



志存高远 勇于超越

High Aspirations And Courage To Go Beyond

为消防人
创造出最优秀的环保产品
去拯救生命
让我们共同努力消灭
人类生命与环境的破坏者
火灾

For the firefighters

To create the best environment-friendly products

To save lives

Let's try hard together to eliminate conflagrations,

The destroyer of human lives and environment.



浪潮不断创新，发展新的业务组合模式与管理机制，并做到合规经营，逐步形成新的核心竞争力与大的盈利能力。实现公司与社会、客户、员工……的最佳利益。

引领可持续发展！未来骤然清晰！

LangChao Fire will always put the customers' interest in the first place.

The optimal integration and competitive price help our customers win the best interest.

Lead the sustainable development! Win the clear future!

企业简介

COMPANY PROFILE

洛阳市浪潮消防科技股份有限公司是中国消防领域的知名企业，也是中国最早的消防产品生产厂家之一，综合实力和竞争能力在全国首屈一指。

企业始建于1954年，1970年转产为消防药剂的生产和销售，消防泡沫销量名列全国前三。2010年11月12日成为国家中小企业产权交易市场首批上市企业，股权代码为960015。下属洛阳市浪潮消防装备有限公司，专业制造消防员个人装备产品。并且还提供消防工程施工、安装与维护的一体化服务，形成了完善的产品销售网络和售后服务体系。

公司具有独立出口权，以优秀的质量、优惠的价格、优质的服务赢得了海内外客户的一致青睐和赞誉。在提倡低碳生活的新时代，浪潮消防一直致力于开发各类绿色环保型新技术，不断研发新产品，用智慧开拓市场、用实力证明自己、用真诚维系客户。

目前所有产品已通过国标检测，取得国家一级资质、公安部CCC强制认证、中国CCS型式认可、法国BV认证、欧盟CE认证。企业通过了CAEPI绿色之星环保认证、ISO9001质量管理体系认证、ISO14001环境管理体系认证、OHSAS18001职业健康安全管理体系认证、质量信誉3A等级认证，是国家级高新技术企业，国家、省市及水上消防协会会员单位，矿山救护专业委员会会员单位。

公司始终坚持“精益求精、与时俱进、持续发展、低碳环保”为经营宗旨，把拯救生命、降低损失作为长期使命。浪潮人将以最积极热忱的服务去创造更多的社会价值，来回报社会的厚爱。

Luoyang Langchao Fire Technology Co., Ltd. is a famous enterprise in the firefighting industry of China, also one of the earliest manufacturers in China. Comprehensive strength and competitiveness are both in the top rank in security and safety field.

It was established in 1954, starting the production and sale of fire fighting concentrates in 1970. The sale of foams is in top 3. On November 12nd, 2010, it became one of the first listed enterprises on national property exchange market for small and medium enterprises(symbol: 960015). And it's subordinate enterprise, Luoyang Langchao Fire Fighting Equipment Co., Ltd. specializes in producing fire fighter's equipment except for one-stop services of construction, installation, and maintaining for fire fighting projects, so that we hold one complete and perfect products sales network and after-sale service system.

It has independent exporting right and has gained its own reputation on both domestic and abroad market depending on the excellent quality, good price and nice after-sale service. In the new age of advocating low carbon life, Langchao Fire has been always focusing on developing all kinds of environment-friendly and new technology and products, exploring market with knowledge, approving itself by strength and maintaining clients full of sincerity.

All our products have been qualified by:

China National Inspection Standard
National First Level Qualification Certificate
CCC of China Ministry of Public Security
Type Approval of China Classification Society
Type Approval of BV
CE certificate.

The enterprise has been qualified by:

Certificate of Green Star of China Association of Environmental Protection Industry
ISO9001 Quality Management System
ISO14001 Environmental Management System
OHSAS18001 Occupational Health And Safety Management System
AAA Quality Credit Certificate
National High-tech Enterprise
Member of China Marine Fire Fighting Association
Member of China Mine Rescuing Committee

Luoyang Langchao Fire always insists on the business principle of "striving for perfection, advance with times, lasting development, and low carbon with environmental protection", also takes rescuing more lives and lowering loss as our long-term mission. We will try to create more value in active passion and nice service to repay the support of society.

荣耀，不过是浪潮昨日成就的注脚，
 荣耀属于过去！我们更展望未来。
 今天站在未来5年的起跑线上，
 是浪潮新梦想的开端，
 是创想未来的启迪，
 在这机遇与挑战并存的时代浪潮中，
 永远在大步前进！

Glory, but yesterday's achievements of Langchao
 Glory belongs to the past! We are looking forward to the future
 Today, standing on the starting line of the next 5 years.
 It is the beginning of Langchao's new dream.
 It is the inspiration of the coming future
 Opportunities and challenges exist in this era,
 Langchao, always steps forward!

◎ 经营宗旨

精益求精 / 与时俱进 / 持续发展 / 低碳环保

◎ 企业作风

快速反应 / 精准执行

◎ 企业使命

生产绿色产品 / 节约地球资源
 创造自然环保和经济效益的双丰收

◎ 核心价值观

安全至上 / 人尽其才 / 勇于创新 / 敢于竞争

◎ 研发方针

绿色环保 / 自然降解

◎ 售后保障

服务无止境 / 真诚每一刻



Business Principle

Striving for perfection, Sustainable development Advance with times, Low carbon with environmental protection

Work Style

Quick response and exact action.

Core Value

Safety as priority Talent fully displayed
 Innovation Competition

Enterprise Mission

Produce green products Save global sources
 Make double benefit from nature protection and economic profit.

