



UNI EN ISO 9001:2015 UNI EN ISO 14001:2015 UNI ISO 45001:2018

COLOR INK NS

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking	
1.1. Product identifier:	COLOR INK NS
UFI:	F470-Y010-000V-JQGJ
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) Flam. Liq. 2;H225 Highly flammable liquid and vapour. Eye Irrit. 2;H319 Causes serious eye irritation. May cause drowsiness or dizziness. STOT SE 3;H336 2.2. Label elements Hazard pictograms: GHS02 GHS07 Signal word: Danger Hazard statements: EUH066 Repeated exposure may cause skin dryness or cracking. H225 Highly flammable liquid and vapour.

ICHEMCO srl

H319 Causes serious eye irritation.H336 May cause drowsiness or dizziness.

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20012 Cuggiono (MI) - ITALY Phone +39 02 97243.1 - Fax +39 02 97243.200: - email: info@ichemco.it - internet: www.ichemco.it

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P264 Wash thoroughly with abundant water after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P370+P378 In case of fire: Use suitable media (see MSDS for instruction) for extinction.
1-methoxypropan-2-ol - Ethyl acetate - Ethyl-alcohol (substance with community exposure limit) - Ethyl methyl ketone - Nitrocellulose (N < 12.6%)
On the basis of available data, the product does not contain PBT or vPvB substances in quantities $\ge 0.1\%$. The product does not contain substances having properties of interference with the endocrine system in a concentration $\ge 0.1\%$.

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 FINECS Registration n Denomination Content Classification(*)

CAS	EINECS	Registration n.	Denomination	Content	Classification(*)
64-17-5	200-578-6	01-2119457610-43	Ethyl-alcohol (substance with community exposure limit)	30 - 45%	Eye Irrit. 2; H319 Flam. Liq. 2; H225
	205 500 4		Ethanol		5
141-78-6	205-500-4	01-2119475103-46	Ethyl acetate	14 - 19%	Eye Irrit. 2; H319
					Flam. Liq. 2; H225
					STOT SE 3; H336
				EUH066	
				LD50/dermal >20	100 mg/kg
				LD50/oral = 4934	mg/kg
107-98-2	203-539-1	01-2119457435-35	1-methoxypropan-2-ol	9 - 14%	Flam. Liq. 3; H226
					STOT SE 3; H336
9004-70-0			Nitrocellulose (N < 12.6%)	9 - 14%	Flam. Sol. 1; H228
78-93-3	201-159-0	01-2119457290-43	Ethyl methyl ketone	0.5 - 0.6%	Eye Irrit. 2; H319
			Butanone		Flam. Liq. 2; H225
					STOT SE 3; H336

SECTION 4: First aid measures

4.1. Description of first aid If you feel unwell, seek medical advice. Take off immediately all contaminated measures: clothing.

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Inhalation: Move affected person to fresh air. Seek medical advise.

- Eye contact: Rinse immediately with fresh water for at least 15 minutes keeping eyes opened, get oculist attention.
- Skin contact: Wash immediately the parts of the body with water and neuter soap. Pull shoes and contaminated clothes off.

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 n. a. and effects, both acute and delayed: 4.3. Indication of any immediate n.a. medical attention and special treatment needed:

SECTION 5: Firefighting measures

5.1. Extinguishing media:	Foam, dry chemical powder, carbon dioxide (CO2).	
Extinguishing media which must not be used:	Water Fire Extinguishers.	
5.2. Special hazards arising from the substance or mixture:	High temperature may liberate dangerous gases	
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:	Do not use water. If possible, take away dangerous containers. Do not stay in the direction of containers bottoms. Cool the containers with spray water from a safe position.	

