

Insecticides China Monthly Report 202401

Issue 1 January 31 2024





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Headline

Methomyl TC price in early-Jan. dropped by 7% MoM and by some 16% YoY. In late Dec. 2023, MARA finally announced the timetable for the ban on four high-toxicity insecticides (methomyl included) in China. For some domestic methomyl producers, they are better prepared for such a trend as they have already set up production capacity for the alternative thiodicarb.

In Jan., the price of nicotinoid insecticides TC continued to fall, and the overall prices of pyrethroid insecticides TC and organophosphorus insecticides TC still edged down. For acaricides, carbamates, insect growth regulators and other insecticides, the market was also weak, and the price of most TC products was steady.

In 2023, the average growth rate of insecticide TC ex-works price stayed at a low level in China. Due to a long period of weak demand, the producers tried to lower their operating rates to keep the price stable. In a sluggish global economy, the weak demand for insecticides TC may continue for some time.

In 2023, many insecticide TC producers in China announced plans to build chlorantraniliprole projects.

In Jan. 2024, Chinese insecticide TC producers have maintained a cautious attitude toward production. Investigations in mid-Jan. show that operating rate averages at 53%. Main reasons for lowered operating rate are: small number of orders from downstream sectors and producers' eagerness to cut inventory.

On 19 Jan., it was announced that Shandong Youdao's phase II chlorantraniliprole production lines had reached the design capacity. The company now boasts at least 10,000 t/a chlorantraniliprole capacity. Recent years, many domestic enterprises have taken part in the pursuit of chlorantraniliprole production capacity; some have made plans to join the game starting from upstream materials and then building a complete chain centred on chlorantraniliprole.

On 26 Jan., the environmental impact report form of Bengbu Shengdan's 10,000 t/a novel biopesticides and environment-friendly pesticide formulations production capacity expansion project was accepted by local government. Through this project, the company is actively involved in developing the business of novel biopesticides and eco-friendly pesticides.

Jiangsu Province, a major production base of insecticide technical products, rolled out the Measures for Chemical Park Management in Jiangsu Province in the end of 2023. The document came into force on 10 Jan., 2024 and will stay valid until 9 Jan., 2029. It specifies requirements on planning and layout, construction of infrastructure, setting up of new chemical parks, modification to park boundaries, chemical park accreditation, park management, etc.

By late Dec. 2023, altogether 431 insecticide products had been approved of pesticide registration in China in the year 2023. The great majority of them are of low toxicity and the three most popular forms are SC, GR and WG.

In Jan., the NATESC organised experts to analyse and exchange views on the occurrence trend of major pests and diseases on crops in China in 2024. It is estimated that there might be heavier occurrence of 22 major pests and diseases on main grain crops (wheat, rice, maize, potato, etc.), oilseed crops and vegetables. Major pests include wheat aphids, rice planthoppers, striped rice stem borers and leaf rollers.

In Nov. 2023, China's insecticide formulations were mainly exported to Brazil, Vietnam, Nigeria, etc.; the export volume dropped by over 10% MoM. However, the export volume of biological insecticide formulations edged up by nearly 5% MoM. Meanwhile, the import volume of insecticide formulations to China decreased by about 6% MoM; Singapore was the largest import origin during this period.







Editor's note

Entering 2024, the weak insecticide market continued. On average, the Jan. price of major insecticide TC products decreased by 1.54% MoM, and fell by 20.97% YoY. Seeing the dull downstream demand, Chinese insecticide TC producers maintained a cautious attitude toward production; overall operating rate averaged about 53% in mid-Jan.

Looking back on the past 2023, there were at least 21 new insecticide TC projects in China. Of these projects, 18 are new construction projects, and 3 are technological transformation and expansion projects. Main products planned in these projects are benzamide, pyrethroid and nicotinoid insecticides TC. Specifically, chlorantraniliprole, thiamethoxam and flonicamid are popular choices. In Jan. 2024, Shandong Youdao's phase II chlorantraniliprole production lines have reached the design capacity.

Currently, it is an off-season for insecticides TC. Given that global economy needs time to recover, it is believed that insecticide market will have little or small improvement in the near future and market demand for insecticides TC will remain at a low level for quite a while.

The USD/CNY exchange rate in this newsletter is USD1.00 = CNY7.0770 on 2 Jan., 2024, sourced from the People's Bank of China. All the prices mentioned in this newsletter will include the VAT, unless otherwise specified.





Market analysis

Methomyl TC price has bigger drop in Jan., producers have developed capacity for thiodicarb

Summary: Methomyl TC price in early-Jan. dropped by 7% MoM and by some 16% YoY. In late Dec. 2023, MARA finally announced the timetable for the ban on four high-toxicity insecticides (methomyl included) in China. For some domestic methomyl producers, they are better prepared for such a trend as they have already set up production capacity for the alternative thiodicarb.

Methomyl TC price in early-Jan. dropped by 6.94% MoM and by some 16.25% YoY. Although the price of upstream material methomyl-oxime was stable and methomyl producers kept operating rates at low level, weak downstream demand as well as the producers' eagerness to destock drove the price down.

Price trend of methomyl TC in China since Jan. 2023:

- From Jan. to July 2023, the ex-works price of methomyl TC turned from a small increase to large falls. The producers upped their operating rates as overseas orders grew in H2 2022, which made inventories in these producers ballooned. However, since early March, the inventories were consumed rather slowly as demand subsided, and the price started to go down. Although the producers tried to stop the downtrend, insufficient demand made such efforts futile;
- From Aug. to Nov. 2023, the price became quite stable as the peak season came and the producers lowered their outputs. The price even rose by over 5% MoM in early Oct.;
- From Dec. 2023 to Jan. 2024, the price continued falling. The producers has kept low operation and they have had strong willingness to cut inventory.

A big reason for the price downtrend to continue in the future should be noted—methomyl formulation products will be phased out in the Chinese market. Despite excellent control result on cotton bollworm, high toxicity of methomyl poses acute hazard to human health. Besides, in recent years, China has rolled out ever stricter environmental protection policies and gradually eliminated high-toxicity large-residue pesticides; there is no doubt that in the future, low-toxicity small-residue products will become the mainstream in the insecticide market. On 25 Dec. 2023, the Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) announced that: pesticide registrations for formulation products containing the four active ingredients (AIs)—methoate, carbofuran, methomyl and aldicarb—will be revoked, and production be prohibited, starting from 1 June, 2024; starting from 1 June, 2026, sale and use of pesticides containing the four AIs will be prohibited, while production and exports by TC producers of the four AIs will be retained, but the registrations for TC products of the four AIs held by producers will be changed to export-only registrations, and closed-loop operation and supervision should be carried out; for methomyl TC, as a raw material for thiodicarb TC production, can be supplied by designated methomyl TC producers to designated thiodicarb TC producers, with closed-loop operation.

Thiodicarb is a substitute for methomyl; it is a popular choice for its low toxicity and good control performance. At present, many pesticide enterprises have plans to or have already started to adjust their product mix and substitute thiodicarb for methomyl. According to the China Pesticide Information Network, as of early Jan. 2024, there were 147 valid registrations for methomyl products (8 registrations for TC products), and 66 valid registrations for thiodicarb products (24 registrations for TC products) in China. Registrants hold both valid registrations for methomyl TC and thiodicarb TC include Shandong Huayang Technology Co., Ltd. (Shandong Huayang) and Hunan Haili





Chemical Industry Co., Ltd. (Hunan Haili); some of these registrants have had production lines for methomyl TC, and thus are in an advantageous position in the production of thiodicarb TC. For instance, Shandong Huayang has begun to replace high-toxicity pesticides with ones with lower toxicity by utilising phosgene resources; its efforts include transforming existing methomyl lines to produce thiodicarb. As to Hunan Haili, its wholly-owned subsidiary Hunan Haili Changde Pesticide Chemical Industry Co., Ltd. boasts 4,000 t/a thiodicarb production equipment plus supporting facilities; supported with Hunan Haili's R&D strength, the thiodicarb products produced by the subsidiary are world-class, and the waste water pre-treatment technique it adopted helps promote green and environment-friendly production.

Outside China, some countries have also planned or already ordered to ban the use of methomyl. Indian government issued a notification on 2 Feb., 2023 to prohibit methomyl for registration, import, manufacture, formulation, transport, sale and use, from the date of final publication of a draft. The government made such a decision because of water body pollution caused by methomyl and its impacts on human health.

FIGURE 1: Semi-monthly ex-works price of methomyl technical in China, Jan. 2023–Jan. 2024



Source:CCM

Weak insecticide market continues in Jan., many products in an off-season

Summary: In Jan., the price of nicotinoid insecticides TC continued to fall, and the overall prices of pyrethroid insecticides TC and organophosphorus insecticides TC still edged down. For acaricides, carbamates, insect growth regulators and other insecticides, the market was also weak, and the price of most TC products was steady.