After-sale Service

Endless Sincerely

Development Policy

Environmental protection Decompose spontaneously

诚信 / 高效 / 激情 / 创新

SINCERITY / HIGH EFFICIENCY / PASSION / CREATION

➔ 资质荣誉 HONOR

本企业产品已通过“公安部消防产品合格评定中心”认证；
 本企业产品已通过“国家固定灭火系统和耐火构件质量监督检验中心”检验；
 本企业产品已通过“中国强制性产品CCC”认证；
 本企业产品已通过“中国船级社”认证；
 本企业产品已通过“法国BV”认证；
 本企业产品已通过“欧盟CE”认证；
 本企业产品获得“石油化工工程建设推荐产品证书”；
 本企业产品首家获得“绿色之星”环保产品称号；
 本企业产品质量由“中国大地保险公司”承保；
 本企业质量管理体系已通过ISO9001:2008标准认证；
 本企业环境管理体系已通过ISO14001:2004标准认证；
 本企业职业健康安全管理体系已通过OHSAS18001:2007标准认证；
 本企业获得国家级“高新技术企业证书”；
 本企业获得“质量信用AAA等级证书”；
 本企业获得“质量、信誉双保障示范单位”称号；
 本企业获得省质监局“合格防伪保真品牌”；
 本企业获得省商务厅“诚信经营示范企业”称号；
 本企业为“中国消防协会、河南省消防协会、洛阳市消防协会、上海市消防协会”会员单位；
 本企业为“中国水上消防协会”会员单位；
 本企业为“中国矿山救护专业委员会”会员单位；

- ★ Qualified by Chinese Ministry of Public Security.
- ★ Qualified by National fixed fire extinguishing system and Refractory component quality supervision and inspection center
- ★ Qualified by China Compulsory Certification
- ★ Qualified by China Classification Society.
- ★ Qualified by BV
- ★ Qualified by CE
- ★ Qualified by “recommended products by China Petrochemical project construction”
- ★ First qualified by “Green Star” about ECO products
- ★ Quality guaranteed by China Continent Insurance Co., Ltd.
- ★ Qualified by ISO9001:2008 International Quality Certification System
- ★ Qualified by ISO14001:2004 Environmental Management System
- ★ Qualified by OHSAS18001 Occupational Health And Safety Management System
- ★ Qualified as National High-tech Enterprise
- ★ Qualified by AAA grade Quality Credit Certificate
- ★ Qualified as Quality And Reputation Double Protection Demonstration Company
- ★ Our trademark “Luoshen” qualified by Qualified Fidelity Brand by quality supervisor center of Henan province
- ★ Qualified as Model Company of Integrity by the department of business of Henan province
- ★ Qualified as member of China Fire Fighting Association, Henan Fire Fighting Association, Luoyang Fire Fighting Association and Shanghai Fire Fighting Association
- ★ Qualified as member of China Marine Rescuing Committee
- ★ Qualified as member of China Mine Rescuing Committee



药剂篇

Extinguishing Agent

卓越的产品和优秀的品质

OUTSTANDING PRODUCT WITH EXCELLENT QUALITY

非常品质 有口皆碑

Well-known Quality



→ 荣誉产品PRODUCT

MJABP型A类泡沫灭火剂

MJABP CLASS A FIRE EXTINGUISHING FOAM

A类泡沫灭火剂，是一种新型高效的压缩空气泡沫灭火剂。其主要优点为控火速度快，火场用水效率高，具有隔热、防辐射、防复燃的显著效果，能大大降低火灾现场的水渍损失。此泡沫可按不同配比，通过控制供给泡沫量来达到最佳灭火效果。它能增加水的粘度并粘附在可燃物一表面，形成一层防辐射的保护层，抗烧能力增加且不易复燃。可按照0.1~3%比例配比，使泡沫发挥极大优势，使用户获得极大经济效益与生命安全。

A类压缩空气泡沫灭火剂，泡沫丰富、细密、粘附性强，因配方中使用本企业自行复配的复合氟碳表面活性剂，泡沫持久性好、析水时间稳定，析液水的表面张力很低。灭A类火（固体火灾）时，它的泡沫能粘附在燃烧物物体表面形成一层隔热防辐射保护层，稳定持久的泡沫更不会随意的流淌，减少了水渍损失，由于源源不断的泡沫析出具有很强渗透能力的粘稠液体，能渗透到固体燃烧物的阴焰深处，泡沫在水膜的作用下快速铺展，稳定持久的泡沫与稳定的持久的析水，不仅能快速灭火，而且有效地阻止了燃烧物的复燃，所以，该产品具有泡沫稳定、防复燃效果好等优点。

项目 Item	技术指标 Technical Norm
PH值 PH Value	6.0~9.5
凝固点 Freezing Point	-24℃
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
表面张力/(mN/m) Surface tension (mN/m)	在混合比1.0%的条件下，表面张力≤30.0 (Proportion 1.0%)≤30.0
润湿性 Moistening time	在混合比1.0%的条件下，润湿时间≤20.0 s (Proportion 1.0%)≤20.0s
25%析液时间/min 25% drainage time/min	在混合比为0.5%的条件下，25%析液时间与特征值的偏差不大于30% (Proportion 0.5%) the deviation not more than 30% of the specific value
隔热防护性能 Heat insulation	在混合比为3%的条件下，25%析液时间≥20.0min,且发泡倍数≥30.0倍 (Proportion 3%) 25% drainage time ≥20.0min, foam expansion ≥30.0
灭A类火性能 Performance for Class A fires	在混合比为0.5%的条件下、灭火时间≤90.0s,且抗复燃时间≥10.0min (Proportion 0.5%) extinguishing time≤90.0s, burn-back time≥10.0min
灭非水溶性液体火性能 Performance for fires of water insoluble liquid	在混合比为0.5%的条件下、发泡倍数与特征值偏差≤20%的条件下，灭火性能级别≥IIID。 (Proportion 0.5%) the deviation of foam expansion not more than 20% of the specific value, Rating ≥IIID.

ENVIRONMENTAL PROTECTION HIGH PRESSURE WATER SPRAY FOAM EXTINGUISHING AGENT

MJABP Class A fire extinguishing foam is a new and efficient air compressed concentrate. It provides rapid flame control and efficient water use and obviously performs with heat insulating, radiation proof and afterburning prevention, which can greatly lower the loss of water spots at fire sites. With different proportion and controlling the supply of the foam, it would effect the best fire extinguishing performance. It enhances the viscosity of water to adhere to the surface of fuels, building a radiation proof shield with better resistance to heat and afterburning. With the proportion from 0.1% to 3%, the foam could offer outstanding performance to protect the property and safety of users.

