

Material Safety Data Sheet

材料安全技术说明书

1. Identification of the preparation and company

产品及公司说明

Product Name:	AK100
产品名称	
Recommended application	common hardener
用途	通用固化剂
Colour	colourless
颜色	无色
Manufacture/Supplier	nanxiong Guangdong xiangyuan chemical technology co.,ltd.
制造商/供应商	广东南海市翔远化学科技有限公司
	No.8 pingan streel east fine chemical park nanxiong city of Guangdong
	广东南海市精细化工产业园平安大道东 8 号
	Fax No.: (86)751-3821165 传真号码: 0751-3821165
	Tel No.: (86)751-3821166 企业电话: 0751-3821166
	National emergency phone 国家应急电话: 0532-83889090

2. Composition/Information on Ingredients

构成/成分信息

Combination substance

混合物: Soluble in organic solution of synthetic resin composition 溶于有机溶液的合成树脂组成

Hazards Ingredients

危险成分

CAS -NO. CAS 编号	Chemical name 化学名称	Content 含量 (%)	Classification 分类
822-06-0	HDI 六亚甲基二异氰酸酯	30-50	Xi
1330-20-7	XYL 二甲苯	5-20	Xn, N
123-86-4	BAC 乙酸正丁酯	15-40	

Xi Have a stimulus /有刺激

Xn Harmful/有害的

N Danger for the environment/对环境有危害

Addition references/其它参考资料

3. Hazards Identification

危险描述

Danger classification/危险分类:

Xi Have a stimulus /有刺激

Xn Harmful/有害的

N Danger for the environment/对环境有危害

Special hazard information for human beings and environment

对人类和环境的危害信息

R20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED

吸入、吞咽和皮肤接触有害

R10 FLAMMABLE/易燃的

R43 May cause sensitization by skin contact/可能引起皮肤过敏

R52/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment/对水生生物有一定毒性，可能会对水中生态环境造成长期影响。

4. First-Aid-Measures

急救措施

General/一般措施

In all cases of doubt, or when symptoms, seek medical attention. Never give anything by mouth to an unconscious person.

如果情况可疑或者症状持续，应寻求医疗救治。不要给昏迷者喂食任何物品。

Inhalation/吸入

Remove to fresh air, keep patient warm and at rest, if breathing is irregular or stopped, administer artificial respiration.

Give nothing by mouth. If unconscious place in recovery position and seek medical advice.

确保将伤员转移到空气新鲜的地方，令伤员保持平静。并以被盖保暖。如伤员呼吸不规律或停止，可实行人工呼吸。

不要给伤员喂食任何物品。如果伤员失去知觉，将其处于抢救姿态，请医务人员来处理。

Skin Contact/皮肤接触

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

脱掉受污衣物。用清水和肥皂或认可的皮肤清洗液彻底冲洗皮肤，不要使用溶剂或稀释剂。

Eye Contact/眼睛接触

Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

必须摘下隐形眼镜，并且需马上用大量清水冲洗眼睛至少 10 分钟，并立即请医生处理。

Ingestion/摄食

If accidentally swallowed obtain immediate attention. Keep at rest. Do not induce vomiting.
如误食，立即请医务人员来处理，并出示容器标签以及本表。令伤员保持平静，不要诱使伤员呕吐。

5. Fire Fighting Measures

灭火措施

Extinguishing Media -recommended/灭火剂—推荐

alcohol resistant foam, CO₂, powders, waterspray/抗酒精泡沫，二氧化碳，粉末，水雾

not to be used/勿用

waterjet / 水流喷射

Special Hazards which occur through the preparation itself, its waste products or Developing Gases
自然产生的有害气体及危害物

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
燃烧产生的黑烟中，含有分解的有害物质。

Special Protection Equipment for the Firefighting/特殊消防设备

Appropriate breathing apparatus may be required.
可能需要适当的呼吸器具。

Additional Instructions/附加说明

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or watercourses.
喷洒降温灭火。不得将灭火用水排放入下水道或天然水道。

6. Accidental Release Measures

意外泄漏处理措施

Personal Protection/个人防护

Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measure listed in section 7 and 8.
消除火源，并通风。避免呼吸有害蒸汽；请配戴适当的呼吸保护器。详细内容请参阅第 7、8 部分的保护措施。

Environmental Protection/环境保护

Do not allow to enter drains or watercourses. If the product contaminate lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.
不得将产品排放入下水道或天然水道。如产品污染公众用水，则按照当地法规通知有关当局。

