

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

1.1 product identifier

Product code : KU400PDG01

Product name : PEARLdry

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

Product use : Roller and blanket wash for 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 : 05.09.2014.

Date of issue/ Date of revision : 01.07.2014.

Date of previous issue : 22.05.2014.

Version : 8

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 :  R11
Xn; R65
Xi; R36
R66, R67
R52/53

Physical/chemical hazards : Highly flammable.

Human health hazards :  Harmful: may cause lung damage if swallowed. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2b Label elements

Hazard symbol or symbols :



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2. HAZARDS IDENTIFICATION

- Risk phrases** : **F** Highly flammable, Harmful
R11- Highly flammable.
R65- Harmful: may cause lung damage if swallowed.
R36- Irritating to eyes.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapors may cause drowsiness and dizziness.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Safety phrases** : **S**9- Keep container in a well-ventilated place.
S16- Keep away from sources of ignition - No smoking.
S23- Do not breathe gas, fumes or vapor.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S33- Take precautionary measures against static discharges.
S43- In case of fire, use dry chemical powder.
S60- This material and its container must be disposed of as hazardous waste.
S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contains :

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
propan-2-ol	>=75 - <90	01-2119457558-25	67-63-0	200-661-7	F; R11 Xi; R36 R67 R10 [1]
hydrocarbons, c9-c11, n-alkanes, isoalkanes, cyclics, <2% aromatics	>=15 - <20	01-2119463258-33		919-857-5	Xn; R65 R66, R67 R10 [1]
solvent naphtha (petroleum), light arom.	>=2.5 - <5	01-2119455851-35	64742-95-6	265-199-0	R10 Xn; R65 Xi; R37 R66, R67 N; R51/53 [1]

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
Propan-2-ol	67-63-0	Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness and dizziness.	FLAMMABLE LIQUIDS - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
hydrocarbons, c9-c11, n-alkanes, isoalkanes, cyclics, <2% aromatics		Flammable liquid and vapor. May be fatal if swallowed and enters airways. May cause drowsiness and dizziness. Repeated exposure may cause skin dryness or cracking.	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
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.	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

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.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media : Recommended:, alcohol-resistant foam, CO₂, 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

Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

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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. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredient name	Occupational exposure limits
propan-2-ol	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 1250 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 999 mg/m ³ 8 hours. TWA: 400 ppm 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 :

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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.
- Gloves** : For prolonged or repeated handling, use the following type of gloves:
 Recommended: nitrile rubber, butyl rubber, foil, fluor rubber
 May be used: neoprene
 Not recommended: PVC
- 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** : Colorless.
- Odor** : Alcohol-like.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : ≥ 82 °C
- Flash point** : Closed cup: 12°C [Measured]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Explosion limits**
- Lower:** : \approx %Vol
- Upper:** : 12 %Vol
- Vapor pressure** : < 34 hPa
- Vapor density** : Not available.
- Density** : ~ 0.8 g/cm³
- Solubility** : Soluble in water in any proportion.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : ≈ 280 °C
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): < 0.06 cm²/s (< 6 cSt)
- Explosive properties** : Not available.
- Oxidizing properties** : Not available.

9.2 Other information

- SADT** : Not available.

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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

Not available.

10.4 Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products.

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
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5045 mg/kg	-
solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	8400 mg/kg	-

Irritation/Corrosion : Causes eye irritation.

Sensitization : Not available.

Mutagenicity : Not available.

Carcinogenicity : Not available.

Reproductive toxicity : Not available.

Specific target organ toxicity (single exposure) : Not available.

Specific target organ toxicity (repeated exposure) : Not available.

Aspiration hazard : Aspiration hazard if swallowed. Can enter lungs and cause damage.

Chronic toxicity : Not available.

Teratogenicity : Not available.

Other information

Toxicokinetics

Absorption : Not available.

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11. TOXICOLOGICAL INFORMATION

- Distribution** : Contains material which causes damage to the following organs: eye, lens or cornea.
 Contains material which may cause damage to the following organs: blood, kidneys, liver, spleen, upper respiratory tract, skin, central nervous system (CNS).
- Metabolism** : Not available.
- Elimination** : 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
<input checked="" type="checkbox"/> propan-2-ol	Acute LC50 1400000 µg/l Marine water Acute LC50 4200000 µg/l Fresh water	Crustaceans - Crangon crangon Fish - Rasbora heteromorpha	48 hours 96 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

- PBT** : P: Not available. B: Not available. T: Not available.
- vPvB** : vP: Not available. vB: Not available.

12.6 Other adverse effects

- AOX** : Not available.

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.

- Methods of disposal** : 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.
- European waste catalogue (EWC)** : The European Waste Catalogue classification of this product, when disposed of as waste, is:
- Hazardous waste** : Yes.

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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** : UN1210
14.2 Proper shipping name : PRINTING INK RELATED MATERIAL
14.3 Transport hazard class(es) : 3



- 14.4 Packing group** : II
14.5 Environmental hazards : Not applicable.
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 : 163 640D
Hazard identification number : 33
ADR Tunnel Code: : Not applicable.(D/E)
Limited quantity : 5 L

IMDG

- Emergency schedules (EmS)** : F-E, S-D
Marine pollutant : Not applicable.
Limited quantity : 5 l

IATA

- | | Max. Qty | Packaging instruction |
|-------------------------------------|----------|-----------------------|
| Passenger and Cargo Aircraft | 5 L | 353 |
| Cargo Aircraft Only | 60 L | 364 |
| Limited quantity | 1 L | Y341 |

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** : 99.2 % 783.7 g/L
- Europe inventory** : All components are listed or exempted.
- 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.

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16. OTHER INFORMATION

CEPE MSDS Code : 1

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

R11- Highly flammable.

R10- Flammable.

R65- Harmful: may cause lung damage if swallowed.

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.

R52/53- Harmful 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 : 7/1/2014.

Version : 8

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.