Color Ink WK

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier:	COLOR INK WK
1.2. Relevant identified uses of the substance or mixture and uses advised against:	Printing ink
1.3. Details of the supplier of the safety data sheet:	Ichemco srl via 11 Settembre, 5 20012 Cuggiono (MI) Italy
Email address of the competent person:	safety@ichemco.it
1.4. Emergency telephone number:	24hrs, UK: 844 892 0111; EU: +32 3 575 55 55
Further information obtainable from:	Product safety department

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification in accordance with Regulation (EC) No. 1272/2008 (CLP)
No prescription.
2.2. Label elements

Signal word:		none
Hazard statements:	EUH208	Contains Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one; 2-methyl-2H-isothiazol-3-one; 1,2-Benzisothiazol-3 (2H) -one; 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.
	EUH210	Safety data sheet available on request.
Contains:		Ethanolamine - 5-chloro-2-methyl-2H-isothiazol-3-one [247-500-7] and 2-methyl-2H-isothiazol-3-one [220-239-6], mixture 3:1 - 2-Propanol - 1,2-benzisothiazolinone - 2-Octyl-2H-isothiazol-3-one
2.3. Other hazards:		n. a.

SECTION 3: Composition/information on ingredients

3.1. Substances
n. a.
3.2. Mixtures
Substances presenting a health or environmental hazard within the meaning of directives 67/548/EEC, 1999/45/EC and 1272/2008 (CLP):

CAS	EINECS	Registration n.	Denomination	Content	Classification(*)
141-43-5	205-483-3	01-2119486455-28	Ethanolamine	15 - 500 ppm	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Eye Dam. 1; H318 Skin Corr. 1B; H314 STOT SE 3; H335
				ATE Oral: 500 mg/kg ATE Dermal: 1100 mg/kg ATE Inhalation, gas: 4500 ppm ATE Inhalation, fog/powder: 1,5 mg/l ATE Inhalation, vapors: 1,1 mg/l	
2634-33-5	220-120-9		1,2-benzisothiazolinone	15 - 500 ppm	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317
				M acute = 1 M chronic = 1 Skin Sens. 1; H317: C≥0,05 %	
26530-20-1	247-761-7		2-Octyl-2H-isothiazol-3-one	15 - 500 ppm	Acute Tox. 3; H311 Acute Tox. 3; H331 Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Skin Corr. 1B; H314 Skin Sens. 1; H317
55965-84-9	611-341-5		5-chloro-2-methyl-2H-isothiazol-3-one [247-500-7] and 2-methyl-2H-isothiazol-3-one [220-239-6], mixture 3:1	< 15 ppm	Acute Tox. 2; H310 Acute Tox. 2; H330 Acute Tox. 3; H301 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Dam. 1; H318 Skin Corr. 1B; H314 Skin Sens. 1; H317
				M (Aquatic Acute): 100 M (Aquatic Chronic): 100 C >= 0,6%: Skin Corr. 1C H314 0,06% <= C < 0.6%: Skin Irrit. 2 H315 C >= 0,6%: Eye Dam. 1 H318 0,06% <= C < 0.6%: Eye Irrit. 2 H319 C >= 0,0015%: Skin Sens. 1A H317 ATE Acute Oral Tox: 64 mg/kg ATE Acute Inh Tox: 0,33 mg/l ATE Acute Skin Tox: 87,12 mg/kg	
67-63-0	200-661-7	01-2119457558-25	2-Propanol	1 - 5%	Eye Irrit. 2A; H319 Flam. Liq. 2; H225 STOT SE 3; H336
				LD50/dermal = 13900 mg/kg LD50/oral = 5840 mg/kg	

(*) For full text of the H- and EUH-phrases, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures:	No damage to the staff assigned to the use of the product is reported. However we encourage to apply the general safety measures here indicated.
Inhalation:	Move affected person to fresh air. Seek medical advise.
Eye contact:	Flush immediately with large amounts of water for at least 15 minutes. Seek medical treatment.
Skin contact:	Wash immediately with large amounts of water. Remove contemned clothing. If irritation persists, seek medical advice.
Ingestion:	Consult physician or poison control center immediately. Do not induce vomiting if not asked by the physician. Do not give anything orally without medical authorization if subject is unconscious.
4.2. Most important symptoms and effects, both acute and delayed:	n. a.
4.3. Indication of any immediate medical attention and special treatment needed:	n. a.