SECTION 6: Accidental release measures

Stop the outpouring, if possible without hazard. Circumscribe the leak and remove it by absorbing on dry sand or other inert materials. Remove any possible source of ignition. Control the vapours with spray water. Do not smoke. Avoid contact.

protective equipment and	Wear gloves, protective clothing, safety goggles, boots, and protection for the respiratory (breathing apparatus). Eliminate all unguarded flames and possible sources of ignition. Do not smoke. Move out of danger unprotected and unauthorized persons.
6.2. Environmental precautions:	Prevent spillage of the material into sewers, groundwater and surface waters.
	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

Avoid flames and radiant heating. This product must be stored, handled and used in hygienic and safe way, according to current regulations.

General ventilation is required. Local ventilation is recommended. Do not breathe vapour. Avoid skin and eye contact.
 (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.
Store the product in fresh, ventilated areas, separated from heating sources. Floor must not be flammable, must be impermeable and must prevent pouring to the outside. Electric plant must comply to current regulations.

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		EL	
4		ppm	mg/m ³	ppm	mg/m ³	
1-methoxypropan	-2-01	100	375	150	568	
Ethyl acetate		400	1400	400	1440	
	stance with community exposure limit)	1000	1881			
Ethyl methyl ketor	le	200	600	300	900	
	AGW (Germany) TWA/8h: 1500 800 ppm WAK (Germany)) TWA/8h: 1500 800 ppm VLA (Spain) TWA/8h: 1460 mg/f VLEP (France) TWA/8h: 1400 m WEL (UK) TWA/8 h 200 ppm - 3 DNEL Short term systemic effects Workers, Inhalatory = 1468 mg/ Short term local effects Workers, Inhalatory = 1468 mg/ Long term systemic effects People, Oral = 4.5 mg/kg; People mg/kg; Workers, oral = 734 mg/ Inhalatory = 734 mg/m3 PNEC Soft water: 0,24 mg/l; Sea water mg/l; Sediment(soft water): 1,15 Soil: 0,148 mg/kg dw; Secondary AGW (Germany) TWA/8h: 370 r ppm MAK (Germany) TWA/8h: 375 mg/m VLA (Spain) TWA/8h: 375 mg/m OEL (EU) TWA/8h: 375 mg/m3 OEL (EU) TWA/8h: 375 mg/m3 OEL (EU) TWA/8h: 375 mg/m3 OEL (EU) TWA/8h: 375 mg/m3 OEL (EU) TWA/8h: 375 mg/m3 PNEC Soft water > 10 mg/kg; sea water Sediment (sea water)>5.2 mg/kg	D mg/m3; m3; 400 j g/m3; 400 STEL/15 m3; Peop m3; Peop m3; Peop e, Inhalate m3; Wor : 0,02 mg /m3; Wor : 0,02 mg /m3; Wor : 100 pm 100 pm orkers >5 ople >3.3 ermal, Wo	; 400 ppm ppm 0 ppm ole, ppm min: 400 ole, Inhala ole, inhiala ory = 367 kers, dern g/l; Waste w; Sedimo ng (oral): C 00 ppm - pm - STE ppm - STE ppm - STE ppm - STEL/ 553,6 mg/ g; Dccas	n – STEL/ ppm tory = 73 atory = 73 atory = 73 mg/m3; nal = 63 r ewater Tr ent (sea v 0,2 g/kg • STEL/15 STEL/15 sTEL/15 min (15 min: 5 (m3; nhalation 0.6 mg/kg sional issu	(15 min: 3 34 mg/m3 34 mg/m3 34 mg/m3 People, D mg/kg; W eatment p vater): 0,1 5 min: 740 5 min: 740 1 mg/mg/m 1 mg/m 1 m	2000 mg/m3 2000 mg/m3 3 20ermal = 37 orkers, 20 mg/m3; 20 20 mg/m3; 20 20 mg/m3; 20 20 mg/m3; 20 20 mg/m3; 20 20 mg/m3; 20 21 mg/kg; 22 mg/m3 23 mg/m3 24 mg/m 24 mg/mg/m 24 mg/mg/m 25 mg/kg;