In Jan., on average, the price of major insecticide TC products decreased by 1.54% on a monthly basis, and fell by 20.97% on a yearly basis.





Nicotinoid insecticides: The ex-works price of nicotinoids decreased MoM in Jan. Main intermediates for nicotinoid insecticides, such as 2-nitroaminoimidazoline and 2-chloro-5-(chloromethyl)pyridine (CCMP), still witnessed downtrend in their prices, as operating rates in the producers were at a high level. The supply exceeded the demand, so the price fell. And thus the price of nicotinoids could not be effectively supported. Currently, the price of nicotinoids is decided by supply-demand dynamics, especially the demand side. There have been sufficient supplies of imidacloprid TC and acetamiprid TC in the market, plus normal operation in the majority of producers. However, downstream demand was dull and mainly small orders were made to replenish stock.

Pyrethroid insecticides: The overall price of pyrethroids continued to edge down in Jan., decreasing by 1.08% MoM on average. In particular, cypermethrin TC and lambda-cyhalothrin TC registered some 2% price falls as the supply was rather sufficient while downstream demand was weak. However, the price of deltamethrin TC edged up 1.55% MoM due to increased raw material costs.

Organophosphorus insecticides: Average price fall for this category was logged at 0.84% on a monthly basis. Although some products like phoxim TC and triazophos TC had stable price, many organophosphorus insecticides TC have come into an off-season. There were a few orders to satisfy the rigid demand, yet increment in total orders were hardly seen. Approaching the Spring Festival, competition among suppliers has grown more intense; in order to attract orders, they might further lower their quotations.

For acaricides, carbamates, insect growth regulators and other insecticides, the market was quite dull. Ex-works prices of most TC products remained at a low level. The price of buprofezin and acaricides/insecticides remained stable. Of carbamate insecticides, the price of carbofuran TC was steady, but that of methomyl TC declined further by 6.94% MoM under slack demand. The prices of abamectin TC and emamectin benzoate TC both dropped by some 3% MoM. Abamectin producers have lowered their operating rates, and mainly engaged in destocking. Emamectin benzoate producers have also lowered their rates; the downstream buyers negotiated for deals on need-to basis.





TABLE 1: Ex-works prices of major insecticide TC products in China in Jan. 2024

Category	Product	Ex-works price (RMB/t)	Ex-works price (USD/t)	RMB MoM change	RMB YoY change
Nicotinoid insecticide	95% Acetamiprid technical	77,400	10,936.84	-2.40%	-35.98%
	97% Imidacloprid technical	87,320	12,338.56	-2.24%	-33.29%
Pyrethroid insecticide	95% Beta-Cypermethrin technical	125,200	17,691.11	-0.63%	-17.63%
	94% Cypermethrin technical	56,400	7,969.48	-2.76%	-30.37%
	98% Deltamethrin technical	394,000	55,673.31	1.55%	-24.95%
	95% Lambda-cyhalothrin technical	111,000	15,684.61	-2.46%	-38.67%
Organophosphorus insecticide	97% Acephate technical	42,000	5,934.72	-2.33%	-23.64%
	95% Chlorpyrifos technical	34,300	4,846.69	-1.04%	-25.27%
	85% Triazophos technical	69,000	9,749.89	0.00%	16.95%
	90% Phoxim technical	33,000	4,662.99	0.00%	-26.67%
Acaricide	90% Propargite technical	60,000	8,478.17	0.00%	0.00%
	97% Spirodiclofen technical	139,000	19,641.09	0.00%	-13.13%
Carbamate insecticide	98% Carbofuran technical	100,000	14,130.28	0.00%	-11.11%
	98% Methomyl technical	67,000	9,467.29	-6.94%	-16.25%
Insect growth regulator	95% Buprofezin technical	65,000	9,184.68	0.00%	-13.91%
Others	95% Abamectin technical	365,600	51,660.31	-3.79%	-32.30%
	70% Emamectin benzoate technical	351,800	49,710.33	-3.20%	-30.20%

Source:CCM

Insecticides TC generally maintains price downtrend in 2023

Summary: In 2023, the average growth rate of insecticide TC ex-works price stayed at a low level in China. Due to a long period of weak demand, the producers tried to lower their operating rates to keep the price stable. In a sluggish global economy, the weak demand for insecticides TC may continue for some time.





In 2023, the average growth rate of insecticide TC ex-works price stayed at a low level in China. Due to a long period of weak demand, the producers tried to lower their operating rates to keep the price stable. In general, the insecticide TC price trend could be divided into four stages:

- Stage one: From Jan. to Feb., growth rate of insecticide TC price slowed, as market demand shrank. Overall demand for insecticides TC remained relatively weak, even though pesticide downstream sectors increased orders for there are concerns over logistics right before and after the Chinese Spring Festival, as well as over dampened willingness in producers to accept new orders;
- Stage two: From March to July, the growth rate dropped to negative territory, though the decrease continued to narrow. On average, the rate was around -4.04% in this period. Export was relatively small, and a few domestic orders were mainly for replenishment. Oversupply put many insecticide TC producers under mounting pressures and they started to lower the price to secure new orders; negative feedback loops thus formed. In April, as rigid demand season for some products began, inquiries from overseas buyers grew. For some producers of products with price at low level, they responded to the downtrend with production restriction or even suspension;
- Stage three: In Aug., the growth rate jumped to a positive figure. In the peak electricity consumption summer period, some producers suspended production for maintenance, and thus market inventories were gradually consumed. Besides, rising price of raw materials lent support to the price of some insecticides TC, and downstream stocking for rigid demand promoted the trade. Some products received much attention in this period;
- Stage four: From Sept. to Dec., though the rate mainly fluctuated in the negative territory, the decrease slowed. Operation resumed in the producers previously suspended for maintenance, yet the overall operating rate was not high. Since the price of basic chemical materials went up, the producers faced bigger pressure on the cost side. Inventories for some products were at low level, and thus their price recovered, which slowed the pace of overall price fall.

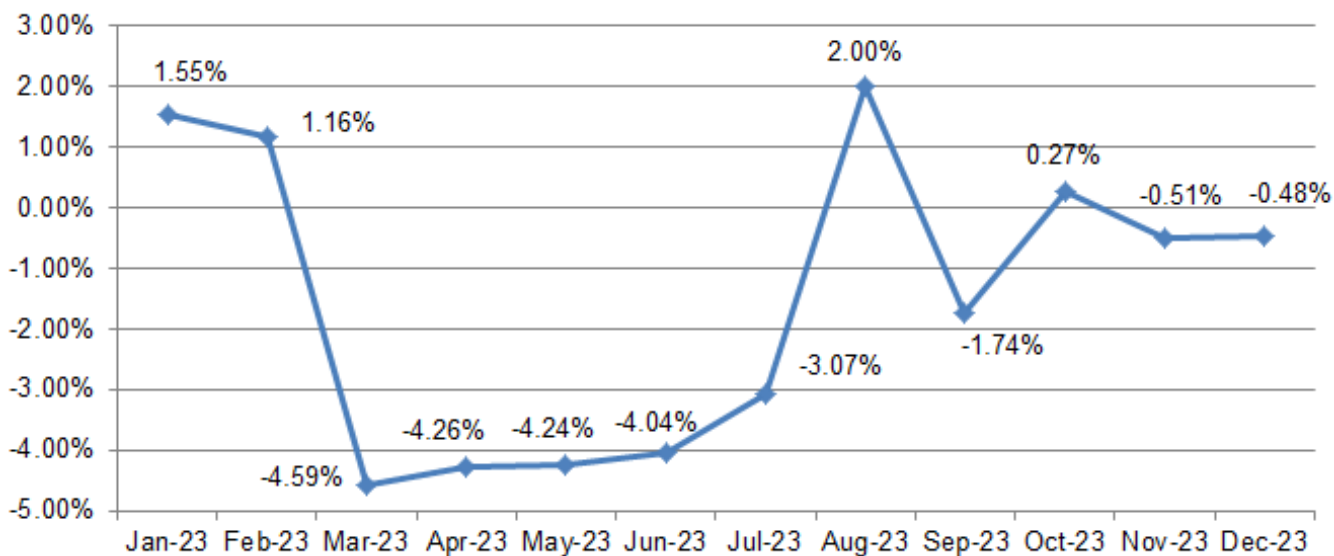
Specifically, except short-lived price recovery in Aug. and Sept. supported by growing raw material costs, nicotinoid insecticides had constant price drop. Much similar trend was witnessed in the price of pyrethroid insecticides; since Feb., the price started to decline, and till Oct. and Nov., a short price increase was seen as spot supply was tight under reduced production in the producers, yet the price soon fell back under dull demand. Organophosphorus insecticides shared the price trend with many products of other categories. However, it is worth noting that China issued a ban on four high-toxicity pesticides, which include carbofuran, methomyl and aldicarb; policy impacts on future price trend for these organophosphorus insecticides are not sure for now.