Measures of Cleaning/Removal / 清洁方法

Contain and collect spillage with non-combustible absorbent materials, eg. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations(see section 13.) Clean preferably with a detergent; avoid use of solvents.
请用不可燃的吸收性材料如沙、土、蛭石以及硅藻土等容纳和收集溢出物。按照当地管理条例将有害废

物装入容器进行处理。最好用清洁剂来清洗，避免使用溶剂清洗。

7. Handling and Storage

处理和贮存

Handling/处理

information for the safe usage/安全使用信息

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. In addition the product should only be used in areas from which all lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. No sparking tools should be used. Avoid skin and eye inside the spray booth ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

需良好的通风，从而避免蒸汽浓度超过职业暴露极限和爆炸极限。该产品应用区域的电气需防爆。从一个容器倒入另一个容器时要采用接地措施，消除静电。工作现场请穿防静电靴及防静电工作服。地板应为导电型。严禁使用会产生火花的工具。避免皮肤或眼睛与其接触。避免吸入有害蒸汽和喷雾。不论是否在喷涂产品，当操作员必须在喷涂室内工作时，有时通风并不足以控制室内的微粒和溶剂蒸汽。在这种情况下，在喷涂过程中工作人员必须配戴由压缩空气供气的呼吸器，直到室内溶剂蒸汽和微粒浓度低于暴露极限为止。

Information regarding fire and explosion protection/防火防爆信息

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

该蒸汽比空气重，可能沿地板扩散。蒸汽与空气混合可能会造成爆炸危险。

Storage/贮存

required conditions of storage rooms and containers/仓库和集装箱的必要条件

Keep container tightly closed. Never use pressure to empty, container is not a pressure vessel. No smoking. Prevent unauthorisiert access. Containers which are opened must be carefully resealed und kept upright to prevent leakage.

保持容器密闭，本容器并非高压容器，所以倒空时请勿加压。严禁吸烟，禁止无关人员进入。已开封容器须小心密闭，并保持直立，以防泄漏。

Information regarding storage together with other materials/其它共储物信息

Keep away from oxidizing agents, from strong alkaline and strongly acid materials.

远离氧化剂及强碱，强酸。

Further information regarding storage conditions/其它存储条件

Always keep in containers of same material as the original one. Observe precautions. Store between 5 °C and 35 °C

in a dry, well ventilated place from sources of heat and direct sunlight. Keep away from sources of ignition.

始终使用原始容器包装，注意标签提示。存贮温度：5°C—35°C。存贮于干燥和通风良好的地方，远离热源并防止阳光直接照射。远离火源。

8. Exposure Controls /Personal Protection

接触控制/个体防护

Engineering Measures/技术措施

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.
保持局部和整体合理有效的通风，如果这样仍不能使漆雾及溶剂的浓度达到OEL值以下，则必须穿戴相应的防护用品。

Control parameters/控制参数

CAS -NO. CAS 编号	Chemical name 化学名称	Value 数值
822-06-0	HDI 六亚甲基二异氰酸酯	ACGIH -TWA:0.05ppm. 中国) : PC-TWA (8hrs) :0.03mg/m ³ ,PC -STEL (15min):0.15mg/m ³
1330-20-7	XYL 二甲苯	ACGIH TWA: 100PPM ACGIH STEL : 125PPM 中国最高允许浓度:China MAC : 100mg/m ³
123-86-4	BAC 乙酸正丁酯	ACGIH TWA: 400PPM ACGIH STEL : 400PPM 中国最高允许浓度:China MAC : 300mg/m ³

Personal Protection/个人防护

Respiratory Protection/呼吸防护

If workers are exposed to concentrations above the exposure limit they Must use appropriate, certified respirators.
如果工人暴露于浓度高于极限蒸汽中，他们必须佩戴合格的呼吸保护器。

Hand Protection/手部防护

For prolonged repeated handling, use glove barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

如果长期或反复与该产品接触，隔离油脂可以保护裸露皮肤，但一旦发生暴露就不能使用隔离油脂进行保护。

Eye Protection/眼部防护

Use safety eyewear designed to protect against splash of liquids.

戴上专门设计用于防止溅出液体伤害眼睛的安全眼镜。

Skin Protection/皮肤防护

Personnel should wear antistatic clothings made of natural fiber or if high temperature resistant synthetic fiber.

工作人员应穿着由天然纤维或高温人工合成纤维制成的抗静电工作服。

Protection-and hygiene measurement/保护和清洁

Upon contact the skin must be thoroughly cleaned with soap and water or a suitable cleaning agent. Do not use organic solvents.

