

## 风险术语 (R 术语)

风险术语	英文解释	中文解释
R1	Explosive when dry.	干燥时有爆炸性;
R2	Risk of explosion by shock, friction, fire or other sources of ignition.	受冲击、摩擦、着火或其他引燃源有爆炸危险;
R3	Extreme risk of explosion by shock, friction, fire or other sources of ignition.	受冲击、摩擦、着火或其他引燃源有极高爆炸危险;
R4	Forms very sensitive explosive metallic compounds.	生成极敏感的爆炸性金属化合物;
R5	Heating may cause an explosion.	受热可能引起爆炸;
R6	Explosive with or without contact with air.	与空气或未与空气接触发生爆炸;
R7	May cause fire.	可能引起火灾;
R8	Contact with combustible material may cause fire.	与可燃物料接触可能引起火灾;
R9	Explosive when mixed with combustible material.	与可燃物料混合时发生爆炸;
R10	Flammable.	易燃的;
R11	Highly flammable.	高度易燃的;
R12	Extremely flammable.	极易燃的;
R14	Reacts violently with water.	与水猛烈反应;
R14/15	Reacts violently with water, liberating highly flammable gases.	与水猛烈反应, 释放出极易燃气体;
R15	Contact with water liberates extremely flammable gases.	与水接触释放出极易燃气体;
R15/29	Contact with water liberates toxic, highly flammable gas.	与水接触释放出有毒的, 极易燃气体;
R16	Explosive when mixed with oxidizing substances.	与氧化性物质混合时发生爆炸;
R17	Spontaneously flammable in air.	在空气中易自燃;
R18	In use, may form flammable/explosive vapor-air mixture.	使用中可能形成易燃/爆炸性蒸气空气混合物;
R19	May form explosive peroxides.	可能生成爆炸性过氧化物;
R20	Harmful by inhalation.	吸入有害;
R20/21	Harmful by inhalation and in contact with skin.	吸入和与皮肤接触是有害的;
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.	吸入、与皮肤接触和吞食是有害的;
R20/22	Harmful by inhalation and if swallowed.	吸入和吞食是有害的;
R21	Harmful in contact with skin.	与皮肤接触是有害的;
R21/22	Harmful in contact with skin and if swallowed.	与皮肤接触和吞食是有害的;
R22	Harmful if swallowed.	吞食是有害的;
R23	Toxic by inhalation.	吸入有害;
R23/24	Toxic by inhalation and in contact with skin.	吸入和与皮肤接触是有害的;
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.	吸入、与皮肤接触和吞食是有害的;

R23/25	Toxic by inhalation and if swallowed.	吸入和吞食是有毒的；
R24	Toxic in contact with skin.	与皮肤接触有毒；
R24/25	Toxic in contact with skin and if swallowed.	与皮肤接触和吞食是有毒的；
R25	Toxic if swallowed.	吞食有毒；
R26	Very toxic by inhalation.	吸入有极高毒性；
R26/27	Very toxic by inhalation and in contact with skin.	吸入和与皮肤接触有极高毒性；
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.	吸入、与皮肤接触和吞食有极高毒性；
R26/28	Very toxic by inhalation and if swallowed.	吸入和吞食有极高毒性；
R27	Very toxic in contact with skin.	与皮肤接触有极高毒性；
R27/28	Very toxic in contact with skin and if swallowed.	与皮肤接触和吞食有极高毒性；
R28	Very toxic if swallowed.	吞食有极高毒性；
R29	Contact with water liberates toxic gas.	与水接触释放出有毒气体；
R30	Can become highly flammable in use.	使用会变为高度易燃的；
R31	Contact with acids liberates toxic gas.	与酸接触释放出有毒气体；
R32	Contact with acids liberates very toxic gas.	与酸接触释放出极高毒性气体；
R33	Danger of cumulative effects.	有累积作用危险；
R34	Causes burns.	引起灼伤；
R35	Causes severe burns.	引起严重灼伤；
R36	Irritating to eyes.	刺激眼睛；
R36/37	Irritating to eyes and respiratory system.	刺激眼睛和呼吸系统；
R36/37/38	Irritating to eyes, respiratory system and skin.	刺激眼睛、呼吸系统和皮肤；
R36/38	Irritating to eyes and skin.	刺激眼睛和皮肤；
R37	Irritating to respiratory system.	刺激呼吸系统；
R37/38	Irritating to respiratory system and skin.	刺激呼吸系统和皮肤；
R38	Irritating to skin.	刺激皮肤；
R39	Danger of very serious irreversible effects.	有极严重不可逆作用危险；
R39/23	Toxic: danger of very serious irreversible effects through inhalation.	有毒的：经吸入有极严重不可逆作用危险；
R39/23/24	Toxic: danger of very serious irreversible effects through inhalation and in contact with skin.	有毒的：经吸入和与皮肤接触有极严重不可逆作用危险；
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.	有毒的：经吸入、与皮肤接触和吞食有极严重不可逆作用危险；
R39/23/25	Toxic: danger of very serious irreversible effects through inhalation and if swallowed.	有毒的：经吸入和吞食有极严重不可逆作用危险；
R39/24	Toxic: danger of very serious irreversible effects in contact with skin.	有毒的：与皮肤接触有极严重不可逆作用危险；
R39/24/25	Toxic: danger of very serious irreversible effects in contact with skin and if swallowed.	有毒的：与皮肤接触和吞食有极严重不可逆作用危险；

