
MATERIAL SAFETY DATA SHEET

SILKOSEAL HARD DRY PLUS

Issue date: June 2009

Version: 3

1. Identification of the Preparation

Product name and/or code: Conventional paste printing inks and varnishes, including four colour sets, and pantones.

Intended use: Lithographic and letterpress printing, sheetfed, heatset and coldest web processes.

Name, full address & tel: Druckfarben Ltd
Druckfarben House,
1 Virage Business Park,
132-134 Stanley Green Road,
Poole, Dorset,
BH15 3AP
Telephone: 01202 674 133

2. Composition/Information on Ingredients

Substances presenting a health hazard within the meaning of the CHIP Regulations or assigned occupational exposure limits.

Name	Concentration Range (%)	Classification (*)	EC No	CAS No
Cobalt Carboxylate	<1	[Xn] R: 22, 38, 43 [N] R: 51/53	237-015-9	13586-82-8

(*) for full text – see section 16

3. Hazards Identification of the Preparation

Contains Cobalt Carboxylate. May produce an allergic reaction.

4. First Aid Measures

General: In all cases of doubt, or when symptoms persist, seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep patient warm and at rest. If breathing has stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in the recovery position and seek medical advice.

- Eye Contact:** Remove contact lenses. Irrigate copiously with clean fresh water, holding the eyelids apart, and seek medical advice.
- Skin Contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleaner. DO NOT USE SOLVENTS OR THINNERS.
- Ingestion:** If accidentally swallowed, obtain immediate medical attention. Keep at rest. DO NOT INDUCE VOMITING.
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5. Fire Fighting Measures

Extinguishing media:

Recommended; Alcohol resistant foam, CO₂, powder, sand, water spray/mist.
Not to be used; Water jet.

Recommendations:

Fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health. Appropriate self-contained breathing apparatus may be required. Cool closed containers exposed to fire with water spray. Do not allow runoff from fire fighting to enter drains or water courses.

6. Accidental Release Measures

Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8. Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Do not allow to enter drains or water courses.

Clean preferably with a detergent; avoid the use of solvents. If the product enters drains or sewers, immediately contact the local water company; in the case of contamination of streams, rivers or lakes, the relevant environment agency.

7. Handling and Storage

Handling:

Contains Cobalt Carboxylate. May produce an allergic reaction. This product contains a skin sensitizer. Hands should be inspected on a regular basis for any kinds of skin damage or inflammation. If in doubt, advice should be taken from a competent occupational health practitioner on assessment and health surveillance of employees exposed to this product (the HSE's Employment Medical Advisory Service can advise on competency). Use correct press settings to minimise "ink mist". Prevent air-borne concentrations higher than the occupational Exposure Limit Values. Keep the container tightly closed. Exclude sources of heat, sparks and open flame. Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking should be prohibited in storage and use areas. For Occupational Exposure Controls, see section 8. Unless the container is specially designed to do so, never use pressure to empty the container. It is not a pressure vessel. Always keep in containers made of the same material as the supply container. The manual Handling Operations Regulations may apply to the handling of containers/packages of this product. Refer to the guide weight indicated on the container when carrying out assessments.

Storage:

Observe the label precautions. Store between 5 and 25°C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorised access. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store separately from oxidising agents and strongly alkaline/acidic materials. The principles contained in the HSE guidance note Chemical Warehousing: The Storage of Packaged Dangerous Substances should be observed when storing this product.

8. Exposure Controls/Personal Protection

Exposure Controls

Provide adequate ventilation. Where reasonably practical, 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/or solvent vapours below the relevant Exposure Limit Values, suitable respiratory protective equipment should be worn (see “Occupational Exposure Controls” below).

