

CRYSTAL Wonder

WARNING – Not suitable for children under 8 years. For use under adult supervision. Contains a chemical which may present a hazard to health. Read the instructions before use, follow them and keep them for reference. Do not allow chemical to come into contact with any part of the body, particularly the mouth and eyes. Keep small children and animals away from experiments. Keep the experimental set out of reach of children under 8 years old.

Advice For Supervising Adults:

- 1 Read and follow these instructions, the safety rules and the first aid information and keep them for reference.
- 2 The incorrect use of chemical can cause injury and damage to health. Only carry out these experiments which are listed in instructions.
- 3 This experimental set is for use only by children over 8 years.
- 4 Because children's abilities vary so much, even within age groups, supervising adults should exercise discretion as to which experiments are suitable and safe for them. The instructions should enable supervisors to assess any experiment to establish its suitability for a particular child.
- 5 The supervising adult should discuss the warnings and safety information with the child or children before commencing the experiments. Particular attention should be paid to the safe handling of acid, alkalies and flammable liquids.
- 6 The area surrounding the experiment should be kept clear of any obstruction and away from the storage of food. It should be well lit and ventilated and close to a water supply. A solid table with a heat-resistant top should be provided.
- 7 Substances in non-reclosable packaging should be used up (completely) during the course of one experiment, i.e. after opening the package.

First Aid Information

Most important: In case of injury, get medical assistance immediately.

- 1 In case of eye contact: Wash out eye with plenty of water, holding the eye open if necessary. Seek immediate medical advice.
- 2 If swallowed: Wash out mouth with water; drink some fresh water. Do not induce vomiting. Seek immediate medical advice.
- 3 In case of inhalation: Remove person to fresh air.
- 4 In case of skin contact and burns: Wash affected area with plenty of water for at least 10 minutes.
- 5 In case of doubt, seek medical advice without delay. Take the chemical and its container with you.
- 6 In case of injury always seek medical advice.

Write the telephone number of your nearest Poison Control Center that can be reached in an emergency:

Tel: _____

SAFETY RULES:

- Read these instructions before use, follow them and keep them for reference.
- Keep young children, animals away from the experiment area.
- Store this experimental set and the final crystals out of reach of children under 8 years of age.
- Clean all equipment after use.
- Make sure that all containers are fully closed and properly stored after use.
- Ensure that all empty containers and/or non-reclosable packaging are disposed of properly.
- Wash hands after carrying out experiments.
- Do not use any equipment which has not been supplied with the set or recommended in the instructions for use.
- Do not eat or drink in the experiment area.
- Do not allow chemicals to come into contact with the eyes or mouth.
- Do not apply any substances or solutions to the body.
- Do not grow crystals where food or drink is handled or in bedrooms.
- Take care while handling with hot water and hot solutions.
- Ensure that during growing of the crystal the container with the liquids is out of reach of children under 8 years of age.

INGREDIENT LIST:

Please observe the following statements (Risk and Safety advice).

Mono-ammonium phosphate $\text{NH}_4\text{H}_2\text{PO}_4$
CAS no. 7722-76-1 EC no. 231-764-5
S24 Avoid contact with skin.
S25 Avoid contact with eyes.

DISPOSAL OF CHEMICALS:

The used chemicals can safely be flushed down the drain with plenty of water.

Contents



2 crystal-growing containers



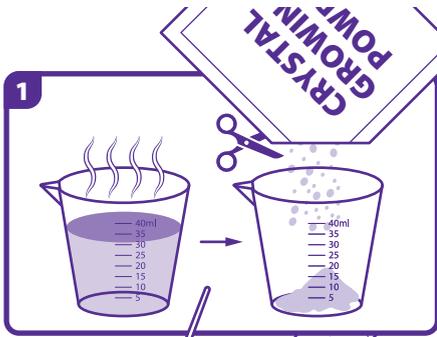
2 bags of crystal-growing powder



1 stirring rod

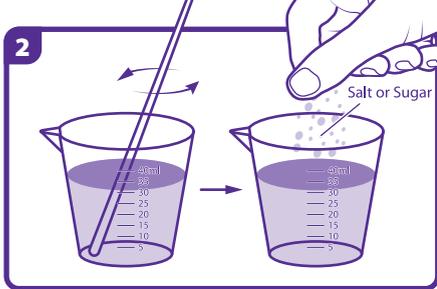
IMPORTANT: Don't throw the package away as you will need it to measure ingredients. **YOU MAY ALSO NEED:** a jug of steaming hot water, rubber gloves, an apron and protective goggles.