R39/25	Toxic: danger of very serious irreversible effects if swallowed.	有毒的：吞食有极严重不可逆作用危险；
R39/26	Very toxic: danger of very serious irreversible effects through inhalation.	极高毒性：经吸入有极严重不可逆作用危险；
R39/26/27	Very toxic: danger of very serious irreversible effects through inhalation and in contact with skin.	极高毒性：经吸入和与皮肤接触有极严重不可逆作用危险；
R39/26/27/28	Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.	极高毒性：经吸入、与皮肤接触和吞食有极严重不可逆作用危险；
R39/26/28	Very toxic: danger of very serious irreversible effects through inhalation and if swallowed.	极高毒性：经吸入和吞食有极严重不可逆作用危险；
R39/27	Very toxic: danger of very serious irreversible effects in contact with skin.	极高毒性：与皮肤接触有极严重不可逆作用危险；
R39/27/28	Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed.	极高毒性：与皮肤接触和吞食有极严重不可逆作用危险；
R39/28	Very toxic: danger of very serious irreversible effects if swallowed.	极高毒性：吞食有极严重不可逆作用危险；
R40	Possible risks of irreversible effects.	可能有不可逆作用的风险；
R40/20	Harmful: possible risk of irreversible effects through inhalation.	有害的：经吸入可能有不可逆作用的风险；
R40/20/21	Harmful: possible risk of irreversible effects through inhalation and in contact with skin.	有害的：经吸入和与皮肤接触可能有不可逆作用的风险；
R40/20/21/22	Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.	有害的：经吸入、与皮肤接触和吞食可能有不可逆作用的风险；
R40/20/22	Harmful: possible risk of irreversible effects through inhalation and if swallowed.	有害的：经吸入和吞食可能有不可逆作用的风险；
R40/21	Harmful: possible risk of irreversible effects in contact with skin.	有害的：与皮肤接触可能有不可逆作用的风险；
R40/21/22	Harmful: possible risk of irreversible effects in contact with skin and if swallowed.	有害的：与皮肤接触和吞食可能有不可逆作用的风险；
R40/22	Harmful : possible risk of irreversible effects if swallowed	有害的：吞食可能有不可逆作用的风险；
R41	Risk of serious damage to eyes.	对眼睛有严重损害的风险；
R42	May cause sensitization by inhalation.	吸入可能引起过敏；
R42/43	May cause sensitization by inhalation and skin contact.	吸入和皮肤接触可能引起过敏；
R43	May cause sensitization by skin contact.	皮肤接触可能引起过敏；
R44	Risk of explosion if heated under confinement.	在封闭情况下加热有爆炸危险；
R45	May cause cancer.	可能致癌；
R46	May cause heritable genetic damage.	可能造成不可逆的遗传损害
R47	May cause birth defects.	可能引起出生缺陷；