Ethyl-alcohol (substance with community exposure limit):	AGW (Germany) TWA/8h: 960 mg/m3; 500 ppm – STEL/15 min: 1920 mg/m3; 1000 ppm
	MAK (Germany) TWA/8h: 960 mg/m3; 500 ppm – STEL/15 min: 1920 mg/m3; 1000 ppm
	VLA (Spain) STEL/15 min: 1910 mg/m3; 1000 ppm
	VLEP (France) TWA/8h: 1900 mg/m3; 1000 ppm – STEL/15 min: 9500 mg/m3;
	5000 ppm WEL (UK) TWA/8h: 1920 mg/m3; 1000 ppm
	DNEL
	Local effects/Short term/Inhalation Workers > 1900 mg/m3; Long term/repeated exposure/ Inhalatione Workers> 950 mg/m3; Short term/inhalation People > 950
	mg/m3
	Systemic effects/long term/dermal/Workersi> 343 mg/kg; long term/Inhalation people > 114 mg/m3; Long term/Dermal people > 206 mg/kg
	PNEC Soft water> 0.96 mg/l; Sea water> 0.79 mg/l; Soft water sediments> 3.6 mg/kg; Se
	water sediments> 2.9 mg/kg; Soil > 0.63 mg/kg; Microorganisms SPT >709 mg/kg;
	nutritional chain (secondary poisoning)>720 mg/kg; water, intermittent release >
	2.75 mg/kg
Ethyl methyl ketone:	TLV-ACGIH 500 mg/m3-200 ppm (TWA/8h); 885 mg/m3-300 ppm (STEL/15 min)
Lanyi metaryi ketonor	AGW (Deu) 600 mg/m3-200 ppm (TWA/8h); 600 mg/m3-200 ppm (STEL/15min)
	MAK (Deu) 600 mg/m3-200 ppm (TWA/8h); 600 mg/m3-200 ppm (STEL/15min)
	VLA (Esp) 600 mg/m3-200 ppm (TWA/8h); 900 mg/m3-300 ppm (STEL/15min) VLEP (Fra) 600 mg/m3-200 ppm (TWA/8h); 900 mg/m3-300 ppm (STEL/15min)
	WEL (Grb) 600 mg/m3-200 ppm (TWA/8h); 899 mg/m3-300 ppm (STEL/15min)
	OEL (EU) 275 mg/m3-50 ppm (TWA/8h); 550 mg/m3-100 ppm (STEL/15min)
	DNEL - Long term systemic effects
	Dermal/Workers:1161 mg/kg; Inhalation/Workers:600 mg/m3; Dermal/People:41
	mg/kg; Inhalation/People: 106 mg/m3;Oral/People:31 mg/kg PNEC (EC)
	Sediment (soft water):284,74 mg/kg; Sediment (sea water):284,7 mg/kg; Soft water
	55,8 mg/l; Occasional emission: 55,8 mg/l; terrestrial compartment > 22,5 mg/kg;
	food chian (secondary poisoning) > 1000 mg/kg
0 0 F	Domotion immediately contaminated elathing Marking slatters must be burt
8.2. Exposure controis:	Remove immediately contaminated clothing. Working clothes must be kept separate place. Wash hands before breaks and at end of the job.
Appropriate engineering controls:	Electric plant must comply to current regulations about use of flammable products.
Eye / face protection:	Glasses with side protection ("cage" glasses) (EN166).
Hand protection:	Neoprene or rubber gloves, suitable for chemical products (EN374).
Skin protection:	Use full protective clothing for chemicals (working-dress, apron). Protective shoes.
Respiratory protection:	If the product is sprayed or if there is a high vapour concentration, use masks with filter for organic vapours (brown A series).
Thermal hazards:	n. a.

SECTION 9: Physica	SECTION 9: Physical and chemical properties		
	ysical and chemical properties: Coloured liquid.		
(a) Physical state:	Liquid.		
(b) Colour:	n. a.		
(c) Odour:	Characteristic.		
(c) Odour threshold:	n.a.		
(d) Melting point:	n.a.		
Freezing point:	n.a.		
(e) Boiling point or initial boiling point and boiling range:	> 60 °C		
(f) Flammability:	n.a.		
(g) Lower and upper explosion limit:	n.a.		
(h) Flash point:	8 °C		
(i) Auto-ignition temperature:	n.a.		
(j) Decomposition temperature:	n.a.		
(k) pH:	(not soluble in water)		
(I) 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:	0.7 - 1.2 g/cm ³		
(q) Relative vapour density:	n.a.		
(r) Particle characteristics:	n.a.		
COV:	64.55 (EC Directive 2010/75/EC) %		
9.2. Other information:	n. a.		

