SHEET

Issue date: 26-May-2018
Version #: 01

1. Chemical and company identification

Name of chemical (Product name) CLT-P407Ser[K][4]

Recommended use of the chemical and restrictions on use

Restrictions on use Do not use with non compatible printer.

HP Japan Inc.
5F Ojima2-2-1 Koto-ku
Tokyo, Japan 136-8711

Poison Information Centre 0120-50-3024

Telephone (+81) 3 5628-1101

HP Inc. health effects line

(Toll-free within the US) 1-800-457-4209

(Direct) 1-760-710-0048

HP Inc. Customer Care Line

(Toll-free within the US) 1-800-474-6836

(Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

Recommended use of the chemical and restrictions on use

Intended use This product is a toner mixture that is used in printing systems.

2. Hazards identification

GHS classification

The product is not classified according to GHS.

GHS label elements

Symbols None.

Signal words None.

Hazard statement None.

Precautionary statement

Prevention None.

Response None.

Storage None.

Disposal None.

Other hazards which do not result in classification Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

Supplemental information None.

3. Composition/information on ingredients

Substance or mixture Mixture

		Gazette notification		
Components	**CAS Number**	**ENCS no.**	**ISHL no.**	**Concentration (%)**
Paraffin waxes and Hydrocarbon waxes	8002-74-2	(2)-10, (8)-414	(2)-10, (8)-414	<10
Carbon black	1333-86-4	5-3328; 5-5222	(5)-5222	<5
Titanium dioxide	13463-67-7	(1)-558, (5)-5225	(1)-558, (5)-5225, 2-(3)-509	<2.5

Chemical formula UVCB (1333-86-4), UVCB (1333-86-4), O2-Ti (13463-67-7), O2-Ti (13463-67-7)

4. First aid measures

If inhaled	Move person to fresh air immediately. If irritation persists, consult a physician.
If on skin	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
If in eyes	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists, consult a physician.
If swallowed	Rinse mouth with water. Drink one to two glasses of water. DO NOT induce vomiting. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Difficulty in breathing. Coughing.
Protection of first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media	Dry chemical, foam, carbon dioxide, water fog.
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protection of fire-fighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
General fire hazards	No unusual fire or explosion hazards noted.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. See Section 8 of the SDS for Personal Protective Equipment.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods or materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Use explosion proof electric equipment. Collect dust using a vacuum cleaner equipped with HEPA filter. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation)	Not available.
Safe handling advice	Not available.
Hygiene measures	Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product.

Storage

Safe storage conditions	Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
Safe packaging materials	Not available.

8. Exposure controls/personal protection

Occupational exposure limits

Japan. OELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits)

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	TWA	4 mg/m3	Total dust.
		1 mg/m3	Respirable dust.
Titanium dioxide (CAS 13463-67-7)	TWA	4 mg/m3	Total dust.
		1 mg/m3	Respirable dust.
		0.3 mg/m3	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Paraffin waxes and Hydrocarbon waxes (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Engineering measures Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Personal protective equipment

Respiratory protection No personal respiratory protective equipment required under normal conditions of use.

Hand protection Rubber gloves are recommended. Wash hands after handling.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and body protection Protection suit must be worn.

9. Physical and chemical properties

Appearance

Physical state Not available.

Form Solid. Fine powder

Color Black.

Odor Odorless

pH Not available.

Melting point/Freezing point Not available.

Boiling point, initial boiling point, and boiling range Not available.

Flash point Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Specific gravity Not available.

Solubility(ies)

Solubility (water) Insoluble in water.

Solubility (other) Partially soluble in toluene, chloroform and tetrahydrofuran

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature > 392 °F (> 200 °C)

Viscosity (Coefficient of viscosity) Not available.

Other information

Oxidizing properties No information available.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable under normal storage conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
Incompatible materials	This product may react with strong oxidizing agents.
Hazardous decomposition products	Carbon monoxide and carbon dioxide.

11. Toxicological information

Acute toxicity Based on available data, the classification criteria are not met.
LD50/oral/rat >5000 mg/kg.

Components	Species	Test Results
Carbon black (CAS 1333-86-4)		
Acute		
Oral		
LD50	Rat	> 10000 mg/kg

Skin corrosion/irritation Based on available data, the classification criteria are not met.
Not a known irritant. (OECD 404).

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.
Not a known irritant. (OECD 405).

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Based on available data, the classification criteria are not met.
Negative Ames Test (Test strains: Salmonella typhimurium).

Carcinogenicity Based on available data, the classification criteria are not met.

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.

ACGIH Carcinogens

Carbon black (CAS 1333-86-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

Japan Society for Occupational Health: Carcinogen

CARBON BLACK, RESPIRABLE DUST (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
TITANIUM DIOXIDE (NANOPARTICLE, AS TI) (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

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

Other information

Complete toxicity data are not available for this specific formulation
Refer to Section 2 for potential health effects and Section 4 for first aid measures.

In a study in rats (H.Muhle) by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration(16mg/m3) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m3) exposure group. But no pulmonary changes was reported in the lowest (1mg/m3) exposure group, the most relevant level to potential human exposures.

In 1996, the IARC revaluated carbon black as a GROUP 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the developer of lung tumors in rat receiving chronic inhalation exposures to free carbon black at level that induce particle overload of the lung. Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulation Not available.

Mobility in soil Not available.

Hazardous to the ozone layer Not available.

13. Disposal considerations

Local disposal regulations

Dispose of in compliance with federal, state, and local regulations. Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Do not put toner container into fire; heated toner may cause severe burns. Do not incinerate. Do not allow this material to drain into sewers/water supplies.

HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit http://www.hp.com/recycle.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

Further information Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

15. Regulatory information

Industrial Safety and Health Act

Notifiable substances

CARBON BLACK	Table 9 Ordinance No. 130	0 - 5.0 %
SOLID PARAFFIN	Table 9 Ordinance No. 170	0 - 10 %
TITANIUM DIOXIDE	Table 9 Ordinance No. 191	0 - 2.5 %

Labeling substances

CARBONBLACK	0 - 5.0 %
TITANIUM DIOXIDE	0 - 2.5 %

Poisonous and Deleterious Substances Control Act

Specified poisonous substances

Not regulated.

Poisonous substances

Not regulated.

Deleterious substances

Not regulated.

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Class I specified chemical substances

Not regulated.

Class II specified chemical substances
Not regulated.
Monitoring chemical substances
Not regulated.
Priority Assessment Chemical Substances (PACs)
Not regulated.
Reporting Exempted Substances
TITANIUM DIOXIDE

Law concerning Pollutant Release and Transfer Register
Specified class 1 substances (substance name, ordinance number and content)
Not regulated.
Class 1 substances (substance name, ordinance number and content)
Not regulated.
Class 2 substances (substance name, ordinance number and content)
Not regulated.

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule Not regulated.

Air Law, Enforcement Rule Not regulated.

Explosives Control Act
Not regulated.

Act on Prevention of Marine Pollution and Maritime Disaster

PARAFFIN WAX	Category: Y
TITANIUMOXIDE	Category: Z

Regulatory information All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

16. Other information

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

Revision information 1. Product and Company Identification: Alternate Trade Names

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds