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## PAPER COLORANT

THE WORLD'S MOST TRUSTED IN DYESTUFFS AND CHEMICALS COMPANY

High quality | ECO friendly | Global Service



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公司简介

## COMPANY PROFILE

## CMC 诚铭化学（泰国）概述

为了提供造纸工业无限的解决方案，CMC 诚铭化学（泰国）成立于2018年，专注于开发广泛的色料产品，以扩大我们的服务领域，提升并满足工业的要求。因为我们正朝向一家综合造纸化学公司迈进。

CMC 诚铭化学（泰国）启源于为了能满足市场和客户需求，希望藉此提升产业竞争力与持续性的研究发展，以便我们能够迅速积极地回应市场与客户。我们提供染料和颜料，莹光增白剂及CMC的高品质AKD中性，碱性施胶剂，表面施胶剂，干强剂，脱墨剂，消泡剂，湿强剂，涂料乳胶以及杀菌剂，助留剂，涂层助剂和污水处理剂。我们完全致力于为我们尊贵的业务合作伙伴提供最全面的服务，优质产品和解决方案。

## CMC 诚铭化工集团历史

广东诚铭化工科技有限公司由诚铭（香港）有限公司（旧名称：香港国际纸化工有限公司）创办和投资，设有3个生产基地和1个海外分公司；

2003 东莞龙腾实业有限公司  
2013 南通腾龙化工科技有限公司  
2017 广东腾龙化工科技有限公司  
2018 诚铭化学（泰国）有限公司

本公司是一家具现代化的高科技造纸化工企业，专业生产AKD中性，碱性上浆剂，表面施胶剂和造纸干强剂，并提供技术服务(提供整体解决方案服务)，生产杀菌剂，助留剂，涂料助剂和污水处理剂作为二级产品。经过15年的努力，公司得到了市场的认可。公司投资1.2亿美元，年总产值3.6亿美元，年生产能力60万吨，其中AKD中性和碱性上浆剂19万吨，表面施胶剂13万吨，10万吨干强度剂，20万吨羧基苯乙烯丁二烯乳液，以及2万多吨杀菌剂，助留剂，涂料助剂和污水处理剂



## CMC (Thailand) at a Glance

In the direction of offering limitless solutions to papermaking industrial, CMC (Thailand) was established on 2018 to focus on developing extensive range of colorants to expand our service areas that can fulfill the industrial's requirements. We are building on the steps toward to a comprehensive paper chemical company.

CMC (Thailand) started in order to promote sales and to research the requirements of customers apart from China, so that we can more vigorously answer back to the market.

We offer dyes and pigments, optical brightening agent (OBA) together with CMC's high quality AKD neutral, alkaline sizing agent, surface sizing agent, dry strength agent, deinking agent, defoamer, wet strength agent, coating latex as well as bactericide, retention aid agents, coating aid agents and sewage treatment agent. We are totally committed to providing our valued business partners with quality products and solutions that match their needs in every aspect.

## CMC Group History

Guangdong Chengming Chemical S&T Co., Ltd. was founded and invested by Cheng Ming (H.K.) Limited (Old Name: Hongkong International Paper Chemicals S&T Co. Ltd.) and it sets up 3 production bases and 1 oversea branch;

2003 Dongguan Longteng Industrial Co. Ltd.  
2013 Nantong Tenglong Chemical S&T Ltd.  
2017 Guangdong Tenglong Chemical S&T Co., Ltd.  
2018 Cheng Ming Chemical (Thailand) Co., Ltd.

The company is a modern high-tech papermaking chemical enterprise specializing in the production AKD neutral, alkaline sizing agent, surface sizing agent and dry strength agent for papermaking as well as providing technical services (providing total solution service), with the production of bactericide, retention aid agents, coating aid agents and sewage treatment agent as secondary businesses. With over 15 years of effort, the company has been recognized by the market.