MJABP Class A extinguishing agent is with plentiful, fine and tough cohesive foam, which is formulated by our own fluorocarbon compounded surfactants, offering long-lasting and stable blanket and reducing the surface tension of the water. For Class A fires, it can adhere to the surface of burning materials to form one protective layer with heat insulation and radiation protection, and the long-lasting foam stays steadily, also water spots loss is reduced. In addition, the continuous foam keeps liberating viscid liquid with high penetrating power, which can penetrate the surface to the bottom of burning materials and spreads rapidly with aqueous film to get fast extinguishing effect and also prevent materials burning back.

In a word, this product outstanding advantage is stable foam and strong anti-afterburning ability.

包装贮存 Packing & Storage

包装：25Kg、50Kg、200Kg塑料桶；

贮存：-15℃~45℃通风、阴凉、干燥的库房；

有效期：三年

本企业可为您配制耐海水型产品。

Package: Plastic barrels of 25kg, 50kg and 200kg

Shelter: at least 3 years(China national standard), if stored at a cool, dry and well-ventilated room

with the ambient temperature between -15℃~45℃

Customized seawater-resistant products available



→ 荣誉产品PRODUCT

F-500微胶囊灭火剂

F-500 ENCAPSULATOR AGENT

本产品是一种多功能高效新型环保灭火剂,集水成膜、抗溶性等各类水媒灭火剂诸多优点于一身,对于木材、纸张、棉制品、干草、煤炭、橡胶、非极性液体(如汽油、煤油等)、极性液体(如甲醇、乙醇等)等化工原料引起的火灾具备极为突出的灭火效果。

配比浓度为1%即可灭A类火,3%时即可灭油类火,6%时即可灭醇类火,填补国内消防剂技术空白。采用了先进的微胶囊技术,可以有效扑灭火灾和控制危险品泄漏及有害气体挥发;具有灭火迅速、瞬间降温、防止复燃、高效隔热、消除浓烟等优越性能。

F-500 is the newest generation of the most complete, high efficient and environment-friendly fire extinguishing agents. It is an idea complex replacing kinds of water-borne agents, like aqueous film, alcohol resistance and etc., which demonstrates outstanding performance to extinguish fires of wood, paper, cotton, dry grass, coal, rubber, non-polar liquids(gasoline, crude oil), polar liquids(ethanol, methanol) and chemical raw materials.

The proportion 1% is perfect for Class A fires, 3% for hydrocarbon fires and 6% for polar solvent liquid fires, which fills out the blank of fire extinguishing technology in China. It adopts advantaged micro encapsulator technology to efficiently extinguish fires and control the spill of hazards and dangerous odor emanating, demonstrating outstanding performance of rapid extinguishing, instant cooling, afterburning prevention, obvious heat insulation, smoke eliminating and etc..

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -10^{\circ}\text{C}$ Average type: $\leq -10^{\circ}\text{C}$ 耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
PH值 PH Value	6.0~9.5
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
表面张力/(mN/m) Surface tension (mN/m)	≤ 30.0
灭A类火性能 Performance for Class A fires	IA
灭B类火性能 Performance for Class A fires	IA和ARIIB

包装贮存

Packing & Storage

包装: 25Kg、50Kg、200Kg塑料桶;

贮存: $-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$ 通风、阴凉、干燥的库房;

有效期: 15年

本企业可为您配制耐海水型产品。

Package: Plastic barrels of 25kg, 50kg and 200kg

Shelter: at least 15years(China national standard), if stored at a cool, dry and well-ventilated room with the ambient temperature between $-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$

Customized seawater-resistant products available



AFFF/AR 3%、6%抗溶性水成膜泡沫灭火剂

ENVIRONMENTAL PROTECTION 3% AND 6% ALCOHOL RESISTANT AQUEOUS FILM FORMING FOAM EXTINGUISHING AGENT

本品以AFFF3%、6%为基料,添加适量抗醇剂复合而成。除具有AFFF3%、6%功能外,还可扑救极性溶剂的火灾。

This product takes AFFF3% and AFFF 6% as basic material with proper amount of alcohol resistance agents added. Besides the functions of AFFF3% and AFFF 6%, it can also be used to put out fires of polar solvents.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -10^{\circ}\text{C}$ Average type: $\leq -10^{\circ}\text{C}$ 耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
PH值/20℃ PH Value	6.0~9.5
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
扩散系数 Spreading Coefficient	正值 Positive value
发泡倍数/20℃ Foam Expansion	与特征值的偏差小于1.0或不大于特征值的20% The deviation is not more than 1.0 or 20% of the characteristic value
25%析水时间(min)/20℃ 25% Drainage Time	与特征值的偏差小于20% The deviation is not more than 20%
灭火时间(min) Fire-extinguishing Time	非水溶性燃料 Non-watersoluble fuel ≤ 3 水溶性燃料 Watersoluble fuel ≤ 3
抗烧时间(min) Burn-back Time	非水溶性燃料 Non-watersoluble fuel ≥ 10 水溶性燃料 watersoluble fuel ≥ 10

包装贮存

Packing & Storage

包装: 25kg、50kg、200kg塑料桶;

贮存: $-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$ 阴凉、通风、干燥的库房;有效期: 二年

本企业可为您配制耐寒型、耐海水型产品。

Packing: Plastic barrels of 25kg, 50kg and 200kg

Warning: Avoid mixing with other chemical or extinguishing agents during transportation and storage;

Storage: Keep the agents in cool, dry environment, and dry storeroom under the temperature of $-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$;

Effective Period: 2 Years;

Customized cold-resistant and seawater-resistant products available



➔ **荣誉产品PRODUCT**

AFFF1%、3%、6%水成膜泡沫灭火剂

ENVIRONMENTAL PROTECTION 1%, 3% AND 6% AQUEOUS FILM FORMING FOAM EXTINGUISHING AGENT

本品以氟碳表面活性剂和碳氢表面活性剂等基料组成，是一种高效泡沫灭火剂。具有泡沫流动性好，灭火速度快、封闭性能好，贮存期长等特点；可与干粉灭火剂联用扑救油类火灾，也可采用“液下喷射”的方式扑救大型油类储罐火灾。该灭火剂是低倍数泡沫灭火剂中灭火速度最快、灭火效率最高的高效泡沫灭火剂。