SECTION 5: Firefighting measures

5.1. Extinguishing media:	Water mist, dry chemical powder, foam, carbon dioxide (CO2).
Extinguishing media which must not be used:	n. a.
5.2. Special hazards arising from the substance or mixture:	n. a.
5.3. Advice for firefighters:	A self-contained respirator and protective clothing should be worn. Keep containers cool with water spray until well after the fire is out.
Recommendations:	The contaminated water used for the extinguishing must be eliminated in compliance with the local legislative dispositions.

SECTION 6: Accidental release measures

Stop the spillage. Circumscribe the loss and remove it by absorbing on dry sand or other inert materials.

6.1. Personal precautions, protective equipment and emergency procedures:	Equip cleanup crew with proper protection. Ventilate area. Evacuate unnecessary personnel.
6.2. Environmental precautions:	Prevent spillage of the material into sewers, groundwater and surface waters.
6.3. Methods and material for containment and cleaning up:	Stop the outpouring, if possible without hazard. Circumscribe the loss and remove it by absorbing on dry sand or other inert materials.
6.4. Reference to other sections:	Please also refer to Sections 8 and 13.

SECTION 7: Handling and storage

This product must be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation.

7.1. Precautions for safe handling:	Avoid eye contact and vapour breathing. Use appropriate gloves.
Advice on general occupational hygiene:	(a) not to eat, drink and smoke in work areas; (b) to wash hands after use; and (c) to remove contaminated clothing and protective equipment before entering eating areas.
7.2. Conditions for safe storage, including any incompatibilities:	Protect from freeze.

7.3. Specific end use(s): Nothing special to note about specific uses.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters:

Substance:	TLW-TWA		STEL	
	ppm	mg/m³	ppm	mg/m³
Ethanolamine	1	2,5	3	7,6
5-chloro-2-methyl-2H-isothiazol-3-one [247-500-7] and 2-methyl-2H-isothiazol-3-one [220-239-6], mixture 3:1		15		45
2-Propanol	200	492	400	983

2-Propanol: AGW (Germany) TWA/8h: 500 mg/m3; 200 ppm – STEL/15 min: 1000 mg/m3; 400 ppm
MAK (Germany) TWA/8h: 500 mg/m3; 200 ppm – STEL/15 min: 1000 mg/m3; 400 ppm
VLA (Spain) TWA/8h: 500 mg/m3; 200 ppm – STEL/15 min: 1000 mg/m3; 400 ppm
VLEP (France) STEL/15 min: 980 mg/m3; 400 ppm
WEL (UK) TWA/8h: 999 mg/m3; 400 ppm – STEL/15 min: 1250 mg/m3; 500 ppm
DNEL
Long term systemic effects/consumers/oral: 26 mg/kg; inhalation: 89 mg/m3; dermal: 319 mg/kg – Workers/inhalation: 500 mg/m3; dermal: 888 mg/kg
PNEC
Microorganisms STP: 2251 mg/kg; soft water: 140.9 mg/kg; sediment (soft water): 552 mg/kg; sea water: 140.9 mg/kg; sediment (sea water): 552 mg/kg; terrestrial compartment: 28 mg/kg; nutritional chain (secondary poisoning): 160 mg/kg; water, intermittent release: 140.9 mg/kg

Ethanolamine: TLV (BGR) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm Pelle
TLV (CZE) - TWA/8h = 2,5 mg/m3; 0,985 ppm - STEL/15min = 7,5 mg/m3; 2,955 ppm
AGW (DEU) - TWA/8h = 0,5 mg/m3; 0,2 ppm - STEL/15min = 0,5 mg/m3; 0,2 ppm -pelle
MAK (DEU) - TWA/8h = 0,51 mg/m3; 0,2 ppm - STEL/15min = 0,51 mg/m3; 0,2 ppm
VLA (ESP) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,5 mg/m3; 3 ppm - pelle
VLEP (FRA) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm - pelle
TLV (GRC) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm
GVI/KGVI (HRV) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm - pelle
VLEP (ITA) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm - pelle
TGG (NLD) - TWA/8h = 2,5 mg/m3 - STEL/15min = 7,6 mg/m3 - pelle
VLE (PRT) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm - pelle
NDS/NDSCh (POL) - TWA/8h = 2,5 mg/m3 - STEL/15min = 7,5 mg/m3 - pelle
NGV/KGV (SWE) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,5 mg/m3; 3 ppm - pelle
MV (SVN) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm -pelle
WEL (GBR) - TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm - pelle
OEL (EU) TWA/8h = 2,5 mg/m3; 1 ppm - STEL/15min = 7,6 mg/m3; 3 ppm - pelle