All in all, increases in insecticide TC price were rarely brought about by rising demand in 2023. Instead, elevating price of upstream basic chemical materials played a leading role in pushing up the insecticide TC price. In 2023, multiple producers pursued chlorantraniliprole, as were shown in expanding registration and several new projects, yet in contrast, downstream demand was lacklustre. In an economic slowdown, insecticide producers have to brace themselves for sluggish demand for some time.





FIGURE 2: Average growth trend of insecticide TC ex-works price in China, Jan.–Dec. 2023



Source:CCM





Company and supply

Benzamides, pyrethroids and nicotinoids, popular choices in 2023 new insecticide projects

Summary: In 2023, many insecticide TC producers in China announced plans to build chlorantraniliprole projects.

Incomplete statistics show that there were at least 21 new insecticide TC projects in China in 2023. Of these projects, 18 are new construction projects, and 3 technological transformation and expansion projects. Main products planned in these projects are benzamide, pyrethroid and nicotinoid insecticides TC; specifically, chlorantraniliprole, thiamethoxam and flonicamid are popular choices.



TABLE 2: New insecticide TC projects in China in 2023 (incomplete statistics)

No.	Time	Company	Project content	Progress as of Jan. 2024
1	Jan. 2023	Zhejiang Avilive Chemical Co., Ltd.	It is a new construction project. It involves 500 t/a aminopyralid, 700 t/a clopyralid, 1,000 t/a picloram and 500 t/a chlorantraniliprole.	EI report has been approved.
2	Feb. 2023	Anhui Huilong RMF Bioengineering Co., Ltd.	It involves 2,000 t/a chlorantraniliprole plus 1,319 t/a 3-bromo-1-(3-chloropyridin-2-yl)-1H-pyrazole-5-carboxylic acid in phase I, and 2,200 t/a 2-amino-5-chloro-N,3-dimethylbenzamide in phase II.	EI report has been approved.
3	Feb. 2023	Chongqing Huage Biochemical Co., Ltd.	It involves 2,000 t/a chlorantraniliprole.	The production capacity has come into use.
4	March 2023	Inner Mongolia Miraculous Crop Science Co., Ltd.	It involves 20,000 t/a chlorantraniliprole TC at two phases (10,000 t/a each phase).	EI report has been approved.
5	March 2023	Shandong Lukang Biological Pesticide Co., Ltd.	It involves 50 t/a spinosad, 1,000 t/a kasugamycin, 200 t/a polyoxin, 30 t/a gibberellic acid, 200 t/a <i>Bacillus thuringiensis</i> (BT), 100 t/a trans-aconitic acid and 12,600 t/a pesticide formulations.	EI report has been approved.
6	April 2023	Hubei Jinghesheng Biotechnology Co., Ltd.	It involves the construction of production capacity: 1,000 t/a chloroacetone, 800 t/a 2-methylbenzoyl cyanide, 1,200 t/a N,N,N',N'-tetramethylethylenediamine, 4,000 t/a 2-chloro-5-chloromethylthiazole(CCMT), 2,000 t/a clothianidin, 3,000 t/a thiamethoxam, 600 t/a flonicamid and 1,000 t/a pymetrozine in phase I and 3,000 t/a glufosinate-ammonium plus lines for intermediates in phase II.	EI report has been approved.
7	May 2023	Inner Mongolia Laike Crop Protection Co., Ltd.	It involves the construction of production capacity: 500 t/a bispyribac-sodium TC, 100 t/a pyribenzoxim TC, 1,000 t/a chlorophenylglycine, 1,500 t/a prochloraz TC, 1,500 t/a chlorfenapyr TC, 1,000 t/a cyhalofop-butyl TC and 500 t/a halide.	Currently under construction.
8	June 2023	Jiangxi Oushi Chemical Co., Ltd.	It involves 2,000 t/a lufenuron (for phase I), 1,000 t/a dinotefuran, 2,000 t/a picoxystrobin and 10,000 t/a thiamethoxam	EI report has been published.
9	June 2023	Gansu Weiersheng Pharmaceutical Co., Ltd.	The phase I involves the construction of 8,000 t/a production capacity for pesticides TC, pesticide intermediates and pharmaceutical intermediates, including 1,200 t/a fenpropathrin, 500 t/a cyfluthrin, 1,000 t/a beta-cypermethrin, 600 t/a (4-tert-butylphenyl)acetonitrile, 1,200 t/a methyl phenylglyoxylate, and 300 t/a 2-thiopheneacetyl chloride.	EI report has been published.



10	June 2023	Inner Mongolia Yongtai Chemical Co., Ltd.	It involves 200 t/a m-difluorobenzene in phase I, and 500 t/a prothioconazole TC and 500 t/a chlorantraniliprole TC in phase II.	EI report has been approved.
11	June 2023	Zhejiang Udragon Bioscience Co., Ltd.	It involves 600 t/a prothioconazole, 50 t/a ipconazole, 200 t/a metconazole, 200 t/a cyproconazole, 200 t/a tiorantraniliprole, 200 t/a zoxamide, 50 t/a famoxadone, 50 t/a spirobuciclofen, 200 t/a MPPZ, 50 t/a benzisothiazolinone and 250 t/a fludioxonil.	Basic EIA information or EI report has been published.
12	June 2023	HuaiBei Longxi Biotechnology Co., Ltd.	It involves 1,000 t/a fludioxonil, 1,000 t/a flonicamid and 1,000 t/a indoxacarb.	Local authorities have planned to approve the EI report.
13	July 2023	Lanzhou Xinlongtai Biotechnology Co., Ltd.	It will expand its pymetrozine capacity from 1,000 t/a to 3,000 t/a.	Currently under construction.
14	July 2023	Hebei Brilliant Chemical Co., Ltd.	It will expand its thiamethoxam capacity from 1,000 t/a to 3,000 t/a, and phase out 300 t/a spirodiclofen capacity.	EI report has been approved.
15	Aug. 2023	Weifang Maoyuan Biotechnology Co., Ltd.	It involves 6,000 t/a thiamethoxam and 10,000 t/a CCMT.	EI report has been approved.
16	Aug. 2023	Gansu Jinse Runsheng Chemical Co., Ltd.	It will be built in three phases. The phase I involves 1,000 t/a fenpropathrin TC, 500 t/a 2,2,3,3-tetramethylcyclopropanecarboxylic acid, 500 t/a fenvalerate TC, 1,000 t/a cypermethrin TC, 500 t/a cyhalothrin TC and 500 t/a lambda-cyhalothrin acid; phase III involves 10,000 t/a O,O-diethyl chlorothiophosphate.	EI report has been published.
17	Aug. 2023	Shandong United Pesticide Industry Co., Ltd.	It involves 10,000 t/a CCMP and 5,000 t/a acetamidprid TC.	EI report (for reassessment) has been published.
18	Aug. 2023	Hebei Nongxin Biotechnology Co., Ltd.	It involves 7,700 t/a lambda-cyhalothrin formulations and 2,000 t/a lambda-cyhalothrin TC.	EI report has been approved.
19	Sept. 2023	Jiangxi Lianbai Technology Co., Ltd.	It involves the construction of 1,500 t/a azoxystrobin production capacity and transformation of 1,500 t/a 2,6-difluorobenzamide line (yet to be put into use) into 1,500 t/a chlorfenapyr line.	EI report has been approved.
20	Sept. 2023	Jiangsu Jiannong ABA Agrochemical Co., Ltd.	It involves 500 t/a fluazaindolizine TC	EI report has been published.
21	Dec. 2023	CAC Nantong Chemical Co., Ltd.	It is an expansion project. It involves 500 t/a cyproflaniide TC, 8,254 t/a 2-coumaranone (in acetic anhydride solution), 2,336 t/a sodium o-cyanophenoxide, the latter two are to support its 5,000 t/a azoxystrobin production capacity, plus	EI report has been approved.





			by-product capacity of 52 t/a aqueous ammonia, 5,209 t/a sodium chloride and 945 t/a sulphur dioxide.	
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Note: Projects presented here include new construction projects and transformation projects.

Source: CCM

At the beginning of 2024, Chinese insecticide TC producers act cautiously

Summary: In Jan. 2024, Chinese insecticide TC producers have maintained a cautious attitude toward production. Investigations in mid-Jan. show that operating rate averages at 53%. Main reasons for lowered operating rate are: small number of orders from downstream sectors and producers' eagerness to cut inventory.

