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Headline

Hebei Sanlen has already put the 200 t/a production line of fosthiazate TC into operation. Yet construction of lines for other pesticide TC

products approved along with fosthiazate TC is cancelled for good.

On 10 Feb., 2022, the grounding breaking ceremony for Shandong Shibang's new production base took place in Shanxian Chemical

Industrial Park, Heze City, Shandong Province. Once the base put into operation, the company will have its R&D and production capacity

greatly improved, acquiring larger competitive strength.

In early Feb., 2022, ex-works prices of most insecticide TC products in China continued the downtrend seen in Jan.

In late Feb., the ex-works price of acetamiprid TC was recorded at USD27,131/t (RMB172,500/t), down 10.39% MoM; the ex-works price

of imidacloprid TC was USD27,524/t (RMB175,000/t), down 10.26% MoM.

According to data from Tranalysis, China's chlorpyrifos was mainly exported to 13 countries in Sept.-Oct. 2021, including Brazil, the US,

Australia, Pakistan and Peru. The total export volume was 1,287.29 tonnes (actual volume), which meant 1,092.27 tonnes converted to

100% AI.

In late Jan., the Department of Agriculture and Rural Affairs of Yunnan Province estimated that in macadamia planting areas within the

province, stinkbug, Cryptophlebia ombrodelta and Deudorix epijarbas were expected to occur moderately, thrip was expected to occur in a

moderate-to-mild way, and aphid was expected to occur mildly in 2022.

On 29 Jan., 2022, MARA and other eight departments jointly issued the Development Plan of the Pesticide Industry in China in the 14th

Five-Year Plan Period (2021-2025). The fundamental task in this five-year period is to build up or improve five systems covering

modernised pesticide production, pesticide operation services, safe use of pesticides, supervision and management of pesticides, as well

as pesticide R&D and innovation. The Plan also suggests further improvement of China's pesticide registration and approval system.

On 3 Feb., 2022, NDRC jointly issued with other three departments the Guidelines for Key Areas of High Energy-Consuming Industries to

Improve Energy Conservation and Carbon Reduction Through Reform and Upgrade (2022 Edition). The Guidelines specifies directions

and targets on energy conservation and carbon reduction in 17 industries.

According to information released by ICAMA in late-Jan. 2022, registration renewal of 128 agrochemical products from 85 companies

altogether was approved, of which 27 were insecticides, including 5 hygienic insecticides.

A core patent of chlorantraniliprole in China (CN100391338C) is about to expire on 13 Aug., 2022.

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Editor's note

In early Feb., 2022, ex-works prices of most insecticide TC products in China continued the downtrend seen in Jan.

As for company dynamics, in late Jan., Hebei Sanlen has already put the 200 t/a production line of fosthiazate TC into operation, yet construction of lines for some other pesticide TC products is cancelled for good. On 10 Feb., 2022, Shandong Shibang held a grounding breaking ceremony for its new production base in Shanxian Chemical Industrial Park, Heze City, Shandong Province. Once the base put

into operation, the company will have its R&D and production capacity greatly improved, acquiring larger competitive strength.

As to latest policy, on 29 Jan., 2022, MARA and other eight departments jointly issued the Development Plan of the Pesticide Industry in China in the 14th Five-Year Plan Period (2021–2025). The fundamental task in this five-year period is to build up or improve five systems covering modernised pesticide production, pesticide operation services, safe use of pesticides, supervision and management of pesticides, as well as pesticide R&D and innovation. On 3 Feb., 2022, NDRC jointly issued with other three departments the Guidelines for Key Areas of High Energy-Consuming Industries to Improve Energy Conservation and Carbon Reduction Through Reform and

Upgrade (2022 Edition). The Guidelines specifies directions and targets on energy conservation and carbon reduction in 17 industries.

In terms of pesticide registration, according to information released by ICAMA in late-Jan. 2022, registration renewal of 128 agrochemical products from 85 companies altogether was approved, of which 27 were insecticides, including 5 hygienic insecticides.

The USD/CNY exchange rate in this newsletter is USD1.00=CNY6.3580 on 7 Feb., 2022, sourced from the People's Bank of China. All the prices mentioned in this newsletter will include the VAT, unless otherwise specified.

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Company dynamics

Hebei Sanlen cancels proposed new capacity for multiple pesticide TC products

Summary: Hebei Sanlen has already put the 200 t/a production line of fosthiazate TC into operation. Yet construction of lines for other

pesticide TC products approved along with fosthiazate TC is cancelled for good.

Hebei Sanlen Agrochemical Co., Ltd. (Hebei Sanlen) announced in late Jan. that its 200 t/a fosthiazate TC production line had been put

into operation, but it would no longer invest in building up capacity for thifluzamide TC (200 t/a), thiamethoxam TC (300 t/a), mesotrione

TC (100 t/a), heptafluoro pyrethrin TC (50 t/a), chlorempenthrin TC (30 t/a), transfluthrin TC (20 t/a) and meperfluthrin TC (20 t/a) and etc.,

due to changing market as well as alterations to its future development plan. Previously, Hebei Sanlen proposed a nine-pesticide TC

project, which was divided into three phases, with 200 t/a fosthiazate TC in the first phase.

Realisation of Hebei Sanlen's fosthiazate TC capacity has granted the company a better say in this market. And more supply of

fosthiazate TC in China is well expected. However, cancellation of the phase two and phase three may have some negative effects on its

development, yet it will not be large as it can still outsource these TC products for its formulation business. Besides, overall supply of

these TC products will not be affected as proposed capacity in Hebei Sanlen is rather small.

Founded in 1997 and located in Douyu Industrial Area, Luancheng District, Shijiazhuang City, Hebei Province, Hebei Sanlen has

established itself as a pesticide producer with certain influence after years of development. The company is dedicated to further exploring

the fosthiazate TC market. And before the 200 t/a line went into production, it had 10,500 t/a for pesticide formulations.

Currently, Hebei Sanlen holds a 96% fosthiazate TC pesticide registration, and seven registrations for fosthiazate formulations: 20%

fosthiazate GR, 75% fosthiazate EC, 5% fosthiazate GR, 30% fosthiazate CS, 5% fosthiazate ME, 40% fosthiazate EW and 10%

fosthiazate GR. It has also acquired production licence for fosthiazate TC and pesticide business licence.

Fosthiazate is an organophosphorus nematicide, which has a good performance on prevention and control of a wide variety of

nematodes, such as root knot nematode, stem nematode and cyst nematode. As damages caused by nematodes increase, these

roundworms grow into one of major threats to agricultural production. But nematicide, as a subdivision of insecticide, has a small pool of

available products, which leaves larger blank in the market to be filled. So, although an old nematicide product, fosthiazate is still a vital

force in today's nematode prevention and control.

Besides fosthiazate, other products against nematodes are abamectin, abamectin B2, carbofuran, aldicarb, isofenphos-methyl,

chloropicrin, Rhodovulum sulfidophilum HNI-1, fluensulfone, allyl isothiocyanate, Verticillium chlamydosporium ZK7, Bacillus firmus,

emamectin benzoate, dazomet, oligosaccharins, profenofos, sulfuryl fluoride, Paecilomyces lilacinus, Bacillus cereus, matrine, fluopyram,

ethoprophos, calcium cyanamide, metam-sodium, carbosulfan, trifluorocide and etc.