R48	Danger of serious damage to health by prolonged exposure.	长期接触有严重损害健康的危险；
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.	有害的：经吸入长期接触有严重损害健康的危险；
R48/20/21	Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.	有害的：经吸入和与皮肤长期接触有严重损害健康的危险；
R48/20/21/22	Harmful : danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed	有害的：经吸入、皮肤和吞食长期接触有严重损害健康的危险；
R48/20/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.	有害的：经吸入和吞食长期接触有严重损害健康的危险；
R48/21	Harmful: danger of serious damage to health by prolonged exposure in contact with skin.	有害的：经皮肤长期接触有严重损害健康的危险；
R48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.	有害的：经皮肤和吞食长期接触有严重损害健康的危险；
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.	有害的：吞食长期接触有严重损害健康的危险；
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.	有毒的：经吸入长期接触有严重损害健康的危险；
R48/23/24	Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.	有毒的：经吸入和与皮肤长期接触有严重损害健康的危险；
R48/23/24/25	Toxic : danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed	有毒的：经吸入、皮肤和吞食长期接触有严重损害健康的危险；
R48/23/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.	有毒的：经吸入和吞食长期接触有严重损害健康的危险；
R48/24	Toxic: danger of serious damage to health by prolonged exposure in contact with skin.	有毒的：经皮肤长期接触有严重损害健康的危险；
R48/24/25	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.	有毒的：经皮肤和吞食长期接触有严重损害健康的危险；
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.	有毒的：吞食长期接触有严重损害健康的危险；
R49	May cause cancer by inhalation.	吸入可能致癌；
R50	Very toxic to aquatic organisms.	对水生生物有极高毒性；
R50/53	Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.	对水生生物有极高毒性，可能在水生环境中造成长期不利影响；
R51	Toxic to aquatic organisms.	对水生生物是有毒的；
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	对水生生物有毒，可能在水生环境中造成长期不利影响；
R52	Harmful to aquatic organisms.	对水生生物是有害的；
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	对水生生物有害，可能在水生环境中造成长期不利影响；

R53	May cause long-term adverse effects in aquatic environment.	可能在水生环境中造成长期不利影响；
R54	Toxic to flora.	对植物群有毒；
R55	Toxic to fauna.	对动物群有毒；
R56	Toxic to soil organisms.	对土壤中生物有毒；
R57	Toxic to bees.	对蜜蜂有毒；
R58	May cause long-term adverse effects in the environment.	可能在环境中造成长期不利影响；
R59	Dangerous for the ozone layer.	对臭氧层有危害；
R60	May impair fertility.	可能损伤生育力；
R61	May cause harm to the unborn child.	可能对未出生婴儿造成危害；
R62	Possible risk of impaired fertility.	可能有损伤生育力的危险；
R63	Possible risk of harm to the unborn child.	可能有损害未出生婴儿的危险；
R64	May cause harm to breastfed babies.	可能对哺乳婴儿造成危害；
R65	Harmful may cause lung damage if swallowed	有害的：吞食可能造成肺部损害；

### 安全术语 (S 术语)

安全术语	英文解释	中文解释
S1	Keep locked up.	上锁
S1/2	Keep locked up and out of reach of children.	上锁管理并避免儿童触及
S2	Keep out of reach of children	避免儿童触及
S3	Keep in a cool place.	保存在阴凉处；
S3/14	Keep in a cool place away from ... (incompatible materials to be indicated by the manufacturer).	保存在阴凉场所，远离（生产厂家指明的不兼容的物料）；
S3/7	Keep container tightly closed in a cool place.	将容器严格密闭保存在阴凉处；
S3/7/9	Keep container tightly closed in a cool, well-ventilated place.	将容器严格密闭保存在阴凉、通风良好场所；
S3/9	Keep in a cool, well-ventilated place.	保存在阴凉、通风良好场所；
S3/9/14	Keep in a cool, well-ventilated place away from ... (incompatible material to be indicated by the manufacturer)	保存在阴凉、通风良好场所，远离（生产厂家指明的不兼容的物料）；
S3/9/14/49	Keep only in the original container in a cool, well-ventilated place away from ...	保存在原始容器中，放在阴凉通风良好场所，远离（生产厂家指明的不兼容的物料）；
S3/9/49	Keep only in the original container in a cool, well-ventilated place.	保存在原始容器中，放在阴凉、通风良好场所；
S4	Keep away from living quarters.	远离生活区；
S5	Keep contents under ... (appropriate liquid to be specified by the manufacturer).	将该物质保存在生产厂家指定的适当液体中；
S6	Keep under ... (inert gas to be specified by the manufacturer).	将该物质保存在生产厂家指定的惰性气体中；

