

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING**

**1.1 product identifier**

Product code : KU403PPG01  
 Product name : PLATE PLUS

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Product use : Speciality cleaner for use in lithographic printing  
 Uses advised against : None known.

**1.3 Details of the supplier of the safety data sheet**

Manufacturer / Distributor : Flint Group,  
 Print Media Europe,  
 Varn House,  
 Northbank Industrial Park,  
 Irlam,  
 Greater Manchester,  
 M44 5BL  
 England.  
 e-mail address of person responsible for this SDS : compliancecentre@flintgrp.com

**1.4 Emergency telephone number (with hours of operation)**

+44 (0) 161 775 5412 (8:00 h - 17:00 h)

**History**

Date of printing : 13.05.2015.  
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 Date of previous issue : 20.04.2015.  
 Version : 14.02

**2. HAZARDS IDENTIFICATION**

**Classification and labeling according to Regulation (EC) 1907/2006 (REACH)**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**2.1b Classification of the substance or mixture**

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification :  R10  
 Xn; R48/20  
 R66, R67  
 N; R51/53  
 Physical/chemical hazards : Flammable.  
 Human health hazards :  Harmful: danger of serious damage to health by prolonged exposure through inhalation. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.  
 Environmental hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2b Label elements**

Hazard symbol or symbols : 

Harmful, Dangerous for the environment

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## 2. HAZARDS IDENTIFICATION

- Risk phrases** : F10- Flammable.  
R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R66- Repeated exposure may cause skin dryness or cracking.  
R67- Vapors may cause drowsiness and dizziness.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Safety phrases** : S23- Do not breathe gas, fumes or vapor.  
S36- Wear suitable protective clothing.  
S43- In case of fire, use dry chemical powder.  
S60- This material and its container must be disposed of as hazardous waste.  
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
- Contains** : Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

### 2.3 Other hazards which do not result in classification

Results of PBT and vPvB assessment: See sections 12 for details.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name	%	REACH Registration number	CAS number	EC number	Classification
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	>=35 - <50	01-2119458049-33	64742-82-1 (CAS valid outside EU)	919-446-0	R10 Xn; R48/20, R65 R66, R67 N; R51/53 [1]
solvent naphtha (petroleum), light arom.	>=10 - <15	01-2119486773-24	64742-95-6	265-199-0	R10 Xn; R65 Xi; R37 R66, R67 N; R51/53 [1]
citric acid	>=5 - <10	01-2119457026-42	77-92-9		Xi; R36 [1]
phosphoric acid ...%	<10	01-2119485924-24	7664-38-2		C; R34 [1] [2]

See Section 16 for the full text of the R-phrases declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in Section 8.

Hazardous ingredients / Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS number	Hazard statements	Classification
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	64742-82-1 (CAS valid outside EU)	Flammable liquid and vapor. May be fatal if swallowed and enters airways. May cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure if inhaled. Toxic to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking.	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (inhalation) - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
solvent naphtha (petroleum), light arom.	64742-95-6	Flammable liquid and vapor. May be fatal if swallowed and enters airways. May cause respiratory irritation. May cause drowsiness and dizziness. Toxic to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking. Causes serious eye irritation.	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
citric acid	77-92-9	Causes severe skin burns and eye damage.	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
phosphoric acid ...%	7664-38-2	Causes severe skin burns and eye damage.	SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

**4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention/advice.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Give nothing by mouth. Do NOT induce vomiting.

Use suitable protective equipment (section 8).

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

See toxicological information (Section 11)

**4.3 Indication of any immediate medical attention and special treatment needed**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

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## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable Extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray

**Extinguishing media not to be used** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

### 5.3 Advice for fire-fighters

Do not release runoff from fire to drains or watercourses.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition and ventilate the area.

Avoid breathing vapor or spray. Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

### 6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

### 6.4 Reference to other sections

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with all local, regional, national and international regulations.

Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).

Observe label precautions. Keep container tightly closed and in a well-ventilated place.

Keep away from sources of ignition - No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

Not applicable.

### 7.4 Additional information

Not applicable.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

Ingredient name	Occupational exposure limits
Phosphoric acid ...%	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 2 mg/m <sup>3</sup> 15 minutes. TWA: 1 mg/m <sup>3</sup> 8 hours.

**Other Exposure limits** : CMR: See toxicological information (Section 11)

**8.2 Exposure controls**

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

**Individual protection measures**

- Respiratory system** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.
- Skin and body** : Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.
- Hands** : The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- For prolonged or repeated handling, use the following type of gloves:

Recommended:

4 - 8 hours: polyethylene (PE) or Viton® gloves.

References: <http://www.esig.org/en/library/publications/best-practice-guides>

**Eyes** : Use safety eyewear designed to protect against splash of liquids.

**Environmental exposure controls**

Do not allow to enter drains or watercourses.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid.
- Color** : Red.
- Odor** : Hydrocarbon.
- Odor threshold** : Not available.
- pH** : 0.5 to 2
- Melting point** : Not available.
- Boiling point** :  $\geq 100$  °C
- Flash point** : Closed cup: 50°C [Measured]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Explosion limits**
- Lower:** : 0 %Vol
- Upper:** : 8 %Vol
- Vapor pressure** :  $< 1.1$  hPa
- Vapor density** : Not available.
- Density** :  $\sim 1$  g/cm<sup>3</sup>

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Solubility</b>	: insoluble in water.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: ca 280 °C
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (20°C (68°F)): >4 cm <sup>2</sup> /s (>400 cSt) Kinematic (40°C (104°F)): >0.21 cm <sup>2</sup> /s (>21 cSt)
<b>Explosive properties</b>	: Not available.
<b>Oxidizing properties</b>	: Not available.