Shandong Shibang's new production base breaks ground in Heze City

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Summary: On 10 Feb., 2022, the grounding breaking ceremony for Shandong Shibang's new production base took place in Shanxian Chemical Industrial Park, Heze City, Shandong Province. Once the base put into operation, the company will have its R&D and production

capacity greatly improved, acquiring larger competitive strength.

On 10 Feb., 2022, grounding breaking ceremony for the new production base of Shandong Shibang Agrochemical Co., Ltd. (Shandong

Shibang) took place in Shanxian Chemical Industrial Park, Heze City, Shandong Province. Once the base completed and put into

operation, the company's R&D and production capacity will be greatly improved, which enables it to meet diverse needs of its customers

more quickly and thus hold larger competitive strength.

Shandong Shibang is determined to become a leading domestic pesticide formulation manufacturer, and thus the new production base

will be established with high standards in construction, and operated under high-quality management for better efficiency.

Overview of the new Heze base

• Designed production equipment: automatic filling lines for bottles*52, automatic filling lines for flexible packaging*22, sand mill*45 (in

15 sets), preparation vessel*139

• Construction content: Eight buildings in total with other supporting utilities

o A centre for quality control & research and development

o Four comprehensive production workshops

Three warehouses

• Total floor area: 4.6 ha, of which 3.4 ha for the first phase

Investment for the first phase: USD28.31 million (RMB180 million)

Shandong Shibang achieved over 40% growth in sales in 2020 and 2021 when the COVID-19 was still raging. It ranked 40th in the 2021

list of Top100 Pesticide Formulation Companies in China, released by China Crop Protection Industry Association, and was awarded the

honour Top10 Famous Branded Pesticide Product by the provincial government seven years in a row. The company has been active in

promoting pesticide precision application technologies to maintain stable crop yield or boost yield while cutting down on unit consumption

of pesticides. In addition, it has earned public recognition through active involvement in various disease and pest control programs.

The company also pays great attention to product R&D. It holds more than 100 pesticide product registration certificates, covering seven

categories such as insecticides, fungicides and acaricides. As of 15 Feb., 2022, Shandong Shibang had 31 registered insecticide

formulations; EC products were registered with the largest number, reaching 14. Its branded 5% abamectin-aminomethyl EC has become

a favourable product in domestic market and the 26% lambda-cyhalothrin acetamiprid WG is a rare high-end product to prevent and

control cotton mirids in China.

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TABLE 1: Shandong Shibang's registration of insecticides EC, as of 15 Feb., 2022

No.	Active ingredient	Total content	Expiry date
1	Abamectin-acetamiprid	4%	2027/3/13
2	Abamectin pyridaben	10%	2027/2/22
3	Petroleum oil	97%	2025/3/22
4	Abamectin-aminomethyl	5%	2025/1/19
5	Dichlorvos·chlorpyrifos	35%	2025/1/11
6	Alpha-cypermethrin	100g/L	2024/12/24
7	Cypermethrin chlorpyrifos	522.5g/L	2024/5/27
8	Cypermethrin·profenofos	440g/L	2024/3/25
9	Bifenthrin	100g/L	2024/2/4
10	Chlorfluazuron	50g/L	2023/12/23
11	Bifenthrin	25g/L	2023/12/23
12	Malathion	70%	2023/12/22
13	Abamectin	2%	2023/12/4
14	Phoxim	70%	2022/6/21

Note:Its pesticide products are registered under the former name Jinan Shibang Agrochemical Co., Ltd. Source:Institute for the Control of Agrochemicals, Ministry of Agriculture and Rural Affairs (ICAMA)



Market analysis

Most insecticides TC see price drop in early Feb. in China

Summary: In early Feb., 2022, ex-works prices of most insecticide TC products in China continued the downtrend seen in Jan.

In early Feb., 2022, ex-works prices of most insecticide TC products in China continued a downtrend. The price of yellow phosphorus, a raw material for organophosphorus insecticides, was lowered, easing some pressures on producers of organophosphorus pesticides. And sluggish demand for nicotinoid insecticides dragged down prices of nicotinoid insecticide products.

Organophosphorus insecticides: As the price of upstream raw material yellow phosphorus declined, production cost in the manufacturers decreased. And prices of most organophosphorus insecticides TC went down in early Feb.

- Chlorpyrifos TC: USD7,471/t (RMB47,500/t), down 3.06% MoM (the MoM change is calculated with RMB price, the same thereafter)
- Acephate TC: USD9,437/t (RMB60,000/t), down 6.25% MoM
- Phoxim TC: USD7,078/t (RMB45,000/t), close to that in the last month

Nicotinoid insecticides: Around the Spring Festival, prices of 2-chloro-5-(chloromethyl)pyridine (CCMP) and other intermediates rose.

However, weak downstream demand pushed producers to cut the prices of imidacloprid TC and acetamiprid TC after the holiday.

- Imidacloprid TC: USD30,670/t (RMB195,000/t), down 7.14% MoM, though its supply decreased due to low operating rate
- Acetamiprid TC: USD30,277/t (RMB192,500/t), down 8.33% MoM

Pyrethroid insecticides: The majority of TC products in this category saw their ex-works prices go down in early Feb.

- Beta-cypermethrin TC: USD29,097/t (RMB185,000/t), basically flat
- Cypermethrin TC: USD13,998/t (RMB89,000/t), down 3.26% MoM, though TC producers operated at low level
- Bifenthrin TC: USD53,476/t (RMB340,000/t), down 4.23% MoM



TABLE 2: Ex-works prices of major insecticide TC products in China in early and mid-Feb.

Product	Category	Ex-works price (RMB/t)	Ex-works price (USD/t)	MoM change
Chlorpyrifos TC	Organophosphorus insecticide	47,500	7,471	Down
Phoxim TC	Organophosphorus insecticide	45,000	7,078	Basically flat
Acephate TC	Organophosphorus insecticide	60,000	9,437	Down
Beta-cypermethrin TC	Pyrethroid insecticide	185,000	29,097	Basically flat
Cypermethrin TC	Pyrethroid insecticide	89,000	13,998	Down
Bifenthrin TC	Pyrethroid insecticide	340,000	53,476	Down
Imidacloprid TC	Nicotinoid insecticide	195,000	30,670	Down
Acetamiprid TC	Nicotinoid insecticide	192,500	30,277	Down
Abamectin TC	Antibiotic insecticide	710,000	111,670	Basically flat
Emamectin benzoate TC	Antibiotic insecticide	737,000	115,917	Down

Source: CCM

Over 10% MoM decreases in acetamiprid and imidacloprid TC prices in late Feb.

Summary: In late Feb., the ex-works price of acetamiprid TC was recorded at USD27,131/t (RMB172,500/t), down 10.39% MoM; the ex-works price of imidacloprid TC was USD27,524/t (RMB175,000/t), down 10.26% MoM.