S7	Keep container tightly closed.	保存在严格密闭容器中；
S7/47	Keep container tightly closed and at a temperature not exceeding... °C (to be specified by the manufacturer)	保持容器严格密闭，温度不超过... °C（由生产厂家指定）；
S7/8	Keep container tightly closed and dry.	保存在严格密闭容器中，保持干燥；
S7/9	Keep container tightly closed and in a well-ventilated place	保持容器严格密闭，置于通风良好的场所；
S8	Keep container dry.	保持容器干燥；
S9	Keep container in a well-ventilated place.	保持容器在通风良好的场所；
S12	Do not keep the container sealed.	不要将容器密封；
S13	Keep away from food, drink and animal feeding stuffs.	远离食品、饮料和动物饲料保存；
S14	Keep away from ... (incompatible materials to be indicated by the manufacturer).	远离(生产厂家指定的不相容物质)保存；
S15	Keep away from heat.	远离热源；
S16	Keep away from sources of ignition - No smoking.	远离火源，禁止吸烟；
S17	Keep away from combustible material.	远离可燃物料；
S18	Handle and open container with care.	小心搬运和开启容器；
S20	When using do not eat or drink.	使用时，不得进食，饮水；
S20/21	When using do not eat, drink or smoke.	使用时，不得进食，饮水或吸烟；
S21	When using do not smoke.	使用时，禁止吸烟；
S22	Do not breathe dust.	不要吸入粉尘；
S23	Do not breathe gas/fumes/vapor/spray.	不要吸入气体/烟雾/蒸汽/喷雾；
S24	Avoid contact with skin.	避免皮肤接触；
S24/25	Avoid contact with skin and eyes.	避免皮肤和眼睛接触；
S25	Avoid contact with eyes.	避免眼睛接触；
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.	眼睛接触后，立即用大量水冲洗并征求医生意见；
S27	Take off immediately all contaminated clothing.	立即脱掉全部污染的衣服；
S28	After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer).	皮肤接触后，立即用大量...（由生产厂家指定）冲洗；
S29	Do not empty into drains.	不要排入下水道；
S29/56	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.	不要排入下水道，在危险废物或特殊废物收集点处置该物料及其容器；
S30	Never add water to this product.	切勿将水加入该产品中；
S31	Keep away from explosive materials.	远离爆炸物质；
S33	Take precautionary measures against static discharges.	对静电采取预防措施；
S34	Avoid shock and friction.	避免冲击和摩擦；
S35	This material and its container must be disposed of in a safe way.	该物料及其容器必须以安全方式处置；
S36	Wear suitable protective clothing.	穿戴适当的防护服；

S36/37	Wear suitable protective clothing and gloves.	穿戴适当的防护服和手套；
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.	穿戴适当的防护服、手套和眼睛/面保护；
S36/39	Wear suitable protective clothing and eye/face protection.	穿戴适当的防护服和眼睛/面保护；
S37	Wear suitable gloves.	戴适当手套；
S37/39	Wear suitable gloves and eye/face protection.	穿戴适当的手套和眼睛/面保护；
S38	In case of insufficient ventilation, wear suitable respiratory equipment.	通风不良时，佩带适当的呼吸器；
S39	Wear eye/face protection.	戴眼睛/面孔保护装置；
S40	To clean the floor and all objects contaminated by this material, use ... (to be specified by the manufacturer).	使用....（由生产厂家指定）清洗地面和被这种物料污染的所有物品；
S41	In case of fire and/or explosion do not breathe fumes.	着火和/或爆炸时，不要吸入烟雾；
S42	During fumigation/spraying wear suitable respiratory equipment.	熏蒸/喷洒时，戴适当呼吸器（由生产厂家指定）；
S43	In case of fire, use ... (if water increases the risk, add - never use water).	着火时使用（指明具体的消防器材种类，如果用水增加危险，注明“禁止用水”
S44	If you feel unwell, seek medical advice (show the label where possible).	如果你感觉不适，征求医生意见（可能时出示标签）；
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the liable where possible).	发生事故时或感觉不适时，立即求医（可能时出示标签）；
S46	If swallowed, seek medical advice immediately and show this container or label.	食入时，立即求医并出示容器/标签；
S47	Keep at temperature not exceeding ... °C (to be specified by the manufacturer).	保持温度不超过.....°C（由生产厂家指定）；
S47/49	Keep only in the original container at temperature not exceeding ... °C (to be specified by the manufacturer)	保存在原始容器中，温度不超过...°C（由生产厂家指定）；
S48	Keep wetted with ... (appropriate material to be specified by the manufacturer).	用.....（生产厂家指定的适当物料）保持湿润；
S49	Keep only in the original container.	仅保存在原始容器中；
S50	Do not mix with ... (to be specified by the manufacturer).	不要与.....（由生产厂家指定）混合；
S51	Use only in well-ventilated areas.	仅在通风良好的场所使用；
S52	Not recommended for interior use on large surface areas.	建议不在表面积大的区域内部使用；
S53	Avoid exposure - obtain special instructions before use.	避免接触，使用前获得特别指示说明；
S54	Obtain the consent of pollution control authorities	在排放入污水处理厂前获得官方污染控