The company invests a total of 120 million U.S. dollars, with annual total output value of 360 million U.S. dollars and annual production capacity of 600 thousand tons, including 190 thousand tons of AKD neutral and alkaline sizing agents, 130 thousand tons of surface sizing agents, 100 thousand tons of dry strength agents, 200 thousand tons of carboxylated styrene butadiene latex, as well as more than 20 thousand tons of bactericide, retention aid agents, coating aid agents and sewage treatment.

en.cm-chemical.com



企业文化  
CORPORATE CULTURE

在这里，我们始终坚持以人为本、求真务实、与时俱进、争先创优”的企业发展理念，尽力为员工提供富有竞争力的薪酬、人性化的工作环境；在这里，我们尊重自我发展，鼓励创新创造，充分发挥员工的个人智慧，实现大家的人生价值；在这里，完备的员工职业发展规划，专业完善的培训体系，丰富多彩的文娱活动，使员工的个人技能和职业素养在潜移默化中提升，员工和企业共同发展，实现我们“诚信、敬业、尊重”的核心价值观。

The company always adheres to the principle of "people-oriented, pragmatism, keeping up with the times and striving for excellence", providing staff with competitive salary and humanized working environment; The company respects self development of staff and advocates innovation and creativity, to encourage staff to give full play to their wisdoms and realize their values of life; complete employee occupation development planning, professional training system, as well as rich and colorful cultural and recreational activities improve staff's personal and professional skills gradually, allowing employees and enterprise to grow and develop together, to implement enterprise corevalue of "integrity, devotion to work, respect".



THE WORLD'S MOST TRUSTED IN DYESTUFFS AND CHEMICALS COMPANY

努力打造为最具世界竞争力的，  
成为客户信赖的首选品牌企业  
Strive to Create the most competitive brand in the world,  
Become the preferred enterprise customers trust.



销售服务  
SALES SERVICE

诚铭化工是一家跨国造纸化学品公司，可为中国及国际客户提供全方位的销售及技术服务支持。我们拥有专业的物流网络，完全可以保障客户随时发货需求并提供优质的服务。

Chengming Chemical is a multinational papermaking chemical company that provides a full range of sales and technical service support to Thailand and international customers. Our company has a professional logistics network to deliver products at any time and provide high-quality services.

安全环保责任  
SAFETY AND ENVIRONMENTAL RESPONSIBILITY

诚铭化工积极倡导安全环保理念，最大程度的减少产品生产对环境带来的危害，公司积极投资建设污水处理设施，引进了国际先进的废水回收再利用系统、纯水处理系统和大型的废气收集处理装置，并配备了产品安全消防控制中心，为企业安全环保提供了有力的保障。

Chengming Chemical safety advocate the concept of environmental protection, reduce harm production on the environment brought to the maximum extent, the company actively invest in the construction of sewage treatment facilities, the introduction of international advanced wastewater recycling and reuse system, water treatment system and large exhaust gas collecting and processing device, and is equipped with a safety fire control center, provides a strong the guarantee for enterprise safety and environmental protection.





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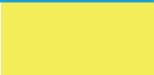














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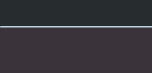

## CMSol® SERIES - POWDER DYE

CMSol® SERIES	1% SHADE	pH	DENSITY (g/cm³) AT 25°C	SOLUBILITY 80°C (g/L)	FASTNESS			BLEACHABILITY		BACK WATER
					LIGHT	ACID	ALKALI	REDUCTIVE	OXIDATIVE	
Lemon Yellow 5G		8.0-9.0	1.1-1.3	60	4	5	5	3-4	3	4-5
Yellow R		8.0-9.0	1.14	60	2-3	5	5	3	1-2	3-4
Yellow 3G		8.5-9.5	1.1-1.3	60	5	5	5	3-4	2-3	5
Yellow RLN		7.5-8.5	1.1-1.3	80	4	5	5	2-3	3-4	4
Yellow PGN		8.5-9.5	1.07	60	2	5	5	2-3	4	4
Yellow 49L		7.0-8.0	1.07	60	2-3	5	5	2-3	4	4
Orange 2GL		9.0-9.5	1.04	30	3-4	5	4	3	4	3
Rose FR		7.5-8.5	1.1-1.2	40	2-3	5	5	4-5	4	3-4
Scarlet F2G		7.5-8.5	1.1-1.2	40	3-4	5	5	3	4	3
Rubine 2R		8.0-9.0	1.1-1.2	80	4	5	5	3-4	4	3-4
Red BL		7.5-8.5	1.1-1.2	80	2-3	5	5	4-5	4	2-3
Scarlet 3BSL		8.0-9.0	1.1-1.2	20	2-3	5	5	4	2	3-4
Red 2G		8.0-9.0	1.04	80	1-2	3-4	4	4	2	4
Red 5B		8.0-9.0	1.1-1.2	80	4-5	5	5	4	2	3-4
Red 2B		8.0-9.0	1.1-1.2	60	4	5	5	4	2	3-4

