In late Feb., the ex-works price of acetamiprid TC was USD27,131/t (RMB172,500/t), down by 10.39% MoM and the ex-works price of imidacloprid TC was USD27,524/t (RMB175,000/t), down by 10.26% MoM. Such decreases are mainly attributed to inactive purchase in downstream companies.

It is worth mentioning that high price of crude oil recently has driven up prices of basic raw materials. However, sluggish demand dragged down the price of 2-chloro-5-(chloromethyl)pyridine (CCMP), an intermediate for acetamiprid and imidacloprid. Currently, supply of CCMP is limited. It is believed that operation in imidacloprid producers might be hampered by tight supply of CCMP in the short term.



FIGURE 1: Ex-works price of acetamiprid TC in China, March 2021-Feb. 2022

-O- Price (USD/t) -O- Original Price (RMB/t) Price (USD/t) Original Price (RMB/t) 39,000 240,000 36,000 220,000 33,000 200,000 30,000 180,000 27,000 160,000 24,000 140,000 21,000 120,000 18,000 100,000 15,000 20220125 2021225

Source: CCM

FIGURE 2: Ex-works price of imidacloprid TC in China, March 2021–Feb. 2022

— Price (USD/t) — Original Price (RMB/t) Price (USD/t) Original Price (RMB/t) 39,000 260,000 36,000 240,000 33,000 220,000 30,000 200,000 180,000 27,000 24,000 160,000 21,000 140,000 18,000 120,000 ANTION'S ANTION'S ANTION'S ANTION'S ANTIPLYS ANTIPLYS ANTIONIS ANTIONIS

Source:CCM



Import and export

China's chlorpyrifos exports in Sept.-Oct. 2021

Summary: According to data from Tranalysis, China's chlorpyrifos was mainly exported to 13 countries in Sept.-Oct. 2021, including Brazil, the US, Australia, Pakistan and Peru. The total export volume was 1,287.29 tonnes (actual volume), which meant 1,092.27 tonnes converted to 100% AI.

According to data from Tranalysis as of 3 Feb., 2022, China's chlorpyrifos was mainly exported to 13 countries in Sept.-Oct. 2021, including Brazil, the US, Australia, Pakistan and Peru The total export volume was 1,287.29 tonnes (actual volume), which equals to 1,092. 27 tonnes when converted to 100% AI.

Here is the detailed information on China's chlorpyrifos exports to its destinations in Sept.-Oct. 2021.

Chlorpyrifos formulation

- Major export type: 400g/L chlorpyrifos EC and 480g/L chlorpyrifos EC
- Major export destination: In this period, China exported 293.71 tonnes (actual volume) of chlorpyrifos formulation in total, at an average export price of USD3.90/kg. The US was the largest export destination, with a volume of 115.72 tonnes (actual volume), accounting for 39.40% of the total formulation products exported in Sept.-Oct.
- Major exporter: The top three exporters were Jiangsu Joc Great Wall Corp., Sharda Cropchem Limited and Jiangsu Trustchem Co., Ltd. The export volume of these three reached 151.56 tonnes (actual volume), accounting for 51.60% of chlorpyrifos formulation exported from China to its major export destinations in the two months.

Chlorpyrifos TC

- Major export type: 95% chlorpyrifos TC and 97% chlorpyrifos TC
- Major export destination: In Sept.-Oct. 2021, China exported 993.58 tonnes (actual volume) of chlorpyrifos TC in total, at an average export price of USD5.73/kg. Brazil was China's largest export destination, with 464.25 tonnes (actual volume), accounting for 46.72% of the total chlorpyrifos TC export in this period.
- Major exporter: The top three exporters were Zhejiang Xinnong Chemical Co., Ltd., Shandong Rainbow International Co., Ltd. and Shanghai Risen International Trade Co., Ltd. They together exported 558.62 tonnes (actual volume) of chlorpyrifos TC products, which makes up 56.22% of the total chlorpyrifos TC export to China's major export destinations in Sept.-Oct.

TABLE 3: China's chlorpyrifos formulation exports, Sept.-Oct. 2021

No.	Product	Volume, kg	Average price, USD/kg
1	480g/L chlorpyrifos EC	252,122	4.02
2	400g/L chlorpyrifos EC	41,585	3.18
Total		293,707	3.90

Note: The data is from Tranalysis as of 3 Feb., 2022.

Source:Tranalysis



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TABLE 4: China's chlorpyrifos TC exports, Sept.-Oct. 2021

No.	Product	Volume, kg	Average price, USD/kg
1	97% chlorpyrifos TC	953,580	5.73
2	95% chlorpyrifos TC	40,000	5.60
	Total	993,580	5.73

Note: The data is from Tranalysis as of 3 Feb. 2022.

Source:Tranalysis

 TABLE 5: China's export volume of chlorpyrifos formulation by destination, Sept.–Oct. 2021

No.	Export destination	Volume, kg
1	The US	115,720
2	Peru	68,600
3	Bangladesh	29,697
4	Uganda	20,306
5	Ukraine	18,320
6	South Korea	17,800
7	Pakistan	17,000
8	Ghana	6,264
	Total	293,707

Note: The data is from Tranalysis as of 3 Feb., 2022.

Source: Tranalysis



 TABLE 6: China's export volume of chlorpyrifos TC by destination, Sept.—Oct. 2021

No.	Export destination	Volume, kg
1	Brazil	464,250
2	Australia	188,536
3	Pakistan	100,000
4	The US	97,920
5	South Korea	43,340
6	Indonesia	36,000
7	Chile	30,000
8	Peru	20,000
9	Colombia	13,534
	Total	993,580

Note: The data is from Tranalysis as of 3 Feb., 2022.

Source:Tranalysis



 TABLE 7: China's export volume of chlorpyrifos formulation by exporter, Sept.–Oct. 2021

No.	Exporter	Volume, kg
1	Jiangsu Joc Great Wall Corp.	63,720
2	Sharda Cropchem Limited	52,000
3	Jiangsu Trustchem Co., Ltd.	35,840
4	JOC Uniwell Industrial Co., Ltd.	32,760
5	Shandong Weifang Rainbow Chemical Co., Ltd.	20,306
6	Hangzhou Smart Chemical Co., Ltd.	18,320
7	Anhui Youngsun Pesticides Co., Ltd.	17,800
8	Shanghai Agroriver Chemical Co., Ltd.	16,640
9	Zhejiang Xinnong Chemical Co., Ltd.	16,000
10	Zhejiang Rayfull Chemicals Co., Ltd.	6,272
	Others	14,049
	Total	293,707

Note: The data is from Tranalysis as of 3 Feb., 2022.

Source:Tranalysis



TABLE 8: China's export volume of chlorpyrifos TC by exporter, Sept.-Oct. 2021

No.	Exporter	Volume, kg
1	Zhejiang Xinnong Chemical Co., Ltd.	228,000
2	Shandong Rainbow International Co., Ltd.	202,500
3	Shanghai Risen International Trade Co., Ltd.	128,120
4	Nanjing Bodao Logistics Co., Ltd.	100,000
5	Adama Makhteshim Ltd.	97,920
6	Shandong Weifang Rainbow Chemical Co., Ltd.	68,000
7	Anhui Alic Chemicals Co., Ltd.	43,040
8	Ningbo Generic Chemical Co., Ltd.	21,720
9	Nanjing Red Sun Co., Ltd.	21,620
10	High Hope Zhongding Corporation	17,376
	Others	65,284
	Total	993,580

Note: The data is from Tranalysis as of 3 Feb., 2022.