8.2. Exposure controls: n. a.

Appropriate engineering controls:	n. a.
Eye / face protection:	Glasses with side protection ("cage" glasses) (EN166).
Hand protection:	PVC or neoprene gloves.
Skin protection:	Use full protective clothing for chemicals (working-dress, apron). Protective shoes.
Respiratory protection:	Store in a cool, well ventilated area.
Thermal hazards:	n. a.
Environmental exposure controls:	n. a.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

(a) Appearance:	Coloured liquid.
(a) Physical state:	Liquid.
(b) Colour:	n. a.
(c) Odour:	Characteristic.
(c) Odour threshold:	n.a.
(d) Melting point:	< 5 °C
Freezing point:	n.a.
(e) Boiling point or initial boiling point and boiling range:	> 90 °C
(f) Flammability:	n.a.
(g) Lower and upper explosion limit:	n.a.
(h) Flash point:	> 61 °C
(i) Auto-ignition temperature:	n.a.
(j) Decomposition temperature:	n.a.
(k) pH:	8.5 - 9.2
(l) Kinematic viscosity:	n.a.
(m) Solubility:	n.a.
(n) Partition coefficient n-octanol/water (log value):	n.a.
(o) Vapour pressure:	n.a.
(p) Density and/or relative density:	0.9 - 1.3 g/cm^3
(q) Relative vapour density:	n.a.
(r) Particle characteristics:	n.a.
COV:	~2 (Dir 2010/75/CE) %
9.2. Other information:	n. a.

SECTION 10: Stability and reactivity

No decomposition if correctly used.

10.1. Reactivity:	There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability:	The material is stable in normal use and stocking conditions.
10.3. Possibility of hazardous reactions:	Keep away from oxidants and strong acids.
10.4. Conditions to avoid:	Low temperatures (protect from freezing).
10.5. Incompatible materials:	n. a.
10.6. Hazardous decomposition products:	Combustion can produce carbon oxides, toxic gases and fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects: In the absence of experimental toxicological data on the mixture, the potential health risks of the product have been evaluated considering the properties of the different composing substances. The concentration of each dangerous substance mentioned in section 3 is thus considered in assessing the toxicological effects resulting from exposure to the product.
Following our experience, if handled in a technically correct way and employed under prescriptions, product does not cause harmful effects on health. In case of prolonged action product may cause skin and mucous membranes irritations.

acute toxicity: **5-chloro-2-methyl-2H-isothiazol-3-one [247-500-7] and 2-methyl-2H-isothiazol-3-one [220-239-6], mixture 3:1**
LD50 /oral/rat: 64 mg/kg
LD50/dermal/rabbit: 87,12 mg/kg
LC50/inhalation/rat/4h: 0,17 mg/l
2-Propanol
LD50/oral/rat = 5840 mg/kg bw
LD50/dermal/rabbit = 16.4 ml/kg bw
LC50/inhalation/rat > 10000 ppm (6h)
1,2-benzisothiazolinone
LD50/oral/rat: 490 mg/kg
LD50/dermal/rat > 2000 mg/kg

irritation: **2-Propanol**
It causes serious eye irritation.

corrosivity: n. a.

sensitisation: n. a.

repeated dose toxicity: n. a.

carcinogenicity: **2-Propanol**
NOAEC (carcinogenicity) : 5000 ppm (rat)

mutagenicity: n. a.

toxicity for reproduction: **2-Propanol**
NOAEL (C): 480 mg/kg bw/day (rabbit)

Information on likely routes of exposure: n. a.

Symptoms related to the physical, chemical and toxicological characteristics: n. a.

Delayed and immediate effects as well as chronic effects from short and long-term exposure: n. a.

Interactive effects: n. a.