Exposure Limit Values

Substance	TWA ⁽¹⁾		STEL ⁽²⁾		Notations ⁽³⁾
	ppm ⁽⁴⁾	mg/m ³⁽⁴⁾	ppm ⁽⁴⁾	mg/m ³⁽⁴⁾	
Cobalt					
Carboxylate	-	0.1	-	-	WEL

- (1) Long term exposure limit – 8 hour time weighting average.
- (2) Short term exposure limit – 15 minute reference period.
- (3) “Sk” indicates a risk of absorption through the skin. “Sen” indicates a respiratory sensitizer. “Carc” indicates a risk of cancer or heritage damage.
- (4) “WEL” indicates a Workplace Exposure Limit. WELs are taken from the current version of EH40, except those marked “SUP”, which are OELs, assigned by the supplier of the substance. Notes: (a) This does not apply to substances assigned dust OELs and which are present in dispersed form (e.g. pigments, extenders). (b) In the case of hydrocarbons or other solvent mixtures where an OEL has been assigned, this should be used.

Occupational Exposure Controls

All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

Respiratory Protection:

If exposure to hazardous substances identified above cannot be controlled by the provision of local exhaust ventilation and good general extraction, suitable respiratory equipment should be worn.

Hand Protection:

When skin exposure may occur, advice should be sought from glove suppliers on appropriate types and usage times for this product. Barrier creams may help to protect exposed areas of the skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred. In all cases, purchase gloves from reputable suppliers, as poor quality gloves may increase the risk of contact dermatitis. Protective gloves may increase the risk of entanglement: keep hands away from operating rollers or presses.

Eye protection:

Eye protection designed to protect against liquid splashes should be worn, especially during wash-ups.

Skin protection:

Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner. Regular skin inspection of

users of this product is recommended. ALWAYS WASH YOUR HANDS BEFORE EATING, SMOKING OR USING THE TOILET. Do not use solvents or thinners as skin cleaning agents.

Environmental Exposure Control:

See section 12 for detailed information.

9. Physical and Chemical Properties

Physical State:	Viscous coloured or clear paste	Solubility in water:	Insoluble or partially miscible
Boiling Range:	230-320°C	Odour:	Distillate
Flash Point:	>61°C	Autoignition Temperature:	>200°C
Viscosity:	50 to 350 poise (falling rod Viscometer)	Specific Gravity:	0.8-2.1
		Lower Explosion Limit:	0.4%
		Upper Explosion Limit:	6.0%

10. Stability and Reactivity

Stable under recommended storage and handling conditions (see Section 7). In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced. Keep away from oxidising agents and strongly alkaline/acidic materials to prevent the possibility of exothermic reaction. Keep dirty wipers in an enclosed container.

11. Toxicological Information

Contains Cobalt Carboxylate. May produce an allergic reaction. There is no data available on the product itself. The product has been assessed following the conventional method in CHIP and is classified for toxicological hazards accordingly. This takes into account where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. See Sections 3 and 15 for details of the resulting hazard classification. The product is formulated in accordance with the CEPE Exclusion List for Printing Inks and Related Products (BCF).

12. Ecological Information

There is no data available on the product itself. The product has been assessed following the conventional method in CHIP and is not classified as dangerous for the environment, but contains substances so classified. See Section 2 for details. The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. [LAPC]/[LAPPC]/[IPPC] Requirements of regulations made under the Environmental Protection Act/Pollution Prevention and Control Act may apply to the use of this product.

13. Disposal Considerations

Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act. Using the information provided in this safety data sheet, advice should be obtained from the relevant environment agency whether the special waste regulations apply.

14. Transport Information

The product is not classified as dangerous for carriage. **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.

15. Regulatory Information

The product is classified and labelled for supply in accordance with the CHIP Regulations as follows:

- R Phrases N/A
- S Phrases N/A
- P Phrases – Contains Cobalt Carboxylate. May produce an allergic reaction. Safety data sheet available for professional user on request.

The information contained in this safety data sheet does not constitute the users own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work. The information contained in this safety data sheet is provided in accordance with the requirements of the CHIP Regulations.

16. Other Information

Text of R phrases listed in Section 2:

R Number	Phrase
[22]	Harmful if swallowed
[38]	Irritating to skin
[43]	May cause sensitisation by skin contact
[51/53]	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.