Entering 2024, China's insecticide TC market has remained dull. Since new orders have been scarce, the producers have maintained operation at a relatively low level. Investigations in mid-Jan. show that operating rate averages at 53%, which is still in a downtrend. Generally speaking, Chinese insecticide TC producers hold a cautious attitude toward production in Jan. On the one hand, quite stable production has continued to fulfil limited number of export orders. On the other hand, large insecticide TC inventories in the market have forced some producers to reduce their output, as the Spring Festival is approaching.

Organophosphorus insecticides: Overall operating rate in Jan. is quite stable on a monthly basis. Chlorpyrifos TC producers Shandong Luba Chemical Co., Ltd. (Shandong Luba), Hubei Benxing Agrochemical Co., Ltd. and Jiangsu Fengshan Group Co., Ltd., with small overseas orders coming, keep normal production. Regarding malathion TC, Shandong Luba is currently a major supplier in the market.

Nicotinoid insecticides: Overall operating rate in Jan. declines slightly on a monthly basis, mainly due to lowered rates in imidacloprid TC producers. Overseas orders for imidacloprid TC shrink, while inventories at domestic market are sufficient. Although Shandong Sino-Agri United Biotechnology Co., Ltd. (Sino-Agri Union) and Shandong Hailir Chemicals Co., Ltd. have normal production of imidacloprid TC products, their outputs drop this month. As to thiacloprid TC, Sino-Agri Union is currently a major supplier in the market; the supply is quite stable. As to thiamethoxam TC, the producers maintain stable production with the support of export orders.

Pyrethroid insecticides: Overall operating rate in Jan. is basically the same as that in the previous month. Pyrethroid insecticide TC products are mainly come from Jiangsu Province; the majority of producers of pyrethroids TC in Jiangsu maintain steady operation this month. Yet it is worth noting that in general, low-level operation continues as orders from downstream sectors are limited.



TABLE 3: Supply of main insecticides TC in China in Jan. 2024

Category	Product	Average operating rate in Jan.	Supply situation in Jan.
Organophosphorus insecticide	Chlorpyrifos TC	65%	Ample supply
	Malathion TC	50%	Normal supply
Nicotinoid insecticide	Imidacloprid TC	45%	Ample supply
	Acetamiprid TC	50%	Ample supply
	Thiamethoxam TC	50%	Ample supply
	Clothianidin TC	60%	Ample supply
	Thiacloprid TC	60%	Ample supply
Pyrethroid insecticide	Cyhalothrin TC	45%	Ample supply
	Bifenthrin TC	50%	Ample supply
Others	Abamectin TC	50%	Ample supply
	Emamectin benzoate TC	60%	Ample supply
	Propargite TC	60%	Ample supply
	Chlorfenapyr TC	50%	Normal supply

Note:1. The operating rates are the average of the rates in major producers, and the statistics are incomplete.

2. Combined with information on downstream orders, the supply situation is here classified into: tight supply, normal supply and ample supply.

Source:CCM

Shandong Youdao's 2nd-phase 9,000 t/a chlorantraniliprole lines meet design capacity

Summary: On 19 Jan., it was announced that Shandong Youdao's phase II chlorantraniliprole production lines had reached the design capacity. The company now boasts at least 10,000 t/a chlorantraniliprole capacity. Recent years, many domestic enterprises have taken part in the pursuit of chlorantraniliprole production capacity; some have made plans to join the game starting from upstream materials and then building a complete chain centred on chlorantraniliprole.

On 19 Jan., it was revealed that Shandong Youdao Chemical Co., Ltd. (Shandong Youdao)'s phase II 9,000 t/a chlorantraniliprole production lines had reached the design capacity. The company now boasts at least 10,000 t/a chlorantraniliprole capacity. With the lines operated to the full, competition in the chlorantraniliprole market intensifies.

As of early Jan. 2024, there were 236 valid pesticide registrations for chlorantraniliprole products in China, of which 19 are for TC products.

In 2023 alone, 153 new registrations for chlorantraniliprole products were granted. The passion of Chinese pesticide enterprises for



chlorantraniliprole is thus exhibited. However, it should be noted that there is huge overcapacity for the product, which has brought its price way down. According to the Action Plan for Promoting Green Manufacturing in the Pesticide Industry issued by China Crop Protection Industry Association (CCPIA) in Dec. 2023, regarding major pesticides with severe overcapacity, which include chlorantraniliprole, glyphosate and glufosinate-ammonium, self-disciplinary management and examination should be carried out in related industries, in order to effectively control the overall capacity and eliminate backward capacity. To companies vying for a share in the chlorantraniliprole market, this means they have to take more aspects into consideration, instead of simply building the production capacity.

For some enterprises, their plan is to crack the problem via upstream material; starting from there, with stronger footing for future competition, these enterprises will then build a complete chain centred on chlorantraniliprole. For example, Nanjing Red Sun Co., Ltd. (Nanjing Red Sun) has developed with strong enthusiasm the production route for chlorantraniliprole from 2,3-dichloropyridine. 2,3-Dichloropyridine, one of the key chlorantraniliprole intermediates, is exclusively invented by Nanjing Red Sun. Currently, the company has set up 9,000 t/a capacity for the intermediate, as well as capacity for upstream and downstream products. It is worth noting that Nanjing Red Sun put its phase I 2,000 t/a chlorantraniliprole production line into operation in its Wanzhou base in Chongqing Municipality in late Aug. 2023; based on its previous plan, it will have 60,000 t/a capacity for chlorantraniliprole TC by 2027.

Some other enterprises choose to cancel previously planned projects and switch to build production capacity for chlorantraniliprole intermediates. For instance, Guangxi Liwei New Material Technology Co., Ltd. cancelled the original 30,000 t/a high-efficacy low-toxicity pesticides, pesticide and pharmaceutical intermediates project (phase I), which involves the construction of 3,000 t/a anhydrous hydrogen chloride, 60,000 t/a trimethyl orthoacetate and 6,000 t/a methyl 3,3-dimethylpent-4-enoate production equipment in the Qintang Sanli New Material Technology Park, Guigang City, Guangxi Zhuang Autonomous Region. According to the environmental impact report of the company's green products project, it proposes to build capacity for chlorantraniliprole intermediates (1,500 t/a 3-bromo-1-(3-chloropyridin-2-yl)-1H-pyrazole-5-carboxylic acid and 1,000 t/a 2-amino-5-chloro-N,3-dimethylbenzamide) and 10 by-products instead.

Bengbu Shengdan actively developing biopesticide business

Summary: On 26 Jan., the environmental impact report form of Bengbu Shengdan's 10,000 t/a novel biopesticides and environment-friendly pesticide formulations production capacity expansion project was accepted by local government. Through this project, the company is actively involved in developing the business of novel biopesticides and eco-friendly pesticides.

On 26 Jan., acceptance of the environmental impact report form of Bengbu Shengdan Biochemical Co., Ltd. (Bengbu Shengdan)'s 10,000 t/a novel biopesticides and environment-friendly pesticide formulations production capacity expansion project was announced by the Bengbu Municipal Bureau of Ecology and Environment. The company has planned to invest USD28.26 million (RMB200 million) to build this project in six months.

Bengbu Shengdan is a government-designated pesticide manufacturer located in the Mohekou Industrial Park, Bengbu City, Anhui Province. It mainly engages in the processing of multiple pesticides, especially herbicides. Previously, the company was approved of a





5,000 t/a biopesticides and environment-friendly pesticide formulations project, which involves 1,000 t/a 480g/L bentazone AS, 1,000 t/a 12.50% oxadiazon EC, 1,000 t/a 4% nicosulfuron SC, 1,500 t/a 10% pyrazosulfuron-ethyl WP and 500 t/a 75% tribenuron-methyl WG.

To better satisfy market demand and improve its product mix, now the company intends to adjust the previous project and make capacity expansion. The new 10,000 t/a project will:

- Make adjustments: Reduce 480g/L bentazone AS capacity to 230 t/a, 12.50% oxadiazon EC capacity to 50 t/a, 4% nicosulfuron SC capacity to 30 t/a, 10% pyrazosulfuron-ethyl WP capacity to 700 t/a, and 75% tribenuron-methyl WG capacity to 30 t/a;
- Add new products: Build a total of 8,960 t/a capacity for other formulation products, including 20 t/a 20% acetamiprid SP, 600 t/a 70% thiamethoxam WG, 200 t/a 5% emamectin benzoate WG, 20 t/a 5% abamectin-aminomethyl-40% lufenuron WG, 30 t/a 70% imidacloprid WG, 70 t/a 75% chlorantraniliprole WG, 40 t/a 20% dinotefuran-50% pymetrozine WG, 50 t/a 5% chlorantraniliprole-80% monosultap WG, 5 t/a 30% indoxacarb WG, 20 t/a 50% dinotefuran WG, 10 t/a 50% flonicamid WG, 30 t/a 50% clothianidin WG, 50 t/a 150g/L imidacloprid-50g/L lambda-cyhalothrin SC, 100 t/a 141g/L thiamethoxam-106g/L lambda-cyhalothrin SC, 50 t/a 20% thiamethoxam-10% chlorantraniliprole SC, 50 t/a 150g/L teflubenzuron SC, 530 t/a 240g/L chlorfenapyr SC, 150 t/a 200g/L chlorantraniliprole SC, 50 t/a 30% thiamethoxam-20% bifenthrin SC, 10 t/a 50g/L fipronil SC.