皮肤接触后，应立即用肥皂和水或合适的清洁剂彻底清洁，不要使用溶剂。

9. Physical and chemical Properties

物理及化学性质

Phenotype/表征

Physical state/物理状态 : liquid/液体

Smell /气味 : Type-typical/特殊气味

Safety indications/安全指示

	Value/数值	Unit/单位	Method/方法
Flash point/闪点	34	°C	DIN53213
Viscosity/粘度	≥16	s/25°C	GB/T1723coating 4 cups
Specific weight 比重	0.94-0.98	g/cm3	DIN51901
Lower Ex-Limit/爆炸下限	0.88	Vol-%	Calculated理论计算
Upper Ex-Limit/爆炸上限	8	Vol-%	Calculated理论计算
Solubility in water/水溶性	insoluble/不溶		
Solvent Content/溶剂含量	50-70	%	Calculated理论计算
Vapor density蒸气密度	3.86	Air=1	Calculated理论计算

10. Stability and Reactivity

稳定性和反应性

conditions to be avoided/要避免的情况

Stable under recommended storage and handling conditions.(See section 7)

符合合适的储运和处理条件（见7章）

materials to be avoided/要避免接触的原料

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

当暴露在高温下可能产生危险的分解物：如一氧化碳、二氧化硫、烟、氮氧化物等。

11. Toxicological Information

毒理学信息

practical experiences/实验经验

further observations/进一步观察

Exposure to component solvents vapours concentration in excess of the Stated occupational exposure limit may result in adverse health effects headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

暴露于浓度超过规定极限的溶剂蒸汽中会对健康造成多种不利影响，可能导致不良健康后果，如粘膜和呼吸系统的

刺激和不良，影响肾脏、肝脏和中枢神经系统。症状和体征包括头痛，头晕，疲劳，肌肉无力，嗜睡和在极端情况下，丧失意识。

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

反复长期与该产品接触可能导致皮下脂肪的减少，从而产生非过敏性接触性皮炎，以及通过皮肤吸收。

There are no data available on the preparation itself. The product should not be allowed to enter drains or watercourses. 本产品没有生态方面的数据。本制剂的成分中包含有对环境有害的物质（指本文件的标题 2）。然而，由于缺乏计算方法，尚无法估量制剂本身对环境的危害程度。

13. Disposal Considerations

处理注意事项

Product/产品

recommendation/建议

Do not allow into drains or water courses.

不得使其进入下水道和水源。

not cleaned packages/未清洁包装

recommendation/建议

Wastes and emptied containers are to be deposited according to the official rules.

废物和空容器应根据官方规则处理。

Waste must be burnt.

废物必须燃烧。

14. Transport Information

运输信息

Domestic Road/Rail-Transport ADR/RID and GGVS/GGVE

RID/ADR-Class : 3

道路运输登记 : 3

Sea-Transport

海运等级

Class : 3

Packing Group : III

Technical name : UN 1263 PAINT

Air-Transport

空运等级

IATA : 3

Packing Group : III

Technical name : UN 1263 PAINT

15. Regulatory Information

监管信息

The product is labelled as follows /产品标记如下

Code-Letter and Hazard-Description of the Product/代码和产品危险说明

Xn Harmful/有害的

N Dangerous for the environment/ 对环境有危害

R10 Flammable/易燃

Nation Regulation/国家法规

Laws for the protection of expectant an nursing mothers and for youth employment must be observed.
必须遵守对孕妇和乳母亲保护法和促进青年就业。

16. Other Information

其它信息

Reference: 1, Guo-tai zhou the encyclopedia of hazardous chemical materials safety technology, chemical industry press, 1997.

参考文献: 1、周国泰《危险化学品安全技术全书》，化学工业出版社，1997。

2, the national environmental protection bureau hazardous chemicals management office, Beijing institute of chemical industry the degree of the chemical regulations handbook of environmental data, China environmental science press, 1992.

国家环保局有毒化学品管理办公室、北京化工研究所全编《化学品毒性法规环境数据手册》，中国环境科学出版社，1992。

3, Cheng Lin, solvent handbook chemical industry press, 1994.

程能林《溶剂手册》，化学工业出版社，1994。

The information of this MSDS is based on the present state of our knowledge and on current EEC and national laws, as the users working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this MSDS is meant as a description of the safety requirements of our product. it is not to be considered as a guarantee of the products' properties.

材料安全数据表中的数据是基于我们目前的知识和当前的 EEC 法律法规，但是用户的工作环境超出了我们的知识和控制。未经许可，本产品不能应用于第一部分提示之外的其它用途。为了满足法律的规定，用户有责任遵守所有的操作指导。本 MSDS 提供的信息是对我们产品安全操作规范的描述，并不意味着对产品性能的保证。