Source:Tranalysis



Pest

Forecast of pest occurrence on macadamia in Yunnan in 2022

Summary: In late Jan., the Department of Agriculture and Rural Affairs of Yunnan Province estimated that in macadamia planting areas within the province, stinkbug, Cryptophlebia ombrodelta and Deudorix epijarbas were expected to occur moderately, thrip was expected to occur in a moderate-to-mild way, and aphid was expected to occur mildly in 2022.

In late Jan., the Department of Agriculture and Rural Affairs of Yunnan Province estimated that in macadamia planting areas within the province, stinkbug, Cryptophlebia ombrodelta and Deudorix epijarbas were expected to occur moderately, thrip was expected to occur in a moderate-to-mild way, and aphid was expected to occur mildly in 2022. It also minded that in blooming period (Feb. to April), major pests to macadamia are stinkbugs, thrip and aphid; in fruit growing season (May to June), major pests are stinkbugs and thrip; in July to Sept., major pests are Cryptophlebia ombrodelta and Deudorix epijarbas.

Prevention and control of major pests

- Stinkbug

Stinkbug imagos and nymphs pierce and suck juice from fruitlets, twigs and flower spikes, leading to fruit drop, relatively low fruit setting percentage, dark brown spots in nutlet, kernel abortion, petal falling and etc.

- Time for applying pesticides: From March to May, spray pesticides where fruits are damaged.
- Recommended pesticides: Beauverias, cypermethrin, beta-cypermethrin, fenpropathrin, bifenthrin, fenvalerate, deltamethrin, esfenvalerate or permethrin, pyridaphenthione, trichlorfon, malathion, fenitrothion, phoxim or prothiofos, carbaryl, pirimicarb, isoprocarb or fenobucarb.

- Thrip

Thrip mainly damages inflorescences, fruitlets, fresh leaves and tender shoots of macadamia, causing low fruit setting percentage, fruit drop or brown spots on peel.

- Time for applying pesticides: From Feb. to May, spray pesticides when rust or brown spots appear on the surface of fruits.
- Recommended pesticides: Imidacloprid, acetamiprid, bifenthrin, cyfluthrin, cypermethrin, beta-cypermethrin, fenpropathrin, fenvalerate, deltamethrin, esfenvalerate or permethrin.

- Aphid

Aphid can cause damages to macadamia around the year, and damages in shooting, blooming and young fruit periods are the most severe, resulting in spots in affected area, curling and shrinking leaves, as well as fruit drop.

- Time for applying pesticides: All year round, spray pesticides topically when tender shoots, fruits or inflorescences are damaged.
- Recommended pesticides: Imidacloprid, acetamiprid, abamectin, pyridaphenthione, trichlorfon, malathion, fenitrothion, phoxim, prothiofos, bifenthrin, cyfluthrin, cypermethrin, beta-cypermethrin, fenpropathrin, fenvalerate, deltamethrin, esfenvalerate, permethrin, carbaryl, pirimicarb, isoprocarb, fenobucarb, rotenone, bisultap, cartap, diafenthiuron.



Policy

Development Plan of the Pesticide Industry in China (2021–2025) released

Summary: On 29 Jan., 2022, MARA and other eight departments jointly issued the Development Plan of the Pesticide Industry in China in the 14th Five-Year Plan Period (2021–2025). The fundamental task in this five-year period is to build up or improve five systems covering modernised pesticide production, pesticide operation services, safe use of pesticides, supervision and management of pesticides, as well as pesticide R&D and innovation. The Plan also suggests further improvement of China's pesticide registration and approval system.

On 29 Jan., 2022, Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA) jointly issued the *Development Plan* of the Pesticide Industry in China in the 14th Five-Year Plan Period (2021–2025) (the Plan) together with other eight departments. It points out that to respond to new development targets, the industry should focus on establishing a modernised pesticide production system, better regulating pesticide operation service system, perfecting pesticide safe use system, strengthening pesticide supervision and management system, and fostering pesticide R&D and innovation system in the five-year period.

In terms of adjustment to product structure, development of the new high-efficiency low-risk chemical pesticides and biopesticides are encouraged, while outmoded pesticide varieties & formulations facing high resistance and risks but with low efficacy will be phased out. Besides, high-risk and highly-toxic pesticides & adjuvants which are deemed as persistent organic pollutants will be strictly controlled. To elevate pesticide efficacy and make them greener and more eco-friendly, manufacturers are encouraged to tap the potential of new techniques and technologies. The government will strictly restrict processing and the use of powders and toxic & harmful adjuvants.



TABLE 9: Guidelines for the development of different pesticides during 2021–2025

Category	Content	
	Biopesticides : microbial pesticides (<i>Beauverias</i> , <i>Metarhiziums</i> , <i>Bacillus subtilis</i> , etc.), agricultural antibiotics (spinosad, kasugamycin, etc.), biochemical pesticides (sex attractant, plant resistance inductor, etc.), RNA biopesticides and small peptide-based biopesticides.	
Develop preferentially	Chemical pesticides: Priority should be given to pesticides against major diseases and pests that have small product varieties or need alternatives due to drug resistance; such diseases and pests include wheat head blight, pine wilt disease, rice stem borer, rice planthopper, diamondback moth, thrip, <i>Bemisia tabaci</i> , etc. Speed up the development of 4th-generation nicotinoid insecticides, diamide insecticides, small molecule biomimetic insecticides as well as new high-efficiency low-risk fungicides and herbicides.	
	Insecticides: trichlorfon, dimethoate, chlorpyrifos, triazophos, imidacloprid, abamectin, fipronil, carbosulfan, flubendiamide, fenvalerate, acephate, acetamiprid, thiamethoxam, bisultap, etc.	
	Fungicides: carbendazim, chlorothalonil, thiram, ziram, triadimenol, propiconazole, mancozeb, lime sulphur, iprodione, etc.	
Develop moderately	Herbicides: glyphosate, acetochlor, atrazine, butachlor, 2,4-D, MCPA, ametryn, dicamba, alachlor, diquat, glufosinate-ammonium, clethodim, etc.	
	Plant growth regulators: paclobutrazol, sodium nitrophenolate, daminozide, etc.	
	Rodenticides: sodium diphacinone, diphacinone, warfarin, coumatetralyl, bromadiolone, brodifacoum, botulinum toxin, etc.	
Phase out gradually	Phorate, isofenphos-methyl, ethoprophos, isocarbophos, aldicarb, carbofuran, methomyl, omethoate, aluminium phosphide and chloropicrin; nonylphenol is prohibited as a pesticide adjuvant.	

