Note: Key data/information in this sample page is hidden, while in the report it is not.

1 Overview of glycine in China

1.1 Introduction of glycine in China

Table 1.1-1 Supply and demand of glycine in China, 2010-2015

Vaar	Capacity	/, t/a	Output, tonne		Event (athors) tonno	Consumption, tonne		
Year	Tech-grade	Others	Tech-grade	Others	Export (others), tonne	Tech-grade	Others	
2010								
2011								
2012								
2013								
2014								
2015								

Note: 1. The year- end inventory of tech-grade glycine is taken into account, while that of others is not;

- 2. Others include feed-grade, food-grade and pharmaceutical-grade glycine.
- 3. Export data in 2015 is estimated.

Source: CCM

Table 1.1-2 Supply and demand of glycine except tech-grade in China, 2010-2015, tonne

		Out	put		Exp	oort		Consu	mption
Year	Food	Feed	Pharmaceutical	Food	Feed	Pharmaceutical	Food	Feed	Pharmaceutical
	-grade	-grade	-grade	-grade	-grade	-grade	-grade	-grade	-grade
2010									
2011									
2012									
2013									
2014									
2015									

Note: 1. The year- end inventory is not taken into account.

2. Export data in 2015 is estimated.



2 Supply of glycine in China

2.1 Production of glycine in China

2.1.1 Capacity and output of glycine in China, 2010-2015

Table 2.1.1-1 Capacity and output of glycine in China, 2010-2015

Year	Capacity	ı, t/a		Output, tonne					
Teal	Tech-grade	Others	Tech-grade	Food-grade	Feed-grade	Pharmaceutical-grade			
2010									
2011									
2012									
2013									
2014									
2015									

Note: Others include food-grade, feed-grade and pharmaceutical-grade.

Source: CCM

2.1.2 Key glycine producers in China

2.1.2.1 Producers' production situation for various grades glycine

Table 2.1.2.1-1 Production for various grades glycine in China by producer, 2015

			Status		Produc			
No.	Company	Abbreviation	'15	Tech	Food	Feed	Pharmaceutical	
			15	-grade	-grade	-grade	-grade	
1	Hebei Donghua Chemical Group	Hebei Donghua	Active	√	\checkmark	V	\checkmark	
2			Active					
3			Active					
4			Active					
5			Active					
			Active					
			Active					
			Active					
			Active					
			Active					
			Active					
			Active					

Note: √: produce, X: not produce



Table 2.1.2.1-2 Glycine capacity in China by producer, 2010-2015, t/a

		Сара	city '15	Сара	city '14	Capa	city '13	Capacity '12		Capacity '11		Capacity '10	
No.	Company	Tech-	Others	Tech-	Others	Tech-	Othoro	Tech-	Others	Tech-	Othoro	Tech-	Othoro
		grade	Others	grade	Others	grade	Others grade	Others	grade	Others	grade	Others	
1	Hebei Donghua												
2													
3													
4													
	Others												
	Total												

Note: Others include food-grade, feed-grade and pharmaceutical-grade.

Source: CCM

2.1.2.2 Producers' distribution and market share of glycine producers in China, 2015

Table 2.1.2.2-1 Industrial concentration of tech-grade glycine in terms of output in China, 2010-2015

No	Itam	Value							
No.	Item	2015	2014	2013	2012	2011	2010		
1	Top one concentration ratio								
2	Top five concentration ratio								
3	Top ten concentration ratio								
4	Herfindahl-Hirschman Index (HHI)								

Source: CCM

2.1.2.4 Producers' output of glycine in China

Table 2.1.2.4-1 Output of glycine in China by producer, 2010-2015, tonne

		Outp	out '15	Outp	out '14	Outp	out '13	Outp	out '12	Outp	out '11	Outp	out '10
No.	Company	Tech- grade	Others										
1	Hebei Donghua												
2													
3													
	Others												
	Total												



2.1.2.5 Producers' inventory of glycine in China

Table 2.1.2.5-1 Inventory of glycine in China by producer, 2010-2015, tonne

No.	Company	Inventory	Inventory	Inventory	Inventory	Inventory	Inventory
140.	Company	'15	'14	'13	'12	'11	'10
1	Hebei Donghua						
2							
3							
4							
	Others						
	Total						

Note: The year end inventory of tech-grade glycine is taken into account, while that of others is not.

Source: CCM

2.1.3 Potential production lines of glycine in China

Table 2.1.3-1 Potential projects of glycine in China

Classification	Company	Designed capacity, t/a	Planned commissioning	Details
			date	
		tech-grade		
		tech-grade		
		tech-grade		
Expansion		tech-grade,		
		feed-grade, t/a food-grade		
		food-grade,		
		pharmaceutical-grade		
Remove		tech-grade		
		1 st phase tech-grade		
		food-grade		
		2 nd phase tech-grade		
		food-grade		
New		tech-grade		
		tech-grade		
		food-grade, feed-grade,		
		pharmaceutical-grade		



2.3 Export of glycine in China

2.3.3 Export destination of glycine in China , 2010-2015 (Oct. 2015)

Table 2.3.3-1 China's exports of glycine by destination, 2014

		Food-g	rade	Feed-g	rade	Pharmaceut	ical-grade
No.	Country/region	Volume,	Price,	Volume,	Price,	Volume,	Price,
		tonne	USD/t	tonne	USD/t	tonne	USD/t
1							
2							
3							
4							
5							
	Others						
	Total						

Source: China Customs, CCM

2.3.4 Exporter of glycine in China, 2010-2015 (Oct. 2015)

Table 2.3.4-1 China's exports of glycine by exporter, 2014

		Food-g	rade	Feed-g	rade	Pharmaceutic	cal-grade
No.	Exporter	Volume,	Price,	Volume,	Price,	Volume,	Price,
		tonne	USD/t	tonne	USD/t	tonne	USD/t
1	*						
2	*						
3							
4							
5							
	*						
	Others						
	Total						

Note: * Glycine producers or their related companies

Source: China Customs, CCM



3 Demand of glycine in China

3.2 Major application segments of glycine in China, 2013-2015

3.2.1 Glyphosate

Table 3.2.1-1 Consumption of glycine in glyphosate in China, 2010-2015, tonne

Year	2010	2011	2012	2013	2014	2015 est.
Output of glyphosate (glycine route)						
Consumption of glycine						

Source: CCM

Table 3.2.1-2 Major glyphosate producers adopting glycine route in China, as of Dec. 2015

No.	Company	Abbreviation	Status	Capacity	Output, tonne		
			2015	2015, t/a	2015	2014	2013
1			Active				
2			Active				
3			Active				
4			Active				
5			Active				
			Active				
			Active				
			Active				
			Active				
Others							
Total							

Note: Companies with * have two production routes, and in the above table only the capacity and output of glycine route are presented.