EC Safety Data Sheet

in accordance with 91/155/EEC



Schwan-STABILO Safety Data Sheet 84X / 3 (engl.)

Revised : 16. Oct. 2008

1. TRADE NAME: ink for STABILO OHPen universal 13/..

Art.-No. 841 / ..; 842/..; 843/ ..;

Supplier Details

Schwan-STABILO

Schwanhaeusser GmbH & Co. KG

Schwanweg 1, D-90562 Heroldsberg, Germany

Telephone: Germany (++49) 911 / 567-4575 or (++49) 911 – 398 24 51

2. COMPOSITION / INFORMATION ON INGREDIENTS

Lower alcohols < 80% (F, Xi, R11, 41, 67); n-Butanol < 6% (CAS: 71-36-3) R 10, 22, 37/38, 41, 67:

13/36 contains <5% Basic Green 1 (Xn, N R22, 50/53) and <4% Solvent yellow 146 (Xi, R36, 43, 51/53)

13/41 contains <4% Basic Blue 7 (T, N R25, 41, 50/53)

13/45 and 13/55 contain < 6% Basic Violet 10 (Xi, R41, 52/53)

3. HAZARDS IDENTIFICATION

Easily Inflammable. May form explosive mixture with air, particularly in empty uncleaned containers. Heating causes rise in pressure - increased danger of bursting and explosion.

4. FIRST-AID-MEASURES

In case of inhalation: Provide fresh air. Keep the person affected warm and lying comfortable. In case of complaints seek medical attention.

Immediately remove any clothing which has been soaked with the solution.

In case of contact with open eye: Rinse thoroughly with plenty of water and contact an ophthalmologist.

In case of swallowing: Only if person affected is fully conscious, make him-/herself vomit and consult a doctor.

The following symptoms may occur in case of inhalation over extended period: Headache, nausea, dizziness, weakness, unconsciousness.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray jet, alcohol-resistant foam, sand

gaseous extinguishing media, dry powder extinguisher.

Not to use : strong water jet

Cool containers affected with water spray jet.

In case of fire, possible release of carbon monoxide (CO), carbon dioxide (CO₂) and nitric oxides (NO_X).

6. ACCIDENTAL RELEASE MEASURES

Ensure sufficient ventilation. Keep ignition sources away. Absorb in liquid-binding material(e.g. universal binding agent, kieselguhr, expanded mica). Dispose of saturated binding material in compliance with local public authority regulations. Wash away any residue with water.

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7. HANDLING AND STORAGE

Keep containers tightly closed and store in a cool place. Heating causes rise in pressure - and danger of bursting. Ensure good ventilation of room also at ground level (fumes are heavier than air). Take measures to prevent electrostatic charging. Explosive mixtures may form in emptied drum.

The products are classified Class B, according to the German "VbF" (Regulation for Flammable Liquids) – therefore the allowed amount for storage, according to the German "TRbF 110" (Technical Rules for flammable Liquids) must be observed.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Breathing mask in case of high concentrations. For short periods filter equipment, filter A. Gloves (solvent-resistant, e.g. Latex, Chloroprene) Closely fitting protective goggles.

General protection and hygiene measures: Observe the usual precautions for handling chemicals. Do not inhale fumes over long period. Do not eat and drink at work. Do not smoke at work. After work and before breaks thoroughly clean exposed skin.

9. PHYSICAL AND CHEMICAL DATA

Form : liquid

Colour : depending, as per shade Odour : characteristic, alcohol-type

Boiling Point : 78 °C

Flash Point : 13 °C (DIN 51755)
Ignition Temperature : > 400 °C (DIN 51794)

Explosion Range (lowest) : 1.6 Percent (v/v) Vapour Pressure : 5.9 kPas Density : app. 0.85 g/cm³

Density : app. 0.85 g/cm³ Solubility in Water : unlimited miscibility

Solubility in other Solvents : soluble in many organic solvents

pH-Value : not applicable

Viscosity : < 7 mPas

10. STABILITY AND REACTIVITY

Thermal Decomposition : Reaction with strong oxidizing agents.

Reaction with alcali metals and withalcaline earth metals. Development

of inflammable vapours.

Hazardous Reactions : None, if stored and handled properly.

Hazardous Decomposition Products : In case of fire, release of carbon monoxide (CO),

carbon dioxide CO₂) and nitric oxides(NO_X).

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11. TOXICOLOGICAL INFORMATION

Acute oral Toxicity (LD_{50}) : No information available.

Irritant Effects on

Skin : No information available

Mucous Membranes : In high concentrations irritation of nose

eyes and mucous membranes possible. In case

of contact with eyes, severe, reversible irritation due to alcohol content.

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Empirical Knowledge : The product discolours the skin.

Inhalation of high concentrations causes narcotic effect/intoxication. Resorption possible

after affecting gastro-intestinal tract.

12. ECOLOGICAL INFORMATION

Fish Toxicity : Poisonous effect on fish and plankton possible.

Do not allow to enter sewage works or

inland waters.

Further Ecological

Advises : The product is biodegradable. The dyes

can be sufficiently eliminated from the water

by absorption in activated sludge.

The biodegradability of the product has not been tested. The above statements were derived

from products of similar composition.

13. DISPOSAL CONSIDERATION

May be added to household waste in small quantities. Larger quantities are to be disposed of under compliance with local public authority regulations at a suitable waste disposal site or incinerator.

Contaminated packaging has to been emptied completely and may be recycled after thorough cleaning..

14. TRANSPORT INFORMATION

ADR/RID : Class 3 UN-No. : 1263 PG: II

Proper Shipping Name : PAINT

UN 1263 PAINT, 3, II

IMDG-Code : Class 3 UN-Nr. : 1263 PG: II

EmS : F-E, S-E
Marine pollutant : No
Proper Shipping Name : PAINT
FARBE

IATA-DGR : Class 3 UN/ID-No.: 1263 PG: II

Proper Shipping Name : Paint

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14. TRANSPORT INFORMATION (continued)

The transport informations are cited according to international regulations and the way they are used in Germany (GGVE/GGVS). Possible divergence in other countries was not taken in consideration.

15. REGULATORY INFORMATION

Labelling in accordance with EC hazard warning labelling compulsory / GefStoffV

Classification : Easily inflammable F (flame)
Hazard Symbols : Xn (harmful) (84X/ 41 blue ink)

Xi (irritant) (84X/36,45,55 green, brown,

Violet)

N (dangerous for the environment) (84X/41,45

Blue, brown)

R-Phrases : 11 (all colours)

22 (84X/41 blue)

36 (84X/36,45,55 green, brown, violet)

51-53 (84X/41,45 blue, brown)

52-53 (84X/36, 46)

S-Phrases : 2-7-16-24/25-46-61

National Regulations

VbF : B

Water Hazard Class : 1, 2, 3 (self-classification)

Wassergefährdungsklasse (WGK)

The shades are classified as follows:

WGK 3: Art.-No. 84X/46

WGK 2: Art.-No. 84X/36,41,45

WGK 1: Art.-No. 84X/18,40,55,56

16. OTHER INFORMATION

The information in item 3 to 8 and 10 to 12 does not refer to the correct use of the commercial product (cf. product information and usage instructions) but to the release of larger quantities of the product through accidents or other irregularities.

Vertical lines in the right-hand margin of this safety data sheet indicate changes from the previous version.

The above information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products describes or their suitability for a particular application.