## CMSOL® SERIES - POWDER DYE

CMSol® SERIES	1% SHADE	pH	DENSITY (g/cm³) AT 25°C	SOLUBILITY 80°C (g/L)	FASTNESS			BLEACHABILITY		BACK WATER
					LIGHT	ACID	ALKALI	REDUCTIVE	OXIDATIVE	
Violet M		8.0-9.0	1.1-1.2	20	3	4	4	3	4	3
Violet MB		8.0-9.0	1.1-1.2	20	4-5	4	4	3	4	5
Violet B		8.0-9.0	1.1-1.2	20	3	4	4	3	3	4
Blue 4BL		8.0-9.0	1.05-1.1	30	2-3	5	4	4-5	5	3-4
Blue BRL		8.0-9.0	1.1-1.3	40	3	5	4	4-5	5	3-4
Blue BRN		8.0-9.0	1.1-1.3	40	3	5	4	4-5	5	3-4
Turq. BL		9.0-10.0	1.1-1.3	10	4	4-5	3	3	4	3
Green BL		8.0-9.0	1.06	40	4	4	4	3-4	4	4
Brown GTL		8.0-9.0	1.09	80	4	5	5	3	4	3-4
Brown Y		9.0-10.0	1.09	80	3	5	5	3	4	3-4
Grey CGL		8.0-9.0	1.0-1.2	30	4	5	4	4	4-5	4-5
Black AR		8.0-9.5	1.0-1.1	40	2-3	5	4	4	4-5	4-5
Black G		8.0-9.0	1.07	40	2	5	4	4	4-5	4
Black VSF		8.0-9.0	1.1-1.2	25	2-3	5	4	4	4-5	4-5

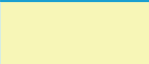
















## CMSol® SERIES - LIQUID DYE

CMSol® SERIES	1% SHADE	pH	DENSITY (g/cm <sup>3</sup> ) AT 25°C	VISCOSITY	FASTNESS			BLEACHABILITY		BACK WATER
					LIGHT	ACID	ALKALI	REDUCTIVE	OXIDATIVE	
Yellow 5RA Liq.		6.5-8.5	1.14	≤ 50	1-2	4	1-2	3	1-2	3-4
Yellow GRN Liq.		6.5-8.5	1.14	≤ 50	1-2	4	1-2	3	1-2	3-4
Yellow 3G Liq.		7.0-8.5	1.1-1.3	≤ 50	3	4	1-2	3	2	3-4
Orange 2GL Liq.		7.0-9.5	1.04	≤ 50	3-4	3-4	2-3	3	1-2	3-4
Orange 6R-S Liq.		7.0-8.5	1.0-1.2	≤ 50	4-5	3-4	2-3	5	4-5	3-4
Orange 2RF Liq.		7.0-9.5	1.0-1.2	≤ 50	3-4	3-4	2-3	5	4-5	3-4
Red 2G Liq.		6.5-8.5	1.04	≤ 50	1-2	3-4	4	3-4	4-5	4
Red 2B Liq.		8.0-9.0	1.1-1.2	≤ 50	4	3-4	4	4	4-5	4-5
Violet MB Liq.		8.0-9.0	1.1-1.2	≤ 50	2	4	3	3	3	4
Violet B Liq.		8.0-9.0	1.1-1.2	≤ 50	4	4	3	3	3	4
Turq. Blue FBL Liq.		8.0-9.0	1.06	≤ 50	3-4	4	4	1	5	3
Blue 2R Liq.		8.0-10.0	1.0-1.2	≤ 50	2-3	4	4	2	5	3-4
Brown 6R Liq.		9.0-10.0	1.09	≤ 50	3	5	4	3-4	4	3-4
Black AR Liq.		8.0-10.0	1.0-1.1	≤ 50	2-3	3-4	2-3	3	4	4
Black G Liq.		7.5-9.5	1.07	≤ 50	1-2	3-4	2-3	3	4	3-4