Source:MARA

As regard to pesticide registration, the Plan suggests improvement of China's pesticide registration and approval system. Furthermore, China will boost registration of biopesticides, substitutes to high-toxicity pesticides, drugs on minor crops and products specially designed for forestry & grassland.

Regarding pesticide R&D and innovation system, three aspects should be given due consideration—R&D on green pesticides, innovation capacity building and innovation mechanism improving. Original innovation and R&D on low-risk chemical pesticides should be highlighted, more efforts thrown into research on microbial and botanical pesticides and nanotechnology be applied actively in producing pesticide formulations. A target of 5 to 8 new pesticide varieties with independent intellectual property right is set for this period, to facilitate prevention and control of major bio-disasters.

Guidelines for improving energy conservation and carbon reduction in energy-intensive industries issued

Summary: On 3 Feb., 2022, NDRC jointly issued with other three departments the *Guidelines for Key Areas of High Energy-Consuming Industries to Improve Energy Conservation and Carbon Reduction Through Reform and Upgrade (2022 Edition)*. The Guidelines specifies directions and targets on energy conservation and carbon reduction in 17 industries.



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On 3 Feb., 2022, National Development and Reform Commission (NDRC) and three other departments jointly issued the *Guidelines for Key Areas of High Energy-Consuming Industries to Improve Energy Conservation and Carbon Reduction Through Reform and Upgrade (2022 Edition)* (the Guidelines), to encourage relevant parties to carry out industrial upgrading and improve energy conservation & carbon reduction in key areas in a scientific way. The Guidelines specifies the directions and targets on energy conservation and carbon reduction in 17 industries, including petroleum refining, ethylene, p-xylene, modem coal chemical, ammonia synthesis, calcium carbide, caustic soda, soda ash, ammonium phosphates, yellow phosphorus, cement, plate glass, iron and steel, coking, ferroalloy, nonferrous metal metallurgy, building and sanitary ceramics.

According to the Guidelines, by 2025:

- Caustic soda industry: Over 40% of the production capacity will be above the energy efficiency benchmark for the industry, and production capacity below the energy efficiency baseline will be basically eliminated.
- Soda ash industry: Over 50% of the production capacity will be above the energy efficiency benchmark for the industry, and production capacity below the energy efficiency baseline will be basically eliminated.
- Iron and steel industry: In iron-making and steel-making processes, over 30% of the production capacity will be above the energy efficiency benchmark, and production capacity below the energy efficiency baseline will be basically eliminated.
- Modem coal chemical industry: The proportion of the production capacity above the energy efficiency benchmark for coal-to-methanol, coal-to-olefin and coal-to-glycol will surpass 30%, 50%, 30% respectively, and production capacity below the energy efficiency baseline will be basically eliminated.
- Petroleum refining industry: Over 30% of the production capacity will be above the energy efficiency benchmark for the industry, and elimination of production capacity below the energy efficiency baseline will be accelerated.
- Ethylene industry: Scale production in the industry will be greatly improved. Raw materials for ethylene production will turn more to light hydrocarbons such as ethane. Over 30% of the production capacity will be above the energy efficiency benchmark for the industry, and production capacity below the energy efficiency baseline will be upgraded in an orderly manner.

Notably, backward production technologies and equipment that are incompatible with green and low-carbon development should be phased out according to relevant laws, regulations and policies. For production capacity that is below the energy efficiency baseline, and it is difficult to reach the threshold through transformation and upgrade within a set time limit, the government would push forward with elimination by using approaches consistent with market principles and the rule of law.



Registration

China approves renewal of registration for 27 insecticides in late-Jan.

Summary: According to information released by ICAMA in late-Jan. 2022, registration renewal of 128 agrochemical products from 85 companies altogether was approved, of which 27 were insecticides, including 5 hygienic insecticides.

In late-Jan., 2022, the Institute for the Control of Agrochemicals, Ministry of Agriculture and Rural Affairs (ICAMA) released the list of 128 agrochemical products approved of registration renewal. There were 27 insecticides on the list, of which EC was the most commonly used form. Only one TC was on the list. Active ingredients etoxazole, abamectin, cypermethrin and abamectin-aminomethyl are popular ones in this round of renewal. Peach tree & citrus tree is a major application field and most of the insecticides are of low toxicity.

TABLE 10: Insecticides approved of registration renewal in late-Jan., 2022 by formulation

Formulation	Number
EC	8
sc	7
OD	3
RB	1
тс	1
SL	1
cs	1
ME	1
AE	1
GR	1
FS	1
WG	1
Total	27





TABLE 11: Insecticides approved of registration renewal in late-Jan., 2022 by active ingredient

Active ingredient	Number
Etoxazole·Abamectin	5
Cypermethrin	3
Abamectin-aminomethyl	2
Flonicamid	2
Thiamethoxam	2
Indoxacarb	1
Afidopyropen	1
Imidacloprid·Meperfluthrin	1
Clothianidin-Chlorantraniliprole	1
Chlorpyrifos	1
Meperfluthrin-Propoxur	1
Cyantraniliprole	1
Permethrin ⁻ Tetramethrin	1
Azadirachtin	1
d-Tetramethrin·d-Cyphenothrin	1
Flupyradifurone	1
Acetamiprid	1
Beauveria bassiana	1
Total	27



TABLE 12: Insecticides approved of registration renewal in late-Jan., 2022 by registrant

Registrant	Number
Shandong Huimin Vanda Biological Technology Co., Ltd.	2
Yancheng Limin Chemical Co., Ltd.	2
Jiangsu Youjia Plant Protection Co., Ltd.	2
Shandong Kanghui Crop Protection Co., Ltd.	1
Qingdao Hengfeng Crop Science Co., Ltd.	1
Syngenta (Suzhou) Crop Protection Co., Ltd.	1
Dongguan Ruidefeng Biotechnology Co., Ltd.	1
Shandong Binhai Hansheng Biotechnology Co., Ltd.	1
Fujian Shenshi Daily Chemical Co., Ltd.	1
Shandong United Pesticide Industry Co., Ltd.	1
Guangdong Zhenge Biotech Co., Ltd.	1
BASF SE	1
Hailir Pesticides and Chemicals Group Co., Ltd.	1
Sumitomo Chemical Co., Ltd.	1
Hefei Henong Pesticide Co., Ltd.	1
Bayer AG	1
Jiangmen Daguangming Agrochemical Xinhui Co., Ltd.	1
Shandong Longxi Crop Protection Co., Ltd.	1
Shaanxi Sunger Road Bio-Science Co., Ltd.	1
Chengdu Kelilong Biochemical Co., Ltd.	1
Shaanxi Yitianfeng Crop Technology Co., Ltd.	1
Sichuan Run'er Technology Co., Ltd.	1
Zhejiang Qianjiang Biochemical Co., Ltd.	1



FMC Corporation	1
Total	27

Source:ICAMA

TABLE 13: Insecticides approved of registration renewal in late-Jan., 2022 by application field

Application field	Number
Peach tree, citrus tree	5
Indoor	3
Walnut tree, cotton	2
Tomato, cabbage and pine	1
Corn, rice and potato	1
Tomato, citrus tree, eggplant and chili	1
Sugar cane, peanut	1
Green Chinese onion, tomato, cotton, Chinese cabbage, rice, pea, cucumber, watermelon and cowpea	1
Outdoor	1
Hygiene	1
Corn, cabbage and leek	1
Tobacco, citrus tree	1
Walnut tree, tobacco	1
Corn, Chinese yam, wheat and peanut	1
Wild pepper tree, cucumber	1
Corn, Chinese cabbage, grassland, tea tree and leek	1
Zizania latifolia, taro, rice, broccoli, cowpea, chili and pine	1
Tea tree, cucumber	1
Apple tree	1





Core patent of chlorantraniliprole TC to expire in Aug. in China

Summary: A core patent of chlorantraniliprole in China (CN100391338C) is about to expire on 13 Aug., 2022.