Please read all the instructions to help you understand all the procedures before you start. If you don't understand or are unsure about anything, please ask an adult such as a parent, relative or schoolteacher. Using this kit, you will need adult supervision at all times. Take great care when using hot/boiling water and the solutions you produce. Also, as the crystal columns you will make are easily broken, be very careful when handling to prevent damage.

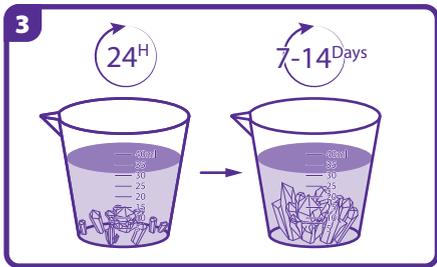


Instructions:

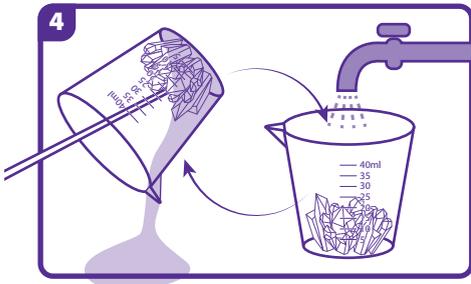
1 Prepare 30ml (1 fl.oz.) of clean hot water. Use boiling water (100°C / 212°F) if possible, as this is best for making crystals grow. Be careful when handling hot water — ask an adult to do this for you. To measure out exactly 30ml (1 fl.oz.), pour boiling water up to the measurement on the container. Measure the water as precisely as you can. If you use too much water, or not enough, your crystals might not grow properly. Immediately open a bag of crystal-growing powder with scissors and pour all the powder into the container.



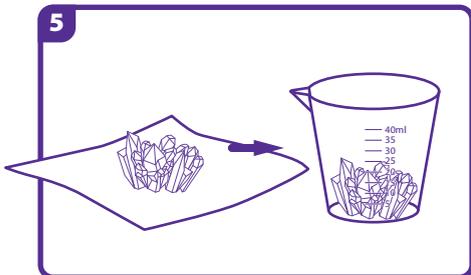
2 As soon as you have added the crystal powder to the water, quickly stir the mixture with the stirring rod until all the powder is dissolved. Then sprinkle a pinch of sugar or salt into the solution. You can add a few drops of food colouring if you want coloured crystals. Otherwise you will have clear crystals. **DO NOT STIR OR SHAKE THE SOLUTION AFTER THIS STEP — KEEP IT STILL.**



3 Find a location for the growing container where the temperature stays relatively constant and the crystals can happily grow undisturbed. After 24 hours, some growing crystal clusters should start to appear on the base. Shining a bright focused torch through the container from behind will help you spot crystals extending in the solution. In good growing conditions, the crystals can grow to reach the surface of the solution in 7 to 14 days. The crystals' size and growing time will vary depending on the environment. If the environment is cold or humid, they will take longer to grow*.



4 When the crystals have reached the surface of the solution, carefully use the stirring rod to hold the crystals in place in the container, and pour away the remaining solution. You cannot use the solution again, so **BE SURE YOUR CRYSTALS HAVE FULLY GROWN** before you pour it away. Gently rinse the crystals with fresh cold water for a few seconds, then immediately pour away the water. Don't wash the crystals for too long, or the water will dissolve them.



5 Now gently squeeze the container and carefully remove your crystals. Place them on paper towels to dry. Rinse the container with fresh water and wipe dry with paper towels. Once the crystals and container are completely dry, put them back into the container to protect them.