Through this project, Bengbu Shengdan is actively involved in developing the business of novel biopesticides and eco-friendly pesticides. National policies such as the Guidance Catalogue for Industrial Structure Adjustment (2024 version) encourage the development of biopesticides for the little harm they caused to human, animals and the surrounding environment. The trend of substituting biopesticides for chemical pesticides is set.





Policy

Measures for Chemical Park Management in Jiangsu Province takes effect from 10 Jan.

Summary: Jiangsu Province, a major production base of insecticide technical products, rolled out the *Measures for Chemical Park Management in Jiangsu Province* in the end of 2023. The document came into force on 10 Jan., 2024 and will stay valid until 9 Jan., 2029. It specifies requirements on planning and layout, construction of infrastructure, setting up of new chemical parks, modification to park boundaries, chemical park accreditation, park management, etc.

In late Dec. 2023, Jiangsu Province, a major production base of insecticide technical products in China, rolled out the *Measures for Chemical Park Management in Jiangsu Province*. The Measures came into force on 10 Jan., 2024 and will stay valid until 9 Jan., 2029. It is formulated for the purpose of strengthening supporting platform for chemical industry, better regulating the management of chemical parks, optimising industrial layout, driving industrial transformation and upgrading, improving quality and efficiency, and pursuing safe, high-quality and green development. Currently, the province boasts 28 chemical parks that have passed accreditation review.

The document specifies requirements on chemical park planning and layout, construction of infrastructure, setting up of new chemical parks, modification to park boundaries, chemical park accreditation, park management, etc.

Concerning planning and layout, and infrastructure construction, the Measures has specific requirements on/for:

- Site selection and layout, overall development plan and development plans for specific industries covered;
- Standards for infrastructures including supporting utilities, and facilities for workplace safety, environmental protection, risk monitoring, emergency rescue and digital management; for chemical parks, these basic standards must be met;
- Definite covering area, clear boundaries (with ends in four directions and geographical coordinates announced); certain districts and regions are prohibited for establishment of new chemical parks and park expansion.

Concerning setting up of new parks, boundary modification, and accreditation, the Measures specifies:

- The provincial government is responsible for the approval and announcement of new establishment, expansion and accreditation; duties for related departments are stated;
- Before setting up new chemical parks, full analysis must be done and such new establishment must be strictly controlled. The document lists five situations in which new establishment is approvable. New establishment must follow requirements on planning, layout and infrastructure construction put forward in the Measures;
- Application for area expansion will be considered only after four basic conditions stated in the Measures are met simultaneously. Processes for new establishment and boundary modification are given in the document, which consist of application, preliminary examination, approval, construction management, and park accreditation;
- Once preparations for new establishment or expansion are done, responsible parties for the park concerned should apply for accreditation, and the accreditation procedures are given in the Measures.

Concerning chemical park management, the Measures requires:

- Territorial regulatory should be carried out. The people's governments of cities (divided into districts) and counties (or county-level cities, districts) are responsible for the management of chemical parks in their administrative regions; they should do a good job in the routine supervision in accordance with the laws and regulations;
- Each chemical park should have a qualified agency designated for the management work;





- Dynamic management should be implemented, annual self-assessment organised, and review and evaluation made every three years;
- Once a park has the positioning for the chemical industry revoked, follow-up management are needed and some arrangements are workable.



Registration

Yearly total of insecticide products approved of registration reaches 431 as of end of 2023

Summary: By late Dec. 2023, altogether 431 insecticide products had been approved of pesticide registration in China in the year 2023. The great majority of them are of low toxicity and the three most popular forms are SC, GR and WG.

According to the data released by the Department of Agrochemical Management of the Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA), as of 31 Dec., 2023, altogether 431 insecticide products had been approved of pesticide registration in China in 2023. Nearly three quarters of these insecticide products are of low toxicity, and 14% of them are of mild toxicity. Over half of the products are in the SC form; other popular forms include GR and WG.

Many companies have several insecticide products approved of registration. Of these companies, Shandong Weifang Rainbow Chemical Co., Ltd. comes first with 15 insecticide products approved, followed by Hebei Veyong Bio-chemical Co., Ltd. with 14 insecticide products and Shaanxi Meibang Pharmaceutical Group Co., Ltd. with 12 insecticide products.



TABLE 4: Insecticide products approved of registration in China by form, 2023

No.	Form	Number
1	SC	245
2	GR	43
3	WG	37
4	TC	19
5	EC	16
6	ME	16
7	OD	12
8	FS	9
9	SL	8
10	EW	5
11	SG	4
12	TK	4
13	CS	4
14	ZC	3
15	DR	2
16	WP	2
17	SE	1
18	ES	1
Total		431

Note: The data are updated to 31 Dec., 2023. The Institute for the Control of Agrochemicals, Ministry of Agriculture and Rural Affairs (ICAMA) is still updating 2023 pesticide registrations.

Source: MARA



TABLE 5: Insecticide products approved of registration in China by toxicity, 2023

No.	Toxicity	Number
1	Low	323
2	Mild	62
3	Moderate	26
4	Low (TC: highly toxic)	14
5	Moderate (TC: highly toxic)	6
Total		431

Note: The data are updated to 31 Dec., 2023.

Source: MARA



TABLE 6: Major registrants of insecticide products approved of registration in China, 2023

No.	Registrant	Number
1	Shandong Weifang Rainbow Chemical Co., Ltd.	15
2	Hebei Veyong Bio-chemical Co., Ltd.	14
3	Shaanxi Meibang Pharmaceutical Group Co., Ltd.	12
4	Shaanxi Topsen Biological Technology Co., Ltd.	10
5	Guangdong Kefeng Bio-Technology Co., Ltd.	7
6	Shandong Yuanfeng Biotechnology Co., Ltd.	7
7	Anhui Jintudi Biotechnology Co., Ltd.	5
8	Guangdong Liwei Chemical Industry Co., Ltd.	5
9	Hailir Pesticides and Chemicals Group Co., Ltd.	5
10	Hunan Xinchangshan Agricultural Development Co., Ltd.	5
11	Jiangxi Bumper Biological Technology Co., Ltd.	5
12	Shandong Zhongxin Kenong Bio-Technology Co., Ltd.	5
13	Shaanxi Yitianfeng Crop Science and Technology Co., Ltd.	5
14	Anhui Kewu Biotechnology Co., Ltd.	4
15	Bengbu Shengdan Biochemical Co., Ltd.	4
16	Hemeisi (Shandong) Plant Protection Co., Ltd.	4
17	Hebei Xingbai Agricultural Technology Co., Ltd.	4
18	Henan Changjian Biotechnology Co., Ltd.	4
19	Henan Loong Boy Biotechnology Co., Ltd.	4
20	Henan Yunnong Crop Protection Technology Co., Ltd.	4
21	Shandong Tiandao Bioengineering Co., Ltd.	4
	Others	299
	Total	431



Note: The data are updated to 31 Dec., 2023.

Source: MARA





Pest

NATESC: relatively heavy occurrence of wheat aphids and rice planthoppers in 2024

Summary: In Jan., the NATESC organised experts to analyse and exchange views on the occurrence trend of major pests and diseases on crops in China in 2024. It is estimated that there might be heavier occurrence of 22 major pests and diseases on main grain crops (wheat, rice, maize, potato, etc.), oilseed crops and vegetables. Major pests include wheat aphids, rice planthoppers, striped rice stem borers and leaf rollers.

In Jan., the National Agro-Tech Extension and Service Centre (NATESC) organised experts to analyse and exchange views on the occurrence trend of major pests and diseases on crops in China in 2024. It is estimated that occurrence area will total 153.33 million ha in China, which increases by 26.2% from the actual occurrence area in 2023 and by 18.4% from the average of actual occurrence area during 2018–2022; over 70% of crop planting areas will be threatened. It is also forecasted that there might be heavier occurrence of 22 major pests and diseases on main grain crops (wheat, rice, maize, potato, etc.), oilseed crops and vegetables.