Search results from the website of China National Intellectual Property Administration show that the agrochemical active ingredient chlorantraniliprole will go off-patent from 13 Aug., 2022 in China. Branded as Coragen, chlorantraniliprole is a bestseller insecticide in many countries. When mixed with others active ingredients such as pymetrozine, thiamethoxam, abamectin, emamectin benzoate, it can achieve better performance with broader spectrum.

One of the core patents of the ingredient CN100391338C was applied on 13 Aug. 2002 by E. I. du Pont de Nemours and Company, Inc. It protects a general formula compound, which covers chlorantraniliprole; in the document, chlorantraniliprole appears as an example. The previously expired chlorantraniliprole patent CN1419537B, held by the same company, also protects a general formula compound and covers chlorantraniliprole, but the product was not specified in the document.

As of 18 Feb., 2022, there were four valid chlorantraniliprole TC registrations in China, which are held by FMC (Shanghai) Agricultural Sciences Co., Ltd., FMC Corporation, Inner Mongolia Miraculous Crop Science Co., Ltd. (Inner Mongolia Miraculous) and Shandong Weifang Rainbow Chemical Co., Ltd. The registration certificate of Inner Mongolia Miraculous will expire on 17 Oct., 2022 if not timely renewed.

TABLE 14: Registration of chlorantraniliprole technical in China, as of 18 Feb., 2022

No.	Product	Total content	Expiry date	Registrant
1	Chlorantraniliprole TC	95.30%	2025/9/21	FMC (Shanghai) Agricultural Sciences Co., Ltd.
2	Chlorantraniliprole TC	95.30%	2025/1/15	FMC Corporation
3	Chlorantraniliprole TC	95.30%	2022/10/17	Inner Mongolia Miraculous Crop Science Co., Ltd.
4	Chlorantraniliprole TC	98%	2023/4/17	Shandong Weifang Rainbow Chemical Co., Ltd.



News in Brief

IMAR releases first batch list of approved chemical parks and concentration areas

On 30 Jan., 2022, the Department of Industry and Information Technology of Inner Mongolia Autonomous Region (IMAR) unveiled the first batch of approved chemical industrial parks or concentration areas, including one chemical park and thirteen concentration areas. The regional government also required the chemical park and concentration areas to fully equip themselves with a monitor and alarm system by the end of 2022 for risks to safe production and for pollution to the ecosystem.



TABLE 15: List of approved chemical parks and concentration areas (first batch) in Inner Mongolia

No.	Chemical industrial park/concentration area	Туре
1	Inner Mongolia Baotou Jiuyuan Industrial Park, New Material Industrial Park	Chemical concentration area
2	Inner Mongolia Baotou Damao Barun Industrial Park	Chemical concentration area
3	Inner Mongolia Wuhai High-Tech Industry Development Zone Wuda Industrial Park	Chemical concentration area
4	Inner Mongolia Wuhai High-Tech Industry Development Zone Haibowan Industrial Park	Chemical concentration area
5	Inner Mongolia Wuhai High-Tech Industry Development Zone Hainan Industrial Park	Chemical concentration area
6	Inner Mongolia Wuhai High-Tech Industry Development Zone Low-Carbon Industrial Park	Chemical concentration area
7	Inner Mongolia Ordos Jungar Economic Development Zone Dalu Industrial Park	Chemical concentration area
8	Inner Mongolia Ordos Otog Economic Development Zone Qipanjing Industrial Park	Chemical concentration area
9	Inner Mongolia Ordos Otog Economic Development Zone Mengxi Industrial Park	Chemical concentration area
10	Inner Mongolia Ordos Sulige Economic Development Zone	Chemical concentration area
11	Inner Mongolia Ulanqab New Material Industry Development Zone Chahar Right Back Banner Industrial Park	Chemical concentration area
12	Inner Mongolia Ulanqab Chahar High-Tech Development Zone Bayin Industrial Park	Chemical concentration area
13	Inner Mongolia Alxa High-tech Industry Development Zone High-Tech Industrial Park	Chemical park
14	Inner Mongolia Alxa High-tech Industry Development Zone Tengri Technology Industrial Park	Chemical concentration area

Source:Department of Industry and Information Technology of Inner Mongolia Autonomous Region

Jiangxi has three parks listed as national key parks to develop pesticide production capacity

The Ministry of Agriculture and Rural Affairs of the People's Republic of China issued the *Development Plan of China's Pesticide Industry* in the 14th Five-Year Plan period (2021–2025) (The Plan) on 29 Jan., 2022. The plan gave out a list of 31 key industrial parks across China to develop pesticide production capacity. Three parks from Jiangxi Province are on the list: Leping Chemical Industrial Park, Xingan Salt Chemical Industry Centralised Area, Xinghuo Chemical Industrial Park of Yongxiu Yunshan Economic and Technological





Development Zone. According to relevant personnel from the Jiangxi Provincial Petroleum & Chemical Industry Association, Jiangxi has grown into one of the main pesticide production bases in China. With implementation of the Plan, pesticide industry in Jiangxi is expected to strengthen.

Inner Mongolia to expand soybean planting in 2022

On 14 Feb., the Agriculture and Animal Husbandry Department of Inner Mongolia Autonomous Region revealed that the Region will further optimise crop structure and tap the potential of soybean cultivation by expanding planting area by 286.67 thousand ha (4.30 million mu) in 2022. Inner Mongolia is an important soybean production base in China, where green and high-quality soybean is produced with high concentration of competitive producing areas. In the past few years, the sowing area and yield of soybean in Inner Mongolia have been recovered; the area reached 1,201.68 thousand ha in 2020, making Inner Mongolia the second in the rank among provincial-level administrative regions. However, it is worth mentioning that the total sowing area and yield of soybean in China saw YoY decreases in 2021, shrinking by 1,466.67 thousand ha and 3,200 thousand tonnes respectively.

Hebei releases the list of Key Crop Protection Products Recommended 2022

In late-Jan., 2022, Crop Protection and Technology Extension Association of Hebei Province released the list of Key Crop Protection Products Recommended in 2022, on which 34 insecticide products are included. Four companies each owns three recommended insecticide products in the list: Zhejiang Ecopro Modern Agro-technology Co., Ltd., Syngenta (China) Investment Co., Ltd., Shanghai Anzhi Nanbao Biotechnology Co., Ltd. and FMC (Suzhou) Crop Care Co., Ltd.