This product is made from fluorocarbon and hydrocarbon surfactants as basic material. It is a kind of high efficient foam extinguishing agent with better fluidity, faster extinguishment, good closure and longer storage period. It is also applicable to "Sub-surface Injection" system to put out large fires of oil stock tank. Among all low-expansion products, this one has the fastest extinguishing speed and highest efficiency.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: ≤-10℃ Average type: ≤-10℃
	耐寒型: ≤-12.5℃ ~ -30℃ Cold-resistant type: ≤-12.5℃ ~ -30℃
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
PH值 PH Value	6.0 ~ 9.5
比流动性 Fluidity	泡沫液流量不小于标准参比流量 flow rate of foam not less than that of reference liquid
扩散系数 Spreading Coefficient	正值 Positive value
发泡倍数20℃ Foam Expansion	与特征值的偏差大于1.0或不大于特征值的 20% The deviation is not more than 1.0 or 20% of the characteristic value
25%析水时间(min)/20℃ 25% Drainage Time	与特征值的偏差大于20% The deviation is not more than 20%
灭火时间(min) Fire-extinguishing Time	≤3
抗烧时间(min) Burn-back Time	≥10



包装贮存

Packing & Storage

包装: 25kg、50kg、200kg塑料桶;
 贮存: -5~45℃阴凉、通风、干燥的库房; 有效期: 八年
 本企业可为您配制耐寒型、耐海水型产品。
 Packing: Plastic barrels of 25kg, 50kg and 200kg
 Storage: Stored in cool, ventilated and dry storeroom under the temperature of 0-45℃
 Effective Period: 8 Years
 Customized cold-resistant and seawater-resistant products available



S/AR3%、6%抗溶性泡沫灭火剂

ENVIRONMENTAL PROTECTION 3% AND 6% ALCOHOL RESISTANT FOAM EXTINGUISHING AGENT

本品以发泡剂、稳定剂、微生物多糖和氟碳表面活性剂等制成，用于扑救醇、酯、醚、酮等可燃极性溶剂的火灾、也可扑救一般油类火灾。

This product consists of foam booster, stabilizer, microbial polysaccharide and fluorocarbon surfactant etc.. It is used to put out fires of flammable polar solvents of alcohol, ester, ether and ketone etc. and also to extinguish fires of oil material.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: ≤-10℃ Average type: ≤-10℃
	耐寒型: ≤-12.5℃ ~ -30℃ Cold-resistant type: ≤-12.5℃ ~ -30℃
PH值/20℃ PH Value	6.0 ~ 9.5
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
发泡倍数/20℃ Foam Expansion	与特征值的偏差大于1.0或不大于特征值的20% The deviation is not more than 1.0 or 20% of the characteristic value
25%析水时间(min)/20℃ 25% Drainage Time	与特征值的偏差大于20% The deviation is not more than 20%
灭火时间(min) Fire-extinguishing Time	非水溶性燃料 Non-watersoluble fuel ≤5 水溶性燃料 Watersoluble fuel ≤3
抗烧时间(min) Burn-back Time	非水溶性燃料 Non-watersoluble fuel ≥10 水溶性燃料 watersoluble fuel ≥10



包装贮存

Packing & Storage

包装: 25kg、50kg、200kg塑料桶;
 产品在运输、贮存期间不得混入其它化学品及其它不同类型的灭火剂;
 产品应存放在阴凉、干燥的库房内。
 防止曝晒, 贮存的环境温度为-5 ~ 45℃
 有效期: 二年
 本企业可为您配制耐寒型、耐海水型产品。
 Packing: Plastic barrels of 25kg, 50kg and 200kg
 Warning: Avoid mixing with other chemical or extinguishing agents during transportation and storage;
 Storage: Keep the agents in cool, dry environment, and under the temperature of -5-45℃ (also prohibit from exposing to the sun)
 Effective Period: 2 Years;
 Customized cold-resistant and seawater-resistant products available.



荣誉产品PRODUCT

G/Z3%、6%高中倍数泡沫灭火剂

ENVIRONMENTAL PROTECTION 3% AND 6% HIGH/ MEDIUM EXPANSION FOAM EXTINGUISHING AGENT

本品以高效发泡剂为基料,属合成类泡沫灭火剂,用于扑救煤矿、飞机库(场)、船舶、仓库、地下室等有限空间的火灾和地面大面积油类火灾。

This product is made with high efficient foam booster as basic material. It is a kind of synthetic foam extinguishing agents and used to put out fires in limited sites, such as coalmine, hangars(airfield), vessel, warehouse, basement etc., also extinguish large ground fires of oil material.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -10^{\circ}\text{C}$ Average type: $\leq -10^{\circ}\text{C}$
	耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
PH值/20°C PH Value	6.0~9.5
沉淀物 (体积 %) Sediment (Volume %)	老化前 Before Aging ≤ 0.25 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
	老化后 After Aging ≤ 1.0 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
发泡倍数/20°C (老化前、后)(中倍数) Foam Expansion (around aging)(Medium Expansion)	≥ 50
发泡倍数/20°C (老化前、后)(高倍数) Foam Expansion (around aging)(High Expansion)	≥ 201
25%析液时间(min)/20°C 25% Drainage Time/20°C(Medium Expansion)	与特征值的偏差 $\leq 20\%$ The deviation is not more than 20%
50%析液时间(min)/20°C 50% Drainage Time/20°C	≥ 10.0 ,与特征值的偏差 $\leq 20\%$ The deviation is not more than 20%
灭火时间/S(高倍数) Fire-extinguishing Time(High expansion)	≤ 150
灭火时间/S(中倍数) Fire-extinguishing Time(Medium Expansion)	≤ 120
1%抗烧时间/S(中倍数) Burn-back Time	≥ 30