## CMZine® SERIES - BASIC DYE

CMZine® SERIES	1% SHADE	pH	DENSITY (g/cm <sup>3</sup> ) AT 25°C	HOT PRESSING AT 25°C	FASTNESS				
					WATER RETTING	LIGHT	WASHING	ACID	ALKALI
Auramine O		2-3	1.10	4	3-4	2	4-5	4	2
Yellow 5GL		2-3	1.10	4	4	3	4	4	2
Yellow MGL Liq.		2-3	1.10	4	3	1	3	4-5	3-4
Yellow Gold Liq.		2-3	1.10	4	3	1	3	4-5	3-4
Orange G		3-4	1.10	3	4	2	2-3	4-5	2-3
Red P		3-4	1.07	2	3	1-2	3	4	4
Red 5GN		2-3	1.04	2	3-4	2	3-4	3-4	4-5
Red GTL		2-3	1.04	2	3-4	3-4	3-4	3	4
Violet 3BL		2.5	1.08	3	3	2-3	3	1-2	3
Violet 5BN		1-2	1.07	3	3	1-2	3	1-2	3
Blue B Liq.		2-3	1.05	4	4	2	4	4	2
Brilliant Blue BO		2-3	1.05	4	4	1	4	4	3
Malachite Green		1-2	1.07	4	3-4	2	3-4	4-5	1
Brown R		2-3	1.06	3	3	2-3	3	4	4
Brown G		2-3	1.06	3	3	2-3	3	4	4
Brown 25 Liq.		1-2	1.08	3	3	1-2	3	4	4
Black BL		2-3	1.08	3	4	4	4	5	4-5

## CMFlex® SERIES - PIGMENT

CMFlex® SERIES	1% SHADE	pH	SOLID CONTENT (%)	PARTICLE SIZE < μm	FASTNESS				
					LIGHT	WEATHER	ACID	ALKALI	HEAT
Yellow 10G		7-9	46	2	7	4-5	5	5	150
Yellow G		7-9	53	2	5	4-5	5	5	180
Yellow HR		7-9	45	2	6-7	2-3	5	5	200
Orange G		7-9	48	2	7-8	4	5	4	150
Red 2R		7-9	50	2	6	3-4	4	2	120
Red F4R		7-9	44	2	6	3-4	5	1	120
Scarlet N		7-9	42	2	5	3-4	4	2	120
Carmine FGR		7-9	44	2	7	4	5	4	180
Carmine FBB		7-9	44	2	7	4	5	5	180
Red F5RK		7-9	48	2	7	4	5	4	180
Violet Lake		7-9	25	2	5	4	5	4	140
Violet H		7-9	40	2	5	4-5	5	5	200
Blue BX		7-9	50	2	5	5	5	5	200
Blue BGS		7-9	46	2	5	5	5	5	200
Green G		7-9	46	2	5	5	5	5	200
Black A		7-9	30	2	5	5	5	5	200
Black B		7-9	52	2	5	5	5	5	200

## CMWhite® SERIES - OBA



### Main ingredients

OPTICAL BRIGHTENER 113

### C.I. No

C.I.113

### Chemical type

A compound of diphenylethylene triazine type

### CAS No

12768-92-2

### Chemical formula

$C_{40}H_{42}N_{12}O_{10}S_2Na_2$

### Molecular weight

960.94

### Appearance

Amber transparent liquid

### E value

115/125

### Max UV absorption wavelength

348 nm

### Application

Whitening of paper pulp, surface sizing, coating;

Whitening of cotton, linen and cellulose fiber as well as cellulose fabrics;

Brightening of light tone cellulose fabrics; synthetic detergent.

### Recommended dosage

Paper-making industry: 0.5-2.0% on dry pulp or dry coating material;

Cotton, hemp or cellulose fabric: 0.75-2.5%;

Liquid detergent: 0.3-0.6%.



