



2?1?1 ???

????????????Cr(?)????????Cr(VI)????????????????????????????????  
??  
????????Cr(VI)????????????????????????????????

????????????Cr(VI)????????????Na2CO3?NaOH????????????Cr(VI)??  
????????????Cr(VI)????????????199?4mg?g????????pH??7—9?????#500m  
L????????9h????????Cr(VI)????????????Cr(VI)????????  
????????????Cr(VI)????99?65????????  
?(43?64?)?????13????????Cr(vu????????2?5g?L??pH??3?0?  
????45rain????D?CS—CD?Cr(VI)????????34?58mg?g?97?54????????  
??

2?1?2 ??????

??  
??

?????D201?ZGA451????Cr(VI)????????????????????????????Cr(  
VI)????????Cr(VI)????????????????????????????Cr(VI)??20mg?L  
????????????95????????1322?3mg?kg????????????  
???D301?D314?D354)?Cr(VI)?????3????Cr(VI)?????152?5?120?5?156?3ITIg?g?????  
??Cr(VI)?????99?4??

????????Cr(VI)????????????????????????????????????  
????????????????????

2?1?3 ??????

??  
????????????????Cr(VI)????????Cr(VI)????????  
??Cr(VI)????????????Cr(VI)??Cr(VI)????????Cr  
(VI)?????0?08mg?L????????????????Cr(VI)?????  
99?????????1????????Cr(VI)????????  
?Cr(VI)?????100mg?L?0.2mg?L????????