包装贮存 Packing & Storage

包装: 25kg、50kg、200kg塑料桶

贮存: $-5 \sim 45^{\circ}\text{C}$ 阴凉、通风、干燥的库房;

有效期: 三年

本企业可为您配制耐寒型、耐海水型产品。

Packing: Plastic barrels of 25kg, 50kg and 200kg

Storage: Stored in cool, ventilated and dry storeroom under the temperature of $-5 \sim 45^{\circ}\text{C}$

Effective Period: 3 Years

Customized cold-resistant and seawater-resistant products available

FP/AR3%、6%抗溶性氟蛋白泡沫灭火剂

ENVIRONMENTAL PROTECTION 3% AND 6% FLUORO-PROTEIN ALCOHOL RESISTANT FOAM EXTINGUISHING AGENT

本品广泛用于生产贮存水溶性、非水溶性、可燃、易燃液体的大型化工厂、飞机场、酒厂、油田、化工仓库、油库、船舶等场合初起火灾的预防与补救,对大面积油类火灾和固体火灾扑救,效果优于蛋白、氟蛋白泡沫灭火剂。

The alcohol resistant foam extinguishing agent is widely used in initial fire protection and extinguishing fires in large chemical plants, airports, wineries, oilfields, chemical storerooms, oil depots and shipping venues in which water-soluble or water insoluble flammable liquids are produced or stored. Its effect is superior to the protein foam or fluoroprotein foam.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -10^{\circ}\text{C}$ Average type: $\leq -10^{\circ}\text{C}$
	耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
PH值/20°C PH Value	6.0~9.5
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
沉淀物 (体积 %) Sediment (Volume %)	老化前 Before Aging ≤ 0.25 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
	老化后 After Aging ≤ 1.0 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
发泡倍数/20°C Foam Expansion	与特征值的偏差 ≤ 1.0 或 $\leq 20\%$ The deviation is not more than 1.0 or 20% of the characteristic value
25%析水时间(min)/20°C 25% Drainage Time	与特征值的偏差 $\leq 20\%$ The deviation is not more than 20%
灭火时间(min) Fire-extinguishing Time	非水溶性燃料 Non-watersoluble fuel ≤ 4 水溶性燃料 Watersoluble fuel ≤ 5
抗烧时间(min) Burn-back Time	非水溶性燃料 Non-watersoluble fuel ≥ 10 水溶性燃料 watersoluble fuel ≥ 10

包装贮存 Packing & Storage

包装: 25kg、50kg、200kg塑料桶;

贮存: $-5 \sim 45^{\circ}\text{C}$ 阴凉、通风、干燥的库房;

有效期: 二年

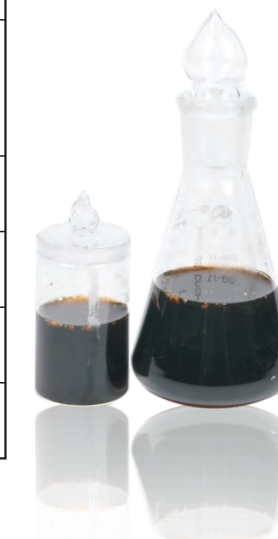
本企业可为您配制耐寒型、耐海水型产品。

Packing: Plastic barrels of 25kg, 50kg and 200kg

Storage: Stored in cool, ventilated and dry storeroom under temperature $-5 \sim 45^{\circ}\text{C}$

Effective Period: 2 Years

Customized cold-resistant and seawater-resistant products available



→ 荣誉产品PRODUCT

FP3%、6%氟蛋白泡沫灭火剂

ENVIRONMENTAL PROTECTION 3% AND 6% FLUOROPROTEIN FOAM EXTINGUISHING AGENT

本品以蛋白泡沫灭火剂为基料，添加适量的氟碳表面活性剂而成，除具有蛋白泡沫灭火剂功能外，还适用于大型油罐“液下喷射”灭火和与干粉灭火剂联用功能。

This product takes protein foam extinguishant as basic materials, with proper fluoro-carbon surfactant added. It is available to put out large grade fire of oil-tanks by subsurface-injection way, also can be mixed with dry powder extinguishing agent to get better effect.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -10^{\circ}\text{C}$ Average type: $\leq -10^{\circ}\text{C}$
	耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
PH值/20°C PH Value	6.0~9.5
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
沉淀物 (体积 %) Sediment (Volume %)	老化前 Before Aging ≤ 0.25 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
	老化后 After Aging ≤ 1.00 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
发泡倍数/20°C Foam Expansion	与特征值的偏差小于1.0或不大于特征值的20% The deviation is not more than 1.0 or 20% of the characteristic value
25%析水时间(min)/20°C 25% Drainage Time	与特征值的偏差小于20% The deviation is not more than 20%
灭火时间(min) Fire-extinguishing Time	≤ 4
抗烧时间(min) Burn-back Time	≥ 10

包装贮存

Packing & Storage

包装: 25kg、50kg、200kg塑料桶;

贮存: $-5 \sim 45^{\circ}\text{C}$ 阴凉、通风、干燥的库房;

有效期: 二年

本企业可为您配制耐寒型、耐海水型产品。

Packing: Plastic barrels of 25kg, 50kg and 200kg

Storage: Stored in cool, ventilated and dry storeroom under temperature $-5 \sim 45^{\circ}\text{C}$

Effective Period: 2 Years

Customized cold-resistant and seawater-resistant products available



S 3%、6% 合成泡沫灭火剂

S 3%, 6% Synthetic Fire Extinguishing Foam

本产品是由复合表面活性剂、助溶剂、稳定剂、抗冻剂等组成，可用于扑救非水溶性液体可燃、易燃液体火灾和一般固体物质的火灾，也可采用“液下喷射”的方式扑救大型油罐火灾。