11.2. Information on other hazards: n. a.

SECTION 12: Ecological information

Prevent contamination of soil and surface waters. Avoid dispersion of material into soil, drains or surface waters. Avoid dispersion of residues into drains.

12.1. Toxicity: **5-chloro-2-methyl-2H-isothiazol-3-one [247-500-7] and 2-methyl-2H-isothiazol-3-one [220-239-6], mixture 3:1**
CL50/ Oncorhynchus mykiss/96 h: 0,19 mg/l -OECD 203
CL50/ Daphnia magna/48 h: 0,16 mg/l - OECD 202
NOEC/Skeletonema costatum/Static/48 h: 0,00049 mg/l - OECD 201
NOEC/Pseudokirchneriella subcapitata/72h: 0.0012 mg/l - OECD201
M factor (Acute tox)=100
EC10/microorganisms/3h: 7.92 mg/l-OECD209
CE50r/ Skeletonema costatum/Static/48 h: 0,0052 mg/l - OECD 201
NOEC/Oncorhynchus mykiss/28 d: 0,098mg/l - OECD 210
NOEC/Daphnia magna: 0,004 mg/l - OECD211
M factor (Chronic tox): 100
2-Propanol
LC50 (Pimephales promelas) : 9640 mg/l (96h)
EC50 (Daphnia magna): >10000 mg/l (24h)
EC50 (Scenedesmus quadricauda) : 1800 mg/l (7d)
1,2-benzisothiazolinone
LC50/Oncorhynchus mykiss/96h: 2.18 mg/l
EC50/Daphnia magna/48h: 2.94 mg/l
EC50r/Pseudokirchneriella subcapitata/72h:0.11 mg/l
NOEC/Skeletonema costatum/72h: 0.027 mg/l
M factor (acute tox) = 1

12.2. Persistence and degradability: **5-chloro-2-methyl-2H-isothiazol-3-one [247-500-7] and 2-methyl-2H-isothiazol-3-one [220-239-6], mixture 3:1**
Biodegradation < 50%/10d
2-Propanol
Easily biodegradable
1,2-benzisothiazolinone
Quickly biodegradable

12.3. Bioaccumulative potential: **5-chloro-2-methyl-2H-isothiazol-3-one [247-500-7] and 2-methyl-2H-isothiazol-3-one [220-239-6], mixture 3:1**
Log Pow: -0.71-0.75 (OECD107)
1,2-benzisothiazolinone
Log Pow: 0.7 (20°C)

12.4. Mobility in soil: n. a.

12.5. Results of PBT and vPvB assessment: Based on available data, the product does not contain any PBT or vPvB substances in quantity higher than 0.1%.

12.6. Endocrine disrupting properties: n. a.

12.7. Other adverse effects: n. a.

SECTION 13: Disposal considerations

13.1. Waste treatment methods: This material should be incinerated in authorized plants or under controlled conditions. Proceed in conformity with local and national regulation.

SECTION 14: Transport information

This preparation is not classified dangerous according to the international transport regulations.
Land transport: Not classified as dangerous under ADR, RID, USDOT, IMO
Sea transport: Not classified as dangeous under IMDG
Air trasport: Not classified as dangerous under IATA/ICAO

SECTION 15: Regulatory information

Information contained in this SDS is based on the present state of our knowledge and on Regulation (EC) No 1907/2006 of the European Parliament and subsequent updates.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture: Water contamination classification (Germany) WGK 1 slightly contaminant for water

15.2. Chemical safety assessment: Not applicable

SECTION 16: Other information

Modified sections: 3

PROTECT FROM FREEZING. STORE IN A DRY LOCATION BETWEEN 5 AND 30°C. AVOID DIRECT SUNLIGHT.
STIR ACCURATELY BEFORE USE
Full text of H phrases listed in Section 3:

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Glossary / List of acronyms

(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
DNEL - Derived No Effect Level
ECHA - European Chemicals Agency
EINECS - European Inventory of Existing Commercial Substances
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
Kow - octanol-water partition coefficient
PBT - Persistent, Bioaccumulative and Toxic substance
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS - Safety data sheet
STOT - Specific Target Organ Toxicity
SVHC - Substances of Very High Concern
UFI - Unique Formula Identifier
vPvB - Very Persistent and Very Bioaccumulative

Users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product: it is not to be considered as a guarantee of the products' properties.
The information in this Safety Data Sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) regulations.