Occurrence trends on crops are forecasted as follows:

- **On wheat:** Total occurrence area of wheat aphids would reach 13.33 million ha across China. In general, there would be relatively heavy occurrence. Major affected regions are wheat planting areas in Huang-Huai area and North China; moderate occurrence would take place in wheat planting areas in Yangtze-Huaihe region, Southwest China and most parts of Northwest China;
- **On rice:**
 - Rice planthoppers: Total occurrence area would reach 20.67 million ha across China. Relatively heavy occurrence would be found in South China, northern and eastern parts of Southwest China and the middle and lower reaches of the Yangtze River; moderate occurrence would be found in other rice planting areas in southern China;
 - Rice leaf rollers: Total occurrence area would reach 14.67 million ha across China. Relatively heavy occurrence would be found in eastern South China, eastern Southwest China, central and western parts of Jiangnan region and rice planting areas alongside rivers; moderate occurrence would be found in other rice planting areas in southern China;
 - Striped rice stem borers: Total occurrence area would reach 16 million ha across China. Heavy occurrence would be found in mixed cropping rice (single- and double-cropping rice) regions in Jiangnan region and in rice planting areas alongside rivers in Anhui Province; relatively heavy occurrence would be found in rice planting areas in the middle and lower reaches of the Yangtze River and northern Southwest China; moderate occurrence would be found in most parts of other rice planting areas;
- **On maize:**
 - Fall armyworm: Total occurrence area would reach 3 million ha across China. Multiple generations would attack on maize fields in Southwest China, South China and Jiangnan region, with severe aftermaths; mild occurrence would be found in the middle and lower reaches of the Yangtze River, Yangtze-Huaihe region, Huang-Huai area, Northwest China and North China; relatively heavy occurrence would be found on some late-sown summer maize;
 - Armyworms: Total occurrence area would reach 3 million ha across China. In general, mild occurrence would be found in North China, Northeast China, Northwest China and Southwest China; in some areas, armyworms would occur intensively;
 - Corn borers: Total occurrence area would reach 16 million ha across China;
 - Cotton bollworms: Total occurrence area would reach 6 million ha across China. Relatively heavy occurrence would be found in certain parts of Huang-Huai-Hai region and southern Northeast China; damages would be caused mainly by third- and fourth-generation cotton bollworms;
- **On cash crops:**
 - Beet webworm: Total occurrence area would reach 1.33 million ha across China. Heavy occurrence might be found in some areas in Inner Mongolia and the surrounding areas; a general mild occurrence would be found in North China, Northeast





- China and most parts of Northwest China. Occurrence area in Inner Mongolia would account for over 60% of the total;
- Vegetable thrips: In general, there would be relatively heavy occurrence. Damages would be caused mainly on crops including cowpea, chili, cucumber, leek and eggplant. Relatively heavy occurrence would be found on vegetables via protected cultivation in northern China such as Huang-Huai area and North China, and on open-field vegetables in the middle and lower reaches of the Yangtze River, Southwest China and South China. Occurrence peaks are spring, autumn and winter;
 - Tomato leafworm: In general, there would be moderate occurrence. Relatively heavy occurrence would be found in some fields in Xinjiang, Gansu, Ningxia, Yunnan, Sichuan, Chongqing, Beijing, Tianjin, Shanxi, Hebei, Liaoning and Shandong.



Trade analysis

China's insecticide formulation Imp. & Exp. volumes drop MoM in Nov. 2023

Summary: In Nov. 2023, China's insecticide formulations were mainly exported to Brazil, Vietnam, Nigeria, etc.; the export volume dropped by over 10% MoM. However, the export volume of biological insecticide formulations edged up by nearly 5% MoM. Meanwhile, the import volume of insecticide formulations to China decreased by about 6% MoM; Singapore was the largest import origin during this period.

According to the statistics from General Administration of Customs of China (China Customs), in Nov. 2023, China exported 31,136 tonnes (actual volume, the same hereafter) of insecticide formulation products. The volume reduced by 10.70% MoM. As regards insecticide formulation imports, in the same month, China imported 351 tonnes of insecticide formulation products; the volume shrank by 5.94% MoM.

In terms of export, export price averaged USD4.92/kg in Nov. 2023, down 3.34% MoM. Major export destinations of China's insecticide formulations were Brazil, Vietnam, Nigeria, etc. Brazil was the largest export destination; the volume to this destination was 6,926 tonnes, which plunged on a monthly basis but still makes up over 22% of the monthly total. It should be noted that in Nov., the export volume of biological insecticide formulations edged up by 4.96% MoM, yet the export price plummeted 41.70% MoM.

In terms of import, average import price of insecticide formulations shot up 74.42% MoM to USD43.64/kg in Nov. 2023. Singapore became the largest import origin; the volume from this origin accounts for over 30% of the monthly total.

TABLE 7: Exports of insecticide formulations from China, Oct. and Nov. 2023

Month	Actual volume, kg	Average price, USD/kg
Nov. 2023	31,135,567	4.92
Oct. 2023	34,864,934	5.09

Note: The data are exports of both chemical insecticide formulations and biological insecticide formulations.

Source: China Customs



TABLE 8: Major destinations of insecticide formulations exported from China, Oct. and Nov. 2023

No.	Nov. 2023			Oct. 2023		
	Destination	Actual volume, tonne	Share	Destination	Actual volume, tonne	Share
1	Brazil	6,926	22.24%	Brazil	10,192	29.23%
2	Vietnam	1,977	6.35%	Thailand	1,719	4.93%
3	Nigeria	1,750	5.62%	Vietnam	1,644	4.72%
4	Myanmar	1,567	5.03%	Nigeria	1,334	3.83%
5	Thailand	1,398	4.49%	Laos	1,315	3.77%
6	Cambodia	1,129	3.63%	Myanmar	1,263	3.62%
7	Cote d'Ivoire	1,053	3.38%	Indonesia	1,051	3.01%
8	The Philippines	927	2.98%	Bangladesh	984	2.82%
9	Bangladesh	907	2.91%	Cote d'Ivoire	951	2.73%
10	Indonesia	882	2.83%	Chile	869	2.49%
	Others	12,620	40.54%	Others	13,543	38.85%
	Total	31,136	100.00%	Total	34,865	100.00%

Note: The data are exports of both chemical insecticide formulations and biological insecticide formulations.

Source: China Customs

TABLE 9: Imports of insecticide formulations to China, Oct. and Nov. 2023

Month	Actual volume, kg	Average price, USD/kg
Nov. 2023	350,836	43.64
Oct. 2023	372,990	25.02

Note: The data are imports of both chemical insecticide formulations and biological insecticide formulations.

Source: China Customs

TABLE 10: Major origins of insecticide formulations to China, Oct. and Nov. 2023

No.	Nov. 2023			Oct. 2023		
	Origin	Actual volume, tonne	Share	Origin	Actual volume, tonne	Share
1	Singapore	114	32.48%	Japan	117	31.37%
2	Indonesia	87	24.79%	Singapore	87	23.32%
3	India	50	14.25%	Indonesia	52	13.94%
4	Japan	23	6.55%	Australia	50	13.40%
5	Malaysia	17	4.84%	South Korea	38	10.19%
6	Vietnam	15	4.27%	Vietnam	15	4.02%
	Others	45	12.82%	Others	14	3.76%
	Total	351	100.00%	Total	373	100.00%

Note: The data are imports of both chemical insecticide formulations and biological insecticide formulations.

Source: China Customs

TABLE 11: Exports of biological insecticide formulations from China by month, Dec. 2022–Nov. 2023

Month	Actual export volume, kg	Average export price, USD/kg
Dec. 2022	8,259	53.39
Jan. 2023	37,382	60.05
Feb. 2023	1,738	90.50
March 2023	33,642	53.78
April 2023	90,652	50.85
May 2023	16,442	42.32
June 2023	26,887	86.61
July 2023	38,718	29.62
Aug. 2023	21,076	65.70
Sept. 2023	22,436	70.52
Oct. 2023	39,868	74.49
Nov. 2023	41,847	43.43

Source: China Customs



Brief news

Fengshan Group to rescind investment agreement with Guang'an authorities

On 3 Jan., Jiangsu Fengshan Group Co., Ltd. (Fengshan Group) announced that it had held the second meeting of the fourth Board of Directors on 2 Jan., 2024; at the meeting, the proposal to rescind the project investment agreement with Guang'an authorities was discussed and approved, and an agreement of project investment rescission would be signed. After consultation with the Administration Committee of Guang'an Economic and Technological Development Zone, the two parties agreed to terminate the previously signed Fengshan Pesticides and Fine Chemicals Project Investment Agreement and related supplemental agreements.

Previously on 30 Jan., 2023, Fengshan Group held the first extraordinary general meeting of shareholders for the year 2023, which discussed and approved the proposal to change the use of raised funds for some investment projects. The company decided to divert the funds raised for previously planned projects—the 10,000 t/a 4-chloro-3,5-dinitrobenzotrifluoride and other fine chemicals project, and the 1,600 t/a 2-nitro-4-methylsulfonylbenzoic acid and 750 t/a cyclohexanedione project—in Guang'an City of Sichuan Province into the construction of 24,500 t/a 4-chlorotoluene and other fine chemicals project in Yichang City of Hubei Province.