This product consists of compound surfactants, cosolvents, stabilizing agents and anti-freeze agents etc. It's used to extinguish fires of water insoluble liquids, flammable liquids and general solid, and also applicable for subsurface-injection method to put out fires of gasoline storage tanks.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -10^{\circ}\text{C}$ Average type: $\leq -10^{\circ}\text{C}$
	耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
PH值 PH Value	6.0~9.5
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
发泡倍数 Foam Expansion	与特征值的偏差小于1.0或不大于特征值的20% the deviation not more than 20% or 1.0 of the specific value
25%析液时间/min 25% drainage time /min	与特征值的偏差小于20% the deviation not more than 20%
灭火时间/min Fire-extinguishing Time/min	≤ 5
抗烧时间/min burn-back time /min	≥ 10

包装贮存

Packing & Storage

包装: 25Kg、50Kg、200Kg塑料桶;

贮存: $-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$ 通风、阴凉、干燥的库房;

有效期: 三年

本企业可为您配制耐海水型产品。

Package: Plastic barrels of 25kg, 50kg and 200kg

Shelter: at least 3 years(China national standard), if stored at a cool, dry and well-ventilated room with the ambient temperature between $-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$

Customized seawater-resistant products available



→ 荣誉产品PRODUCT

FFFP 3%、6%成膜氟蛋白泡沫灭火剂

ENVIRONMENTAL PROTECTION 3% AND 6% FILM FORMING FLUOROPROTEIN FOAM EXTINGUISHING AGENT

本品以蛋白泡沫为基料，配以本厂自行研制的复合表面活性剂组成。本产品配伍性能受其他灭火剂品种干扰少，并能与干粉灭火剂联用，也可采用“液下喷射”的方式扑救大型油罐火灾。广泛用于机场、油库、大型化工厂、部队基地油库等。

This product is made with protein foam as basic material and compounded proper amount of surfactant which is developed by our own. It can match up well with other extinguishing agents and work with dry powder together. The fluoroprotein foam extinguishing agent can be widely used in airport, warehouse for oil, large chemical plant, chemical warehouse, harbor chemical warehouse and oil warehouse of army base etc.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -10^{\circ}\text{C}$ Average type: $\leq -10^{\circ}\text{C}$
	耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
PH值/20°C PH Value	6.0~9.5
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissoluble and transparent liquid
沉淀物 (体积 %) Sediment (Volume %)	老化前 Before Aging ≤ 0.25 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
	老化后 After Aging ≤ 1.0 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
发泡倍数/20°C Foam Expansion	与特征值的偏差不大于1.0或不大于特征值的20% The deviation is not more than 1.0 or 20% of the characteristic value
25%析水时间(min)/20°C 25% Drainage Time	与特征值的偏差不大于20% The deviation is not more than 20%
灭火时间(min) Fire-extinguishing Time	≤ 5
抗烧时间(min) Burn-back Time	≥ 15



包装贮存

Packing & Storage

包装: 25kg、50kg、200kg塑料桶;

产品在运输、贮存期间不得混入其它化学品及其它不同类型的灭火剂;

产品应存放在阴凉、干燥的库房内。防止曝晒, 贮存的环境温度为 $-5 \sim 45^{\circ}\text{C}$
有效期: 二年

本企业可为您配制耐寒型、耐海水型产品。

Packing: Plastic barrels of 25kg, 50kg and 200kg

Warning: Avoid mixing with other chemical or extinguishing agents during transportation and storage

Storage: Keep the agents in cool, dry environment, and under the temperature of $-5 \sim 45^{\circ}\text{C}$ (also prohibit from exposing to the sun)

Effective Period: 2 Years;

Customized cold-resistant and seawater-resistant products available



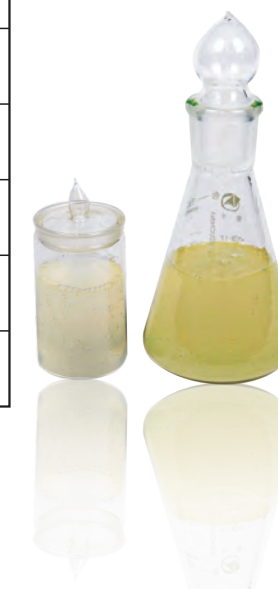
S/AR-YC3%、6%乙醇汽油专用泡沫灭火剂

ENVIRONMENTAL PROTECTION 3% AND 6% ALCOHOL PETROL FOAM EXTINGUISHING AGENT

本品是我厂针对新型车用燃料最新研制出的一种新型环保泡沫灭火剂, 采用本企业自行复配的表面活性剂, 对新型燃料乙醇汽油灭火迅速, 且对油类火灾也能有效控制, 其数据均能达到标准要求。

This product is a kind of new type environmental protection foam that is aimed at putting out fires caused by new type fuels. Because of adopting the surfactant which is compounded by our own, it can put out the alcohol petrol fires quickly and also can control the fire of oil material effectively. All of the datas can come up to the standard of the country.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -5^{\circ}\text{C}$ Average type: $\leq -5^{\circ}\text{C}$
	耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
密度(20°C)g/cm ³ Density 20°C	1.01~1.20
PH值/20°C PH Value	6.0~9.5
粘度/20°C /Mpa·s Viscosity 20°C	≤ 1000
发泡倍数 /20°C Foam Expansion	≥ 6.0
25%析液时间 /20°C 25% Drainage Time/20°C(min)	≥ 4.5
灭火时间/S Fire-extinguishing Time(s)	≤ 120
封闭时间 /min Seal Time(min)	≥ 15



包装贮存

Packing & Storage

包装: 25kg、50kg、200kg塑料桶

贮存: $-5 \sim 45^{\circ}\text{C}$ 阴凉、通风、干燥的库房;

有效期: 二年

Packing: Plastic barrels of 25kg, 50kg and 200kg

Storage: Stored in cool, ventilated and dry storeroom under the temperature of $-5 \sim 45^{\circ}\text{C}$

Effective Period: 2 Years



荣誉产品PRODUCT

P3%、6%蛋白泡沫灭火剂

ENVIRONMENTAL PROTECTION 3% AND 6% PROTEIN FOAM EXTINGUISHING AGENT

本品以动物水解蛋白为基料，用于扑救非水溶性可燃、易燃液体和一般固体物质的火灾，具有泡沫稳定、抗烧性能强，泡沫覆盖能力好等特点。

This product is made from animal protein and used to put out the fires, like ones of water-insoluble flammable liquid and general solid with stable foam, excellent burning resistance and great coverage ability.