SECTION 10: Stability and reactivity

It may react with oxidants. It produces acrid fumes if warmed until decomposition.

10.1. Reactivity: n. a.

10.2. Chemical stability: n. a.

10.3. Possibility of hazardous n. a. reactions:

10.4. Conditions to avoid: Keep away from ignition source, heat, direct light.

10.5. Incompatible materials: Strongly oxidizing substances.

10.6. Hazardous decomposition n. a.

products:

SECTION 11: Toxicological information

	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.
	Acute effects: contact with eyes causes irritation; symptoms may include redness, swelling, pain and tearing. Inhalation of vapors may cause moderate irritation of the upper respiratory tract. Swallowing may cause health problems, including stomach pain and sting, nausea and vomiting. The product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) with effects such as drowsiness, dizziness, loss of reflexes, narcosis.
acute toxicity:	1-methoxypropan-2-ol LD50/oral/rat = 4016 mg/kg LD50/dermal/rabbit = 13000 mg/kg LC50/inhalation/rat = 54,6 mg/l (4h) LC0/inhalation/rat >7000 ppm/6h (OCSE403)
	Ethyl acetate LD50/oral/rat = 4934 mg/kg dw (OCSE401) LD50/dermal/rabbit > 20000 mg/kg-dw LCLo/Inhalation/rat > 22.5 mg/l (6h) Ethyl-alcohol (substance with community exposure limit)
	LC50/inhalation/rat = 124.7 mg/l (4h) LD50/oral/rat> 2528 mg/kg bw LD50/dermal/rabbit > 20000 ml/kg bw Ethyl methyl ketone LC50/inhalation/rat>5000 ppm
irritation	LD50/oral/rat > 2000 mg/kg LD50/dermal/rabbit> 5000 mg/kg If swallowed, material may be aspirated into the lungs and cause chemical pneumonitis. 1-methoxypropan-2-ol
	Skin irritation/test on rabbit: not irritating Eye irritation/test on rabbit: not irritating Ethyl acetate OECD 404 Not irritating to skin (Test on rabbit)
	OECD 405 Irritating to eyes (Test on rabbit) Ethyl-alcohol (substance with community exposure limit) Skin irritation on rabbit: not irritating Ethyl methyl ketone Skin irritation/OECD404/test on rat: not irritating
	Eye irritation/OECD405/test on rabbit's eyes: irritating
corrosivity: sensitisation:	1-methoxypropan-2-ol Skin sensitization/test on Guinea pig: not skin sensitizer
	Ethyl acetate Not skin sensitising, Test on Guinea Pig: negative (OECD 406) Ethyl-alcohol (substance with community exposure limit) Skin sentisation on mouse: not sensitising
repeated dose toxicity:	1-methoxypropan-2-ol OECD 410 NOAEL/dermal/rabbit > 1000 mg/kg bw/day OECD 413 NOAEL/inhalation/rat = 1000 ppm
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	carcinogenicity:	Ethyl acetate Repeated exposure may cause skin dryness or cracking Subacute oral toxicity NOAEL (C)/oral/rat = 900 mg/kg bw/day Subacute inhalative toxicity NOAEL (C)/inhalation/rat = 350 ppm 1-methoxypropan-2-ol BMD10/mouse: 3000 ppm NOAEL (fetal development)/rat: 1500 ppm OCSE 414 NOAEL (C)/rat: 300 ppm
		Ethyl acetate Unknown CMR effects
	mutagenicity:	
	toxicity for reproduction:	Essay on reproductive toxicity after 1 generation NOAEL (C)/mouse = 13800 mg/kg bw/day Essay on reproductive toxicity after 2 generations NOAEL (C)/mouse < 20700 mg/kg bw/day
	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:	
	Interactive effects: 11.2. Information on other hazards:	