**9.2 Other information**

**SADT** : Not available.

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

Not available.

**10.2 Chemical stability**

Stable under recommended storage and handling conditions (see Section 7).

**10.3 Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid**

Avoid all possible sources of ignition (spark or flame).

**10.5 Incompatible materials**

Keep away from the following materials to prevent strong exothermic reactions:  
oxidizing agents, strong alkalis, strong acids

**10.6 Hazardous decomposition products**

Decomposition products may include the following materials:  
carbon monoxide, carbon dioxide, smoke, oxides of nitrogen

**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Ingestion may cause gastrointestinal irritation and diarrhea. If splashed in the eyes, the liquid may cause irritation and reversible damage.

**Substances / Mixtures**

**Acute toxicity** :

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	8400 mg/kg	-
<input checked="" type="checkbox"/> citric acid	LD50 Oral	Rat	3 g/kg	-

**Irritation/Corrosion** : Not available.

**Sensitization** : Not available.

**Mutagenicity** : Not available.

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## 11. TOXICOLOGICAL INFORMATION

<b>Carcinogenicity</b>	: Not available.
<b>Reproductive toxicity</b>	: Not available.
<b>Specific target organ toxicity (single exposure)</b>	: Not available.
<b>Specific target organ toxicity (repeated exposure)</b>	: Not available.
<b>Aspiration hazard</b>	: Not available.
<b>Chronic toxicity</b>	: Not available.
<b>Teratogenicity</b>	: Not available.

### Other information

#### **Toxicokinetics**

<b>Absorption</b>	: Not available.
<b>Distribution</b>	:
<b>Metabolism</b>	: Not available.
<b>Elimination</b>	: Not available.

## 12. ECOLOGICAL INFORMATION

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 2 and 3 for details.

### 12.1 Toxicity data

Product/ingredient name	Result	Species	Exposure
citric acid	Acute LC50 160000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours

### 12.2 Persistence/degradability

Not available.

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

Not available.

### 12.5 Results of PBT and vPvB assessment

<b>PBT</b>	: P: Not available. B: Not available. T: Not available.
<b>vPvB</b>	: vP: Not available. vB: Not available.

### 12.6 Other adverse effects

<b>AOX</b>	: Not available.
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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Do not allow to enter drains or watercourses.  
Dispose of according to all federal, state and local applicable regulations.

<b>Methods of disposal</b>	: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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### 13. DISPOSAL CONSIDERATIONS

- European waste catalogue (EWC)** : The European Waste Catalogue classification of this product, when disposed of as waste, is:  
07 07 04\* other organic solvents, washing liquids and mother liquors
- Hazardous waste** : Yes.

### 14. TRANSPORT INFORMATION

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**International transport regulations**

- 14.1 UN number** : UN1268
- 14.2 Proper shipping name** : PETROLEUM DISTILLATES, N.O.S.
- 14.3 Transport hazard class(es)** : 3



- 14.4 Packing group** : III
- 14.5 Environmental hazards** : Hazardous to aquatic environment
- 14.6 Special precautions for user** : Not applicable.

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

**Additional information**

**ADR ADN**

- Classification code** : F1
- Special provisions** : 640E
- Hazard identification number** : 30
- ADR Tunnel Code:** : (D/E)
- Limited quantity** : 5 L

**IMDG**

- Emergency schedules (EmS)** : F-E, S-E
- Marine pollutant** : Yes.
- Marine pollutant substances** : Naphtha (petroleum), hydrodesulfurized heavy, Solvent naphtha (petroleum), light arom.
- Limited quantity** : 5 l

**IATA**

	Max. Qty	Packaging instruction
<b>Passenger and Cargo Aircraft</b>	60 L	355
<b>Cargo Aircraft Only</b>	220 L	366
<b>Limited quantity</b>	10 L	Y344

### 15. REGULATORY INFORMATION

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

- EU regulations** : The product is classified as dangerous according to Directive 1999/45/EC and its amendments.  
See sections 2 and 3 for details.
- VOC content** : 56.8 % 545.5 g/L
- Europe inventory** : All components are listed or exempted.

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## 15. REGULATORY INFORMATION

**Industrial use** : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

### 15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

## 16. OTHER INFORMATION

**CEPE MSDS Code** : 1

**Full text of R-phrases referred to in sections 2 and 3 - Europe**

☑10- Flammable.

R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R65- Harmful: may cause lung damage if swallowed.

R34- Causes burns.

R36- Irritating to eyes.

R37- Irritating to respiratory system.

R66- Repeated exposure may cause skin dryness or cracking.

R67- Vapors may cause drowsiness and dizziness.

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**The information in this Safety Data Sheet is required pursuant to Annex II to Regulation (EC) No 1907/2006.**

**Date of issue/Date of revision** : 5/5/2015.

**Version** : 14.02

☑ Indicates information that has changed from previously issued version.

### Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.