项目 Item	技术指标 Technical Norm
凝固点 Freezing Point	普通型: $\leq -10^{\circ}\text{C}$ Average type: $\leq -10^{\circ}\text{C}$
	耐寒型: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$ Cold-resistant type: $\leq -12.5^{\circ}\text{C} \sim -30^{\circ}\text{C}$
PH值/20°C PH Value	6.0 ~ 9.5
抗冻结、融化性 Property of anti-freeze and deliquescence	无可见分层和非均相 Well dissolcable and transparent liquid
沉淀物 (体积 %) Sediment (Volume %)	老化前 Before Aging ≤ 0.25 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm 老化后 After Aging ≤ 1.0 , 沉淀物能通过180 μm 筛 Sediment can leak from the sieve whose specification is 180 μm
发泡倍数/20°C Foam Expansion	与特征值的偏差不大于1.0或不大于特征值的20% The deviation is not more than 1.0 or 20% of the characteristic value
25%析水时间(min)/20°C 25% Drainage Time	与特征值的偏差不大于20% The deviation is not more than 20%
灭火时间(min) Fire-extinguishing Time	≤ 5
抗烧时间(min) Burn-back Time	≥ 15



包装贮存

Packing & Storage

包装: 25kg、50kg、200kg塑料桶:

贮存: $-5 \sim 45^{\circ}\text{C}$ 阴凉、通风、干燥的库房:

有效期: 二年

本企业可为您配制耐寒型、耐海水型产品。

Packing: Plastic barrels of 25kg, 50k and 200kg

Storage: Stored in cool, ventilated and dry storeroom under temperature $-5 - 45^{\circ}\text{C}$

Effective Period: 2 Years;

Customized cold-resistant and seawater-resistant products available



ABC干粉灭火剂

ENVIRONMENTAL PROTECTION ABC POWDER EXTINGUISHING AGENT

本品含量可根据用户需要制成不同的规格型号,产品经全硅化防潮防结块处理,又称ABC通用干粉灭火剂,具有扑救A、B、C类物质火灾的功能。

This product can be made different specification upon buyers varied requirements, with damp-proof and caking-proof because of special treatment by completed silicification. It can put out three different types of fires, as type A(solid), type B(liquid), type C(gas).

项目 Item	技术指标 Technical Norm
含量/% Component	根据用户需求, 厂方公布值 ± 3 Depend on customer's requirement
松密度 g/ml Apparent Density	≥ 0.80 厂方公布量 ± 0.1
含水率/% Moisture Content	≤ 0.20
吸湿率/% Moisture absorption Rate	≤ 3.00
电绝缘性/KV Electric insulation	≥ 5.00
抗结块性(针入度)/mm Penetration	≥ 16.0
斥水性 water Repellency	无明显吸水、不结块 No obvious water absorption, no caking
粒度/0.04mm% Particle Size	≥ 50.0
灭火效能(A、B、C) Extinguishing Efficiency(A、 B、 C)	三次实验,至少二次灭火成功 Success ratio:2.3(at least)



包装贮存

Packing & Storage

包装: 40kg/袋, 内用塑料袋, 外用编织袋;

贮存: 存放在通风、阴凉、干燥的库房。防止潮湿和包装破损;

Packing: 40kg bag with plastic inside and woven bag outside

Storage: stored in ventilated and dry storeroom to avoid being moist and destroyed.



→ 荣誉产品PRODUCT

AFFF/AR-GS高压细水雾泡沫灭火剂

ENVIRONMENTAL PROTECTION HIGH PRESSURE WATER SPRAY FOAM EXTINGUISHING AGENT

AFFF/AR-GS高压细水雾泡沫灭火剂是一种多功能、高效环保型泡沫灭火剂，它不仅适用在高压水雾系统中喷射微小的水滴，同样也适用在泡沫灭火剂系统中喷射稳定持久的泡沫。

AFFF/AR-GS高压细水雾泡沫灭火剂由于采用了一种新型的复合表面活性剂，它在多功能灭火方面显示了特有的作用。如：在扑灭A类火(固体火)时采用喷雾的方式灭火，形成水雾。细小水滴直径仅在(7~100 μm)之间，分散能力强，水滴的粘附性能好，它能渗透到固体燃烧物阴焰深处，破坏燃烧链反应，进行深层次灭火，从根本上终止了燃烧物的复燃；在扑灭B类火(液体火)油类火时，它不仅具有很低的表面张力，流动性好，而且产生的泡沫自身性能和析水性能都具备了优良的稳定性，所以，它的灭火性能和抗烧性能都优于其它的产品；在扑救醇类火时它能在燃烧表面快速形成一层固相薄膜，有效地阻碍了极性溶剂对泡沫的破坏，并使泡沫得到快速铺展，达到快速灭火的目的。

AFFF/AR-GS高压细水雾泡沫灭火剂是一种环保产品，它是由日用品级的发泡剂，食品级微生物多糖、去离子水以及企业自配的一种复合表面活性剂、适量防冻剂、防腐剂、缓冲剂等组成，并用特殊的生产工艺配制而成。该灭火剂所用的原材料：日用品级的发泡剂、食用级微生物多糖和去离子水总和达98%以上，所以对环境无污染，是环保型产品。同时，该产品也是节水型的泡沫灭火剂。

混合比	Mixture Proportion
AFFF/AR/GS 1%	AFFF/AR/GS 1%
AFFF/AR-GS 3%	AFFF/AR/GS 3%
AFFF/AR-GS 6%	AFFF/AR-GS 6%

流动点	Fluid Point
普通型 ≤ -10℃	Average type ≤ -10℃
耐寒型 ≤ -12.5℃ ~ -25℃	Cold-resistant Type ≤ -12.5℃ ~ -25℃



ENVIRONMENTAL PROTECTION HIGH PRESSURE WATER SPRAY FOAM EXTINGUISHING AGENT

High pressure water spray foam is a multifunctional, high efficient and environmental protection type foam extinguishing agent. The product is not only used in high pressure water spray extinguishing system to spurt small drips but also in foam extinguishing system to spurt stable foam.