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:	1-methoxypropan-2-ol
	OECD201 LC50/Oncorhynchus mykiss/96h > 1000 mg/l
	EU MEthod C.2 ECO/Daphnia magna/48 h = 500 mg/l
	OECD201 EC50/Pseudokirchnerella subcapitata/96h > 1000 mg/l
	EC50/Pseudomonas putida/17h> 10000 mg/l
	Ethyl acetate
	LC50/Pimephales promelas/96h = 230 mg/l
	EC50/Daphnia magna/48h = 165 mg/l
	NOEC/Daphnia Pulex/48h = 2.4 mg/l
	NOEC/Scenedesmus subspicatus/72h > 100 mg/l
	EC50/Photobacterium phosphoreum/15 min = 5870 mg/l
	Ethyl-alcohol (substance with community exposure limit)
	EC10/chlorella vulgaris/4d = 675 mg/l
	EC50/photobacterium phosphoreum/15 min = 32.1 g/l
	LC50/ceriodaphnia dubia/48h = 5012 mg/l
	LC50/pimephales promelas/96 h = 15.3 g/l
	Ethyl methyl ketone
	EC50/Daphnia magna/48h = 308 mg/l
	EC50/Scenedesmus subspicatus/96h = 2029 mg/l
	LC50/Pimephales promelas/96h = 2993 mg/l
	1-methoxypropan-2-ol
uegrauability.	Biodegradation/28d = 96% OECD301E
	Ethyl acetate
	Biodegradation (28d) = 79% (OECD301D)
L	

	Ethyl-alcohol (substance with community exposure limit) Easily biodegradable Ethyl methyl ketone
12.3. Bioaccumulative potential:	Easily biodegradable Ethyl acetate Log Pow = 0.68 BCF = 30
	Ethyl methyl ketone Shortly bioaccumulative Log Pow = 0.3
	n. a. 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: 12.7. Other adverse effects:	

SECTION 13: Disposal considerations

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

SECTION 14: Transport information

Transport only in accordance with ADR for road, RID for rail, IMDG for sea and ICAO for air transport. 14.1. UN number: 1210 - PRINTING INK, flammable (vapour pressure at 50 °C not more than 110 kPa) 14.2. UN proper shipping name: PRINTING INK

14.2. On proper shipping name.	
14.3. Transport hazard class(es):	3 - Flammable liquids
14.4. Packing group:	II - Substances presenting medium danger
Classification Code (ADR 2.2):	F1 - Flammable liquids having a flash-point of or below 60 °C
	 MP19 - May - in quantities not exceeding 5 litres per inner packaging - be packed together in a combination packaging conforming to 6.1.4.21: - with goods of the same class covered by other classification codes or with goods of other classes, when mixed packing is also permitted for these; or - with goods which are not subject to the requirements of ADR, provided they do not react dangerously with one another.
Transport category (1.1.3.6):	2
Hazard identification No. (5.3.2.3):	33 - highly flammable liquid (flash-point below 23 °C)
14.5. Environmental hazards:	n. a.
Marine pollutant:	No
14.6. Special precautions for user:	n. a.
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	
IMDG Page:	3272-1
IMDG EMS:	F-E S-D
IMDG MFAG:	311
Danger labels:	33 1210



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 Restrictions related to the product or substances contained according to Annex XVII environmental of Regulation (EC) 1907/2006 (REACH) and subsequent amendments: 3, 40, 75 regulations/legislation specific for the substance or mixture:

German Water Hazard Class WGK = 3

Directive 2012/10/EU: P5c

15.2. Chemical safety Not applicable assessment:

SECTION 16: Other information

Modified sections: 3

STIR ACCURATELY BEFORE USE

Full text of H phrases listed in Section 3:

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H228 Flammable solid.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

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.