### Main ingredients

OPTICAL BRIGHTENER 220

### C.I. No

C.I.220

### Chemical type

A compound of diphenylethylene triazine type

### CAS No

16470-24-9

### Chemical formula

$C_{40}H_{40}N_{12}Na_3O_{16}S_4$

### Molecular weight

1165.03

### Appearance

Amber transparent liquid

### E value

100/125

### Max UV absorption wavelength

350 nm

### Application

Whitening of surface sizing, coating of paper sheets, paper, also whitening of cotton, viscose;

Good compatibility with resin finishing agent.

### Recommended dosage

Paper-making(absolute dry pulp): 0.15-1.2%;

Surface sizing with starch, CMC, PVA: 1.5-10g/L;

Coating with PVA, CMC, starch: 0.3-3.0%(compared to weight of coating material).



## LABORATORY TESTS

CMSol dyes are selected anionic direct dyes in liquid and powder from suitable for application in fine paper and recycled paper. The illustrations represent the shade of CMSol dyes at an approximate depth of shade of 1% dye on dry furnish. Solubility is evaluated by gradually adding small amounts of dye to the solution respectively at 80 °C (hot solubility) until a significant amount of dye in gr that dissolves in 1 litre of water.

### Fastness Tests

All fastness values are determined at 1% dyeing depth. Light fastness were obtained using a Xenon arc lamp. Test results are evaluated according to the Blue wool scale, where value 8 represents maximum fastness, value 1 minimum one. Bleed fastness test results are determined in following solutions:

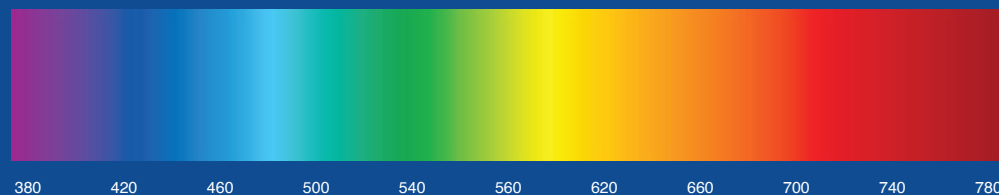
- Acid 15 g/l of Acetic
- Alkali 15 g/l of Sodium carbonate

Procedure : 2 sheets of filter paper are wetted with the solution to be examined. Then the paper sample is placed in between and pressed with a weight of 200 grs at room temperature for 10 minutes. After that the filter paper is compared with a 1-5 Grey scale. Value 5 represents no coloration and value 1 heavy coloration. Backwater is collected during the formation of the paper sheet, then the value is determined with 1-5 Grey Scale. Value 5 represents no coloration and value 1 heavy coloration of the backwater.

METHOD	REDUCTIVE	OXIDATIVE
Agent	2% Active Sodium dithionite (Sodium hydrosulphite)	2% Active chlorine (Calcium hypochlorite)
pH	6	4
Temperature	60 °C	50 °C
Time	60 mins	60 mins

From the obtained bleached pulp handsheets are produced and then evaluated in terms of residual color strength. To the minimum residual color strength the highest value is assessed, while the minimum is addressed to the highest residual color strength. The shelf life of the CMSol dyes is considered to be at least 6 months, provided they are stored between 5°C and 40°C in the original packaging and tightly sealed. The liquid products must be protected from frosts and high temperatures. Each time dye is taken out for application the container must be resealed tightly and the remaining contents used as soon as possible.

The shelf life of the CMSol dyes is considered to be at least 2 years, provided they are stored between 5°C and 40°C in the original packaging and tightly sealed. Each time dye is taken out for application the container must be resealed tightly and the remaining contents used as soon as possible.



380 420 460 500 540 560 620 660 700 740 780

## 展望未来

### PROSPECT

展望未来，我们必将与时俱进，奋力拼搏，坚持技术创新，持续提升企业核心竞争力，坚持以客户为本，以卓越品质，一流服务为方针，为客户创造更大的价值！

In the future, we will keep pace with the times, struggle to technological innovation and continue to enhance our core competitiveness. We will adhere to the principle of customer-oriented, and create greater value for our customers with excellent quality and first-class service!



THE WORLD'S MOST TRUSTED IN DYESTUFFS AND CHEMICALS COMPANY

努力打造为最具世界竞争力的，  
成为客户信赖的首选品牌企业

Strive to Create the most competitive brand in the world,  
Become the preferred enterprise customers trust.