TABLE 16: Company with three insecticide products in Hebei's 2022 recommend list

Company	Active ingredient	Brand
	Cyantraniliprole	Beineiwei (Benevia)
FMC (Suzhou) Crop Care Co., Ltd.	Chlorantraniliprole	Kangkuan (Coragen)
	Chlorantraniliprole	Puzun (Prevathon)
	Pyrethrins·matrine	1
Shanghai Anzhi Nanbao Biotechnology Co., Ltd.	Pyrethrins	Sanbaoqihua
	Rotenone	Sanbaoluoteng
	Cyantraniliprole-thiamethoxam	Fuliang
Syngenta (China) Investment Co., Ltd.	Difenoconazole·fludioxonil·thiamethoxam	Kulasi
	Abamectin·chlorantraniliprole	Liangtai
	Bacillus thuringiensis	Wudixiaozi
Zhejiang Ecopro Modern Agrotechnology Co., Ltd.	Empedobacter brevis	1
	Matrine	Bituo

Source: Crop Protection and Technology Extension Association of Hebei Province

Chemical projects along the Yellow River in Ningxia may be restricted

In late-Jan., 2022, the Regulations of Ningxia Hui Autonomous Region on the Promotion of Ningxia Section of the Yellow River Basin as a Pilot Zone for Ecological Protection and High-quality Development (The Regulations) was passed in the People's Congress of Ningxia Hui Autonomous Region. The Regulations, coming into force on 1 March, 2022, provides strong legal support for Ningxia to accelerate work on ecological protection and high-quality development from several aspects, including ecological environment protection & restoration, water conservation & intensive utilisation of water resources, and disaster prevention & response. It is worth mentioning that the Regulations requires stricter land management on banks along the Yellow River Ningxia Section where new construction and expansion of chemical industrial parks and chemical projects within certain range to the River are banned.

Jiangsu Youjia's Phase IV project comes into trial production

In late-Jan., 2022, Jiangsu Youjia Crop Protection Co., Ltd. (Jiangsu Youjia), a wholly-owned subsidiary of Jiangsu Yangnong Chemical Co., Ltd. announced that its Phase IV project, also known as the Phase II project of Sinochem Modern Plant Protection Industrial Park, would start trial production. Investment in Phase IV project totalled USD305.12 million (RMB1.94 billion).



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This time, production capacity and pollution treatment facilities for the following products undergo commissioning:

• 3,800 t/a Bifenthrin

• 1,000 t/a Fluazinam

• 3,000 t/a Difenoconazole

• 2,000 t/a Propiconazole

• 6,000 t/a Mesotrione

• 3,000 t/a Chloroacetophenone and by-products

Qingdao Hansen has full propargite TC order book over the next three months

According to monitoring data from CCM, the ex-works price of propargite TC in China was USD9,122/t (RMB58,000/t) on 8 Feb. It is worth mentioning that propargite TC is currently offered by Qingdao Hansen Biologic Science Co., Ltd. (Qingdao Hansen) only and the company

has achieved full order book over the next three months.

Nanjing Red Sun plans new capacity for chlorantraniliprole and other products

On 17 Feb., Nanjing Red Sun Co., Ltd. (Nanjing Red Sun) released the main content of surveys conducted by some institutional/individual

investors. According to the announcement, Nanjing Red Sun plans to build up new capacity for chlorantraniliprole, L-glufosinate and

some other products. Currently, its chlorantraniliprole and L-glufosinate projects have gone through lab tests and industrialised pilot tests,

but are yet to enter production line construction phase. So far the company owns 75,000 t/a production capacity for pyridine bases,

including 50,000 t/a for pyridine, and captures 49% of global market share in this sector. And on average it takes up more than 35% of the

global market share of paraquat, diquat, nicotinic acid and 2,3-dichloropyridine, key downstream products of pyridine bases.

Multiple new products of Rotam China debut in Sichuan

On 21 Feb., Rotam China held 2021 Strategic Customer Conference in Chengdu City, Sichuan Province. Some key new products

debuted in the conference, including Pythilock®, Fushuangwei®, Duoning/DELITE®®, Xilelong®, Lingfu®, Rotam®Tongliang®,

Rotam®Gengyou®. Among them, Xilelong® is the only patented insecticide available on the market that contains chlorine, bromine and

sulphur; it can effectively guard against lepidopterous pests. Rotam China is mainly composed of Jiangsu Rotam Chemistry Co., Ltd.,

Rotam Crop Science (Tianjin) Co., Ltd. and Yantai Rotam Fertilizer Co., Ltd.

Increasing oil price may drive up pesticide production cost

On 24 Feb. local time, the conflict between Ukraine and Russia escalated. Influenced by the deteriorating situation, the price of petroleum

is expected to go higher in Q2, as Russia is a major energy supplier worldwide. In particular, the country provides about a quarter of

petroleum and a third of natural gas to the total consumption in European countries. Continuous rises of chemical raw material price will

drive up production cost of relevant pesticides. For example, increasing price of triethylamine, isopropanol and ethylenediamine may lift

prices of downstream insecticide products like malathion and imidacloprid in the near future.

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Price Update

Ex-works prices of major insecticides in China on 8 Feb., 2022

TABLE 17: Ex-works prices of major insecticides in China, 8 Feb., 2022

Product	20220108		20220208		
Product	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)	
95% Abamectin technical	710,000	111,295.73	710,000	111,670.34	
97% Acephate technical	64,000	10,032.29	60,000	9,436.93	
95% Acetamiprid technical	210,000	32,918.46	192,500	30,276.82	
95% Azocyclotin technical	215,000	33,702.23	220,000	34,602.08	
95% Beta-Cypermethrin technical	185,000	28,999.59	185,000	29,097.2	
97% Bifenthrin technical	355,000	55,647.87	340,000	53,475.94	
95% Buprofezin technical	75,200	11,787.94	75,200	11,827.62	
98% Carbofuran technical	115,000	18,026.77	115,000	18,087.45	
98% Chlorfenapyr technical	356,000	55,804.62	356,000	55,992.45	
95% Chlorfluazuron technical	570,000	89,350.1	570,000	89,650.83	
95% Chlorpyrifos technical	49,000	7,680.97	47,500	7,470.9	
94% Cypermethrin technical	92,000	14,421.42	89,000	13,998.11	
99% Cyromazine technical	160,000	25,080.73	160,000	25,165.15	
98% Deltamethrin technical	590,000	92,485.19	590,000	92,796.48	
95% Diafenthiuron technical	153,000	23,983.45	153,000	24,064.17	
98% Dimethoate technical	49,000	7,680.97	49,000	7,706.83	
70% Emamectin benzoate technical	812,000	127,284.7	737,000	115,916.96	
92% Fenvalerate technical	137,000	21,475.37	137,000	21,547.66	
95% Fipronil technical	650,000	101,890.46	620,000	97,514.94	
98% Hexaflumuron technical	540,000	84,647.46	545,000	85,718.78	