	before discharging to wastewater treatment plants.	制机构许可；
S55	Treat using the best available techniques before discharge into drains or the aquatic environment.	在排入污水道和水生环境前进行最佳技术处理；
S56	Dispose of this material and its container at hazardous or special waste collection point.	在危险废物或特殊废物收集点处置该物料及其容器；
S57	Use appropriate containment to avoid environmental contamination.	使用适当容器避免环境污染；
S58	To be disposed of as hazardous waste.	作为危险废物进行处置；
S59	Refer to manufacturer/supplier for information on recovery/recycling.	参考生产厂家/供货商提供的回收/再生利用信息；
S60	This material and/or its container must be disposed of as hazardous waste.	该物质及其容器必须作为危险废物处置；
S61	Avoid release to the environment. Refer to special instructions/Safety data sheets.	避免释放到环境中，参考特别指示/安全收据说明书；
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.	吞食后不要催吐：立即求医并出示该容器或标签；
S14A	Keep away from acids, reducing agents and polymerization catalysts.	远离酸、还原剂、聚合催化剂保存；
S14B	Keep away from organic material and metal powders.	远离有机金属化合物和金属粉末保存；
S14C	Keep away from water, acids and alkali.	远离水、酸、碱保存；
S28A	After contact with skin, wash immediately with plenty of water.	皮肤接触后，立即用大量水冲洗；
S28B	After contact with skin, wash immediately with plenty of water and soap.	皮肤接触后，立即用大量水、肥皂冲洗；
S28C	After contact with skin, wash immediately with a sodium borate solution.	皮肤接触后，立即用大量硼酸钠溶液冲洗；
S43A	In case of fire, use dry chemical. (never use water)	着火时使用干粉消防器材种类灭火(禁止用水)；
S43B	In case of fire, use fire-fighting equipment on basis of sodium chloride or sodium bicarbonate (never use water).	着火时使用氯化钠或碳酸氢钠类型的消防器材种类灭火(禁止用水)；
S43B	In case of fire, use fire-fighting equipment on basis of sodium chloride or sodium bicarbonate (never use water).	着火时使用氯化钠或碳酸氢钠类型的消防器材种类灭火(禁止用水)；
S43C	In case of fire use limestone powder, sodium chloride or dry sand (never use water).	着火时使用石灰粉末、氯化钠或干沙子灭火(禁止用水)；
S43D	In case of fire, use sodium carbonate or dry sand (never use water).	着火时使用碳酸钠或干沙子灭火(禁止用水)；
S43E	In case of fire, use dry sand (never use water).	着火时使用干沙灭火(禁止用水)；
S43F	Use water in case of Fire	用水灭火；
S47A	Keep at temperature not exceeding 65 °C.	保持温度不超过 65°C；



S50A	Do not mix with acids.	不要与酸混合；
S5A	Keep contents under oil.	将该物质保持在油中；
S5B	Keep contents under liquids which are oxygen-free, e.g. kerosene, toluene, etc.	将该物质保持在无氧液体中，如煤油、甲苯等；
S6A	Keep under nitrogen.	将该物质保持在氮气中；

### 危险性标示符号 (PICTOGRAMS AND HAZARD CODES)

根据欧洲联盟危险化学品立法规定，化学品的包装标签上必须标示出对人类最重要的危险性符号 (dangerous symbols)。这些危险符号应以黑体字印刷在橙红色背景上，各种危险性符号的含义如下：

符号	图片	英文	中文
E		Explosive	爆炸性物品
O		Oxidizing	氧化性物品
F F+		Highly Flammable Extremely Flammable	高度易燃物品 极易燃物品
T T+		Toxic Very Toxic	有毒物品 极高毒性物品
C		Corrosive	腐蚀性物品
Xi Xn		Irritant Harmful	刺激性物品 有害物品
N		Dangerous for the environment	环境危险物品
B		Biohazard	生物有害物品
R		Radioactive	放射性物品

说明：以上内容来源于互联网，由围场元合生物技术研发有限公司整理。