Due to adopting a new type surfactant, the product displays its unique function in multifunctional fire-extinguishing, for example, when we put out type A fire(solid), we can adopt high pressure water spray which can form large aqueous spray that has strong spreading power and good coherence. The spray can penetrate deep into the bottom of solid burning material and damage burning chemical reaction to completely extinguish fires, so that it can totally prevent the burnback. When we put out type B fires (liquid), our products have many advantages such as low surface tension, good fluidity and the stability of the properties, so its functions of fire-extinguishing and fire-resistance are superior to any other products. When we put out fires caused by alcohol, it can quickly form a layer of thin film on the surface of the burning surface, therefore it can prevent effectively the polar solvent from destroying the foam and make the foam extend quickly and put out the fire finally.

This product is made from daily grade vesicant, food grade microbial polysaccharide, deionized water, surfactants compounded by our own, proper antifreeze, antiseptic buffer etc.. Therefore, our product is not only of environmental protection but also water-saving.

包装贮存 Packing & Storage

包装：25kg、50kg、200kg塑料桶；
产品在运输、贮存期间不得混入其它化学品及其它不同类型的灭火剂；
产品应存放在阴凉、干燥的库房内。防止曝晒，贮存的环境温度为-5~45℃；
本企业可为您配制耐寒型、耐海水型产品。

Packing: Plastic barrels of 25kg, 50kg and 200kg
Warning: Avoid mixing with other chemical or extinguishing agents during transportation and storage
Storage: Keep the agents in cool, dry environment, and under the temperature of -5 ~ 45℃ and also prohibit from exposing to the sun
Customized cold-resistant and seawater-resistant products available



营销市场 Domestic market:

国内市场	北京、天津、上海、重庆、山东（济南、青岛、烟台、东营等）、山西（太原、大同、运城、临汾、长治、晋城、阳泉等）、陕西（西安、榆林、咸阳、延安、宝鸡、安康等）、河南（郑州、开封、安阳、周口、新乡、南阳、濮阳等）、河北（石家庄、秦皇岛、唐山、保定、沧州、邯郸、黄骅等）、湖南（岳阳、郴州、湘潭等）、湖北（武汉、宜昌、十堰、襄樊等）、辽宁（沈阳、大连、辽阳、锦州、丹东等）、吉林（长春、吉林、松原等）、黑龙江（哈尔滨、齐齐哈尔、大庆、牡丹江等）、江苏（南京、扬州、苏州等）、江西（南昌、九江等）、安徽（合肥、芜湖、铜陵、安庆、蚌埠等）、福建（福州、厦门等）、广东（广州、深圳、珠海、汕头、湛江、茂名、佛山、江门等）、广西（南宁、桂林等）、云南（昆明等）、贵州（贵阳、遵义等）、四川（成都、西昌、资阳、泸州等）、青海（西宁、格尔木等）、甘肃（兰州、酒泉、武威等）、宁夏（银川等）、新疆（乌鲁木齐、库尔勒、克拉玛依、哈密等）、内蒙古（呼和浩特、包头、锡林浩特、二连浩特、乌海、鄂尔多斯、乌审旗等）、海南（海口、三亚）等省市。
国际市场	伊朗、乍得、阿联酋、巴西、印度、孟加拉、南非、摩洛哥、韩国、日本、哈萨克斯坦、迪拜等国家。
Domestic market:	<p>★Grade one cities: Beijing, Tianjin, Shanghai, Chongqing,</p> <p>★Definite places:</p> <p>Shandong province-cities of Jinan, qingdao, yantai, dongying, etc</p> <p>Shanxi province-cities of taiyuan, datong, yuncheng, linfen, changzhi, jincheng, yangquan, etc</p> <p>Shanxi province-cities of xi'an, yulin, xianyang, yan'an, baoji, ankang, etc</p> <p>Henan province-cities of zhengzhou, kaifeng, anyang, zhokou, xiniang, nanyang, puyang, etc</p> <p>Hebei province-cities of shijiazhuang, qinhuangdao, tangshan, baoding, cangzhou, handan, huanghua</p> <p>Hunan province-cities of yueyang, binzhou, xiangtan, etc.</p> <p>Hubei province-cities of wuhan, yichang, shiyan, xiangfan ,etc</p> <p>Liaoning province-cities of shenyang, dalian, liaoyang, jinzhou, dandong, etc.</p> <p>Jilin province-cities of changchun, jilin, songyuan, etc</p> <p>Heilongjiang province-cities of ha'erbin, qiqiha'er, daqing, mudanjiang, etc</p> <p>Jiangsu province-cities of nanjing, yangzhou ,suzhou, etc</p> <p>Jiangxi province-cities of nanchang ,jiujiang, etc</p> <p>Anhui province-cities of hefei, wuhu, tongling, anqing, bangbu, etc</p> <p>Fujian province-cities of fuzhou, xiamen, etc</p> <p>Guangdong province-cities of Guangzhou, Shenzhen, zhuhai ,shantou,zhanjiang, maoming, foshan, jiangmen,etc</p> <p>Guangxi province-cities of nanning, guilin, etc.</p> <p>Yunnan province- cities of kunming,etc</p> <p>Guizhou province-cities of guiyang, zunyi,etc</p> <p>Sichuan province-cities of chengdu, xichang, ziyang, luzhou, etc</p> <p>Qinghai province-cities of xining, ge'ermu, etc</p> <p>Gansu province-cities of lanzhou, jiuquan, wuwei, etc</p> <p>Ningxia province-cities of yinchuan, etc</p> <p>Xinjiang province-cities of wulumuqi, kuerle ,kelamayi, hami, etc</p> <p>Neimenggu province-cities of huhehaote, eerduosi, baotou, xilinhaote, erlianhaote, wuhai, etc</p> <p>Hainan province-city of haikou, sanya, etc</p>
Aborad market	Iran, Chad, UAE, Brazil, India, Bangladesh, South Africa, Morocco, Korea, Japan, Kazakhstan, Dubai etc.

笑傲群雄 技惊四方