This time, the rescission of the agreement will not have a significant impact on the project in Hubei as well as on the company's operation in the long run. In fact, the move could help concentrate its resources and accelerate the construction of on-going projects.

Shandong Kaisheng plans to add 2,000 t/a 2,2'-dichlorodiethyl ether capacity

On 8 Jan., acceptance of the environmental impact report of Shandong Kaisheng New Materials Co., Ltd. (Shandong Kaisheng)'s 2,000 t/a 2,2'-dichlorodiethyl ether technological transformation project was announced by the Zibo Municipal Ecological Environment Bureau. The company has planned to make use of previous 28 sets of equipment, add 12 new sets and expand its capacity for hydroxychlorides. Upon completion of this project, Shandong Kaisheng will have 2,000 t/a new capacity for 2,2'-dichlorodiethyl ether, plus by-product capacity of 1,659 t/a sulphur dioxide, about 3,237 t/a hydrochloric acid (31%) and about 1,481 t/a sodium sulphite aqueous solution (30%).

Zhongke Lanhai to build 15,000 t/a capacity for intermediates

On 4 Jan., the Weifang Ecological Environment Bureau announced that it was to approve the environmental impact report of Zhongke Lanhai (Shandong) New Materials Co., Ltd. (Zhongke Lanhai)'s 10,000 t/a benzoyl chloride, 5,000 t/a benzotrichloride and 10,000 t/a peroxides project. Upon completion, the company will have production capacity of 10,000 t/a benzoyl chloride, 5,000 t/a benzotrichloride, 1,000 t/a tert-butyl 3,5,5-trimethylperoxyhexanoate (TBPMH), 1,000 t/a tert-butyl peroxy-2-ethylhexanoate (TBPO), 1,000 t/a benzoyl peroxide (BPO), 1,000 t/a tert-butylperoxy 2-ethylhexyl carbonate (TBEC), 5,000 t/a tert-butyl peroxybenzoate (TBPB), 1,000 t/a tert-amyloxy 2-ethylhexyl carbonate (TAEC), plus by-product capacity of about 25,646 t/a hydrochloric acid and 544 t/a sodium hypochlorite. Of the planned products, benzoyl chloride is an intermediate for insecticides benzoximate and 1,2-dibenzoyl-1-tert-butylhydrazine.

Mengzhou Nongda to construct capacity for biopesticide formulations

On 8 Jan., the environmental impact report form of Mengzhou Nongda Biochemical Co., Ltd. (Mengzhou Nongda)'s 3,000 t/a biopesticide





formulations upgrade and 4,000 t/a fertilisers project was approved by the Jiaozuo Ecological Environment Bureau. Although its total capacity for pesticide formulations will remain at 3,000 t/a, the company has planned to adjust product mix and construct workshops and production lines for formulation products in the forms of SL, DC, SC, FS, WG, GR, OD, ME and ST. Upon completion of the project, it will add capacity of 950 t/a 5% (+)-abscisic acid, 20 t/a 50g/L flufenoxuron, 50 t/a 25% paclobutrazol, 20 t/a 600g/L imidacloprid, 20 t/a 3% 28-homobrassinolide-gibberellic acid, 50 t/a 30% thidiazuron, 50 t/a 0.1% triacontanol, 20 t/a 10% gibberellic acid and 20 t/a 3% 1-methylcyclopropene (1-MCP).

Shandong Shuncheng plans pesticide TC & formulation project

On 2 Jan., acceptance of the environmental impact report of Shandong Shuncheng Chemical Co., Ltd. (Shandong Shuncheng)'s pesticide TC and formulation project was announced by the Weifang Ecological Environment Bureau. The company has planned to invest USD87.61 million (RMB620 million), of which 5%, or USD4.38 million (RMB31 million), is for environmental protection, into this project. Upon completion, Shandong Shuncheng will have capacity of 8,000 t/a profenofos, 4,000 t/a propyl bromide, 1,000 t/a 1-bromobutane, 5,000 t/a MCPA, 2,000 t/a MCPA-sodium SP, 500 t/a MCPA-sodium AS, 1,500 t/a trityl chloride, 7,500 t/a O,O-diethyl-O-(2-chloro-4-bromophenyl)thiophosphate, and 1,250 t/a hydrochloric acid (by-product).

Liaoning Tianyu to build 600 t/a 2,6-dichlorobenzonitrile capacity

On 24 Jan., Fuxin Municipal Bureau of Ecology and Environment approved the environmental impact report of Liaoning Tianyu Chemical Co., Ltd. (Liaoning Tianyu)'s 2,100 t/a fine chemicals technological transformation project. The company has planned to make changes to some existing workshops, buildings, and production equipment, as well as add 600 t/a 2,6-dichlorobenzonitrile (DFBN) capacity. Meanwhile, it will remove 3,4-difluorobenzonitrile (BFBN), 2-chloro-4-fluoro-5-nitrobenzotrithloride (CFNBTC) and 2-fluoro-4-chlorotoluene (FCTN) from its product mix, and cancel the nitrification and hydrogenation processes in the previous 6-fluoro-2-methyl-1H-indole (6FMI) production processes and thus switch to produce 2-(2-propionyl)-5-fluoro-nitrobenzene (6FMI-3).

Liaoning Tianyu is a wholly-owned subsidiary of Lianhe Chemical Technology Co., Ltd.

Anhui Haishun plans to build 4,000 t/a capacity for intermediates

On 11 Jan., acceptance of the environmental impact report of Anhui Haishun Chemical Co., Ltd. (Anhui Haishun)'s 3,000 t/a 1-hexadecanesulfonic acid sodium salt and 7,000 t/a fine chemical intermediates (Phase I) was announced by the Ma'anshan Municipal Bureau of Ecology and Environment. The company has planned to rebuild and upgrade its production lines of 3,000 t/a 1-hexadecanesulfonic acid sodium salt and 1,000 t/a 2-(4-chlorophenyl)-3-methylbutyryl chloride, and to build new capacity of 2,000 t/a chloromethyl isopropyl carbonate and 2,000 t/a 2,6-dichlorobenzonitrile in the first phase program.

Anhui Chengming plans to build 14kt/a capacity for phosphate esters

On 8 Jan., acceptance of the environmental impact report of Chengming Chemistry (Anhui) Co., Ltd. (Anhui Chengming)'s 14,000 t/a phosphate esters project was announced by the Bengbu Municipal Bureau of Ecology and Environment. The company has planned to invest USD15.54 million (RMB110 million) in this project, of which 1.33% or USD206,302.11 (RMB1.46 million) is for environmental





protection. Upon completion (after an expected 12-month construction period), Anhui Chengming will have production capacity of 10,000 t/a triethyl phosphate (99.5%), 2,000 t/a tributyl phosphate (99.5%, suitable for export) and 2,000 t/a triisobutyl phosphate (99.5%, suitable for export).

Ningxia Nongjia to build capacity for thiamethoxam & clothianidin

On 22 Jan., it was announced that local authorities intended to approve the environmental impact report of Ningxia Nongjia New Material Technology Co., Ltd. (Ningxia Nongjia)'s 10,000 t/a thiamethoxam and 5,000 t/a clothianidin TC project. Ningxia Nongjia has planned to invest USD16.96 million (RMB120 million), of which 4.34% or USD736,187.65 (RMB5.21 million) is for environmental protection, to build the capacity in its plant.

Ningxia Nongjia was established in Oct. 2018, its registered address being located in the new material base of Qingtongxia City, Ningxia Hui Autonomous Region. Its business scope covers production and wholesale of pesticides, manufacture of basic chemical materials, etc. Currently, Ningxia Soochow Agrochemical Co., Ltd. holds 49% stake in this company and Chengwu Chenhui Environmental Protection Technology Co., Ltd. holds the rest 51% stake.

Jiangsu Lanfeng finishes the sale of a wholly-owned subsidiary

On 22 Jan., Jiangsu Lanfeng Bio-chemical Co., Ltd. (Jiangsu Lanfeng) announced that it had completed the transfer of its 100% equity in Ningxia Lanfeng Fine Chemical Co., Ltd. (Ningxia Lanfeng) to Hebei Wanglian Agricultural Technology Co., Ltd. (Hebei Wanglian). Previously in Dec. 2023, Jiangsu Lanfeng held a board meeting and a meeting of the supervisory board, and deliberated and agreed to the proposal to sell 100% equity of its wholly-owned subsidiary Ningxia Lanfeng to Hebei Wanglian at the price of USD2.90 million (RMB20.50 million).