97% Imidacloprid technical	210,000	32,918.46	195,000	30,670.02
98% Isoprocarb technical	43,500	6,818.82	43,500	6,841.77
95% Lambda-cyhalothrin technical	248,000	38,875.13	235,000	36,961.31
90% Malathion technical	31,500	4,937.77	38,000	5,976.72
95% Methidathion technical	90,000	14,107.91	90,000	14,155.39
Methomyl 90% SP	85,000	13,324.14	74,000	11,638.88
98% Methomyl technical	93,000	14,578.17	86,000	13,526.27
75% Omethoate technical	53,500	8,386.37	53,500	8,414.6
90% Phoxim technical	45,000	7,053.95	45,000	7,077.7
90% Profenofos technical	87,000	13,637.65	87,000	13,683.55
90% Propargite technical	57,000	8,935.01	58,000	9,122.37
95% Pymetrozine technical	170,000	26,648.27	160,000	25,165.15
95% Pyridaben technical	110,000	17,243	110,000	17,301.04
97% Spirodiclofen technical	183,000	28,686.08	185,000	29,097.2
85% Triazophos technical	58,500	9,170.14	58,500	9,201.01
	-			

Note:Ex-works price includes VAT. Source:CCM

Shanghai Port prices of major insecticides in China, 8 Feb., 2022



 $\textbf{TABLE} \ 18: Shanghai \ Port \ prices \ of \ major \ insecticides \ in \ China, \ 8 \ Feb., \ 2022$

Postori	20220108		20220208		
Product	Original Price (RMB/t)	Price (USD/t)	Original Price (RMB/t)	Price (USD/t)	
95% Abamectin technical	710,500	111,374.11	710,500	111,748.98	
97% Acephate technical	64,500	10,110.67	60,500	9,515.57	
95% Acetamiprid technical	210,500	32,996.83	193,000	30,355.46	
95% Azocyclotin technical	215,500	33,780.61	220,500	34,680.72	
95% Beta-Cypermethrin technical	185,500	29,077.97	185,500	29,175.84	
97% Bifenthrin technical	355,500	55,726.24	340,500	53,554.58	
95% Buprofezin technical	75,700	11,866.32	75,700	11,906.26	
98% Carbofuran technical	115,500	18,105.15	115,500	18,166.09	
98% Chlorfenapyr technical	356,500	55,883	356,500	56,071.09	
95% Chlorfluazuron technical	570,500	89,428.47	570,500	89,729.47	
95% Chlorpyrifos technical	49,500	7,759.35	48,000	7,549.54	
94% Cypermethrin technical	92,500	14,499.8	89,500	14,076.75	
99% Cyromazine technical	160,500	25,159.11	160,500	25,243.79	
98% Deltamethrin technical	590,500	92,563.56	590,500	92,875.12	
95% Diafenthiuron technical	153,500	24,061.82	153,500	24,142.81	
98% Dimethoate technical	49,500	7,759.35	49,500	7,785.47	
70% Emamectin benzoate technical	812,500	127,363.07	737,500	115,995.6	
92% Fenvalerate technical	137,500	21,553.75	137,500	21,626.3	
95% Fipronil technical	650,500	101,968.84	620,500	97,593.58	
98% Hexaflumuron technical	540,500	84,725.84	545,500	85,797.42	
97% Imidacloprid technical	210,500	32,996.83	195,500	30,748.66	
98% Isoprocarb technical	44,000	6,897.2	44,000	6,920.42	



95% Lambda-cyhalothrin technical	248,500	38,953.51	235,500	37,039.95
90% Malathion technical	32,000	5,016.15	38,500	6,055.36
95% Methidathion technical	90,500	14,186.29	90,500	14,234.04
Methomyl 90% SP	85,500	13,402.51	74,500	11,717.52
98% Methomyl technical	93,500	14,656.55	86,500	13,604.91
75% Omethoate technical	54,000	8,464.75	54,000	8,493.24
90% Phoxim technical	45,500	7,132.33	45,500	7,156.34
90% Profenofos technical	87,500	13,716.02	87,500	13,762.19
90% Propargite technical	57,500	9,013.39	58,500	9,201.01
95% Pymetrozine technical	170,500	26,726.65	160,500	25,243.79
95% Pyridaben technical	110,500	17,321.38	110,500	17,379.68
97% Spirodiclofen technical	183,500	28,764.46	185,500	29,175.84
85% Triazophos technical	59,000	9,248.52	59,000	9,279.65

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 Feb., 2022



 $\textbf{TABLE} \ 19: FOB \ Shanghai \ prices \ of \ major \ insecticides \ in \ China, \ 8 \ Feb., \ 2022, \ USD/t$

Product	20220108	20220208
95% Abamectin technical	108,398.71	108,763.56
97% Acephate technical	9,576.98	9,019.06
95% Acetamiprid technical	32,178.6	29,610.23
95% Azocyclotin technical	32,940.8	33,816.44
95% Beta-Cypermethrin technical	27,369.32	27,461.44
97% Bifenthrin technical	52,366.81	50,329.99
95% Buprofezin technical	11,629.66	11,668.81
98% Carbofuran technical	17,696.78	17,756.35
98% Chlorfenapyr technical	54,434.87	54,618.09
95% Chlorfluazuron technical	87,057.08	87,350.1
95% Chlorpyrifos technical	7,635.73	7,432
94% Cypermethrin technical	13,694.22	13,297.69
99% Cyromazine technical	23,693.21	23,772.96
98% Deltamethrin technical	86,922.18	87,214.74
95% Diafenthiuron technical	22,663.91	22,740.19
98% Dimethoate technical	7,371.32	7,396.13
70% Emamectin benzoate technical	123,947.61	112,893.3
92% Fenvalerate technical	20,311.2	20,379.57
95% Fipronil technical	99,252.3	94,997.76
98% Hexaflumuron technical	82,483.87	83,526.27
97% Imidacloprid technical	32,178.6	29,992.61
98% Isoprocarb technical	6,562.58	6,584.67
95% Lambda-cyhalothrin technical	36,633.1	34,838.39



90% Malathion technical	4,798.05	5,773.2
95% Methidathion technical	13,885.78	13,932.52
Methomyl 90% SP	13,123.58	11,485.26
98% Methomyl technical	15,619.02	14,504.56
75% Omethoate technical	8,033.02	8,060.06
90% Phoxim technical	6,981.65	7,005.15
90% Profenofos technical	12,959	13,002.61
90% Propargite technical	8,855.25	9,038.01
95% Pymetrozine technical	25,163.66	23,772.96
95% Pyridaben technical	16,934.58	16,991.58
97% Spirodiclofen technical	27,075.23	27,461.44
85% Triazophos technical	9,083.91	9,114.49

Note:FOB Shanghai price considers factors of Shanghai port price, port sur-charges, loading charges, traders' profits and export tax refund. And the shipment cost shall be paid by the buyer. This FOB price is the average of quotations offered by enterprises and it may be lower than the one reported in customs data which is the actual purchase price.

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17th Floor, Huihua Commercial & Trade Building, No.80 XianlieZhong Road Guangzhou, 510070, P.R.China

Tel:+86-20-37616606

Fax:+86-20-37616768

E-mail:econtact@cnchemicals.com

Website:www.cnchemicals.com