In view of the USD1.41 million (RMB10 million) balance that Jiangsu Lanfeng has concerning the guarantee for external loan to Ningxia Lanfeng, Hebei Wanglian had agreed to pledge the 100% equity to Jiangsu Lanfeng as the counter guarantee, according to the arrangement of the guarantee measures stated in the equity transfer agreement the two parties reached. On 19 Jan., Hebei Wanglian went through the procedures of equity pledge registration at the Zhongwei Industrial Park Branch of Zhongwei Market Supervision and Management Bureau of Zhongwei City.





Price update

Ex-works prices of major insecticides in China, 8 Jan., 2024

TABLE 12: Ex-works prices of major insecticides in China, 8 Jan., 2024

Product	20231208		20240108	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	380,000	53,442.84	372,000	52,564.65
97% Acephate technical	43,000	6,047.48	42,000	5,934.72
95% Acetamiprid technical	80,500	11,321.44	79,000	11,162.92
95% Azocyclotin technical	220,000	30,940.59	225,000	31,793.13
95% Beta-Cypermethrin technical	126,000	17,720.52	126,000	17,804.15
97% Bifenthrin technical	151,500	21,306.82	148,000	20,912.82
95% Buprofezin technical	65,000	9,141.54	65,000	9,184.68
98% Carbofuran technical	100,000	14,063.91	100,000	14,130.28
98% Chlorfenapyr technical	168,000	23,627.36	165,000	23,314.96
95% Chlorfluazuron technical	400,000	56,255.63	395,000	55,814.61
95% Chlorpyrifos technical	35,300	4,964.56	34,300	4,846.69
94% Cypermethrin technical	58,000	8,157.07	58,000	8,195.56
99% Cyromazine technical	120,000	16,876.69	113,000	15,967.22
98% Deltamethrin technical	380,000	53,442.84	390,000	55,108.1
95% Diafenthiuron technical	112,000	15,751.58	112,000	15,825.91
98% Dimethoate technical	47,600	6,694.42	47,600	6,726.01
70% Emamectin benzoate technical	364,000	51,192.62	359,000	50,727.71
92% Fenvalerate technical	145,000	20,392.66	145,000	20,488.91
95% Fipronil technical	415,000	58,365.21	411,000	58,075.46
98% Hexaflumuron technical	460,000	64,693.97	460,000	64,999.29





97% Imidacloprid technical	90,600	12,741.9	88,600	12,519.43
98% Isoprocarb technical	45,500	6,399.08	45,500	6,429.28
95% Lambda-cyhalothrin technical	117,000	16,454.77	111,000	15,684.61
90% Malathion technical	35,000	4,922.37	35,000	4,945.6
95% Methidathion technical	90,000	12,657.52	90,000	12,717.25
90% Methomyl SP	63,000	8,860.26	58,900	8,322.74
98% Methomyl technical	72,000	10,126.01	67,000	9,467.29
75% Omethoate technical	52,000	7,313.23	52,000	7,347.75
90% Phoxim technical	33,000	4,641.09	33,000	4,662.99
90% Profenofos technical	68,000	9,563.46	65,800	9,297.73
90% Propargite technical	60,000	8,438.34	60,000	8,478.17
95% Pymetrozine technical	103,800	14,598.33	100,800	14,243.32
95% Pyridaben technical	102,000	14,345.18	102,000	14,412.89
97% Spirodiclofen technical	139,000	19,548.83	139,000	19,641.09
85% Triazophos technical	69,000	9,704.1	69,000	9,749.89

Note: Ex-works price includes VAT.

Source: CCM

Shanghai Port prices of major insecticides in China, 8 Jan., 2024





TABLE 13: Shanghai Port prices of major insecticides in China, 8 Jan., 2024

Product	20231208		20240108	
	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)
95% Abamectin technical	380,500	53,513.16	372,500	52,635.3
97% Acephate technical	43,500	6,117.8	42,500	6,005.37
95% Acetamiprid technical	81,000	11,391.76	79,500	11,233.57
95% Azocyclotin technical	220,500	31,010.91	225,500	31,863.78
95% Beta-Cypermethrin technical	126,500	17,790.84	126,500	17,874.81
97% Bifenthrin technical	152,000	21,377.14	148,500	20,983.47
95% Buprofezin technical	65,500	9,211.86	65,500	9,255.33
98% Carbofuran technical	100,500	14,134.23	100,500	14,200.93
98% Chlorfenapyr technical	168,500	23,697.68	165,500	23,385.62
95% Chlorfluazuron technical	400,500	56,325.95	395,500	55,885.26
95% Chlorpyrifos technical	35,800	5,034.88	34,800	4,917.34
94% Cypermethrin technical	58,500	8,227.39	58,500	8,266.21
99% Cyromazine technical	120,500	16,947.01	113,500	16,037.87
98% Deltamethrin technical	380,500	53,513.16	390,500	55,178.75
95% Diafenthiuron technical	112,500	15,821.89	112,500	15,896.57
98% Dimethoate technical	48,100	6,764.74	48,100	6,796.67
70% Emamectin benzoate technical	364,500	51,262.94	359,500	50,798.36
92% Fenvalerate technical	145,500	20,462.98	145,500	20,559.56
95% Fipronil technical	415,500	58,435.53	411,500	58,146.11
98% Hexaflumuron technical	460,500	64,764.29	460,500	65,069.94
97% Imidacloprid technical	91,100	12,812.22	89,100	12,590.08
98% Isoprocarb technical	46,000	6,469.4	46,000	6,499.93





95% Lambda-cyhalothrin technical	117,500	16,525.09	111,500	15,755.26
90% Malathion technical	35,500	4,992.69	35,500	5,016.25
95% Methidathion technical	90,500	12,727.84	90,500	12,787.9
90% Methomyl SP	63,500	8,930.58	59,400	8,393.39
98% Methomyl technical	72,500	10,196.33	67,500	9,537.94
75% Omethoate technical	52,500	7,383.55	52,500	7,418.4
90% Phoxim technical	33,500	4,711.41	33,500	4,733.64
90% Profenofos technical	68,500	9,633.78	66,300	9,368.38
90% Propargite technical	60,500	8,508.66	60,500	8,548.82
95% Pymetrozine technical	104,300	14,668.65	101,300	14,313.97
95% Pyridaben technical	102,500	14,415.5	102,500	14,483.54
97% Spirodiclofen technical	139,500	19,619.15	139,500	19,711.74
85% Triazophos technical	69,500	9,774.41	69,500	9,820.55

Note: Shanghai port price = ex-works price + transportation fee from warehouse to Shanghai port, and the ex-works price includes VAT
Source: CCM

FOB Shanghai prices of major insecticides in China, 8 Jan., 2024





TABLE 14: FOB Shanghai prices of major insecticides in China, 8 Jan., 2024, USD/t

Product	20231208	20240108
95% Abamectin technical	52,076.85	51,221.1
97% Acephate technical	5,789.41	5,681.46
95% Acetamiprid technical	11,102.16	10,946.71
95% Azocyclotin technical	30,271.22	31,105.32
95% Beta-Cypermethrin technical	16,743.2	16,822.22
97% Bifenthrin technical	20,075.5	19,704.26
95% Buprofezin technical	9,017.44	9,060
98% Carbofuran technical	13,806.46	13,871.62
98% Chlorfenapyr technical	23,093.56	22,788.22
95% Chlorfluazuron technical	54,842.83	54,412.89
95% Chlorpyrifos technical	4,939.89	4,822.6
94% Cypermethrin technical	7,757.85	7,794.47
99% Cyromazine technical	15,946.64	15,087.29
98% Deltamethrin technical	50,239.11	51,804.54
95% Diafenthiuron technical	14,899.49	14,969.81
98% Dimethoate technical	6,428.8	6,459.14
70% Emamectin benzoate technical	49,889.84	49,436.76
92% Fenvalerate technical	19,289.52	19,380.56
95% Fipronil technical	56,870.71	56,588.37
98% Hexaflumuron technical	63,050.55	63,348.12
97% Imidacloprid technical	12,491.25	12,273.16
98% Isoprocarb technical	6,151.75	6,180.79
95% Lambda-cyhalothrin technical	15,529.73	14,802.87





90% Malathion technical	4,754.75	4,777.19
95% Methidathion technical	12,458.22	12,517.02
90% Methomyl SP	8,743.32	8,212.89
98% Methomyl technical	10,867.74	10,160.77
75% Omethoate technical	7,011.02	7,044.11
90% Phoxim technical	4,593.52	4,615.2
90% Profenofos technical	9,091.71	8,839.09
90% Propargite technical	8,355.17	8,394.61
95% Pymetrozine technical	13,813.05	13,477.13
95% Pyridaben technical	14,095.18	14,161.7
97% Spirodiclofen technical	18,467.35	18,554.51
85% Triazophos technical	9,611.35	9,656.72

Note: FOB price is calculated mainly based on ex-works price, tax refund, value added tax rate, exchange rate, etc.

Source: CCM



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Publisher : Kcomber Inc.

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