



GUIDE

# A SAFE HOME FOR A CHILD

tukes



Finnish Safety and Chemicals Agency

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**PARENTHOOD IS A SOURCE OF GREAT JOY**, but it also means constant responsibility. A child does not have an adult's skills or care, which is why it is the parents' duty to make sure that their children live in a safe environment.

Based on statistics, both adults and children frequently have accidents at home. Due to accidents at home, children may suffer, for example bruises, wounds, broken bones, and burns. In the most extreme cases, an accident may cause poisoning, suffocation, strangulation, or drowning.

Many accidents that occur to small children at home could have been prevented. Child care products that are suitable for their purpose and that are used appropriately, as well as the supervision of small children, are essential factors in improving the safety of a child.

The purpose of this guide is to help parents to identify risks to small children. The guide discusses the safety of products that are a part of a child's daily life.

Materials and objects consist of different kinds of chemicals. Chemicals are also added, for example, to provide products with certain characteristics, such as colour or softness, and to improve the product's fire safety. The companies that manufacture and sell the products are always responsible for the safety of the products on the market.

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*As a parent, you can influence your child's exposure to chemicals.*

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*Always familiarise yourself with the labelling of products and the instructions for their use – and follow them.*

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## TOWARDS A SAFER EVERYDAY LIFE

### IF A CHEMICAL IS DANGEROUS, WHAT DOES THAT MEAN?

Not all chemicals are dangerous or hazardous to health, but some chemicals have different kinds of dangerous characteristics. They can be hazardous to health, which means that they can cause a hazard to a person's health, if they enter the body. Some chemicals are acutely toxic and may cause serious harmful effects on a person's health. Other dangerous characteristics include, for example corrosive, irritating, or sensitising effects. Chemicals may also be dangerous, if they are persistent and do not break down easily in the body or the environment. If a person is repeatedly exposed to such a substance, its concentration in the body increases, in which case the substance may have a harmful effect on health over a longer period of time. Chemicals also have combined effects – sometimes they cause a bigger effect together than a single chemical alone would have caused.

### WHY ARE CHEMICALS ESPECIALLY DANGEROUS TO CHILDREN?

Because the development of a child's body is not complete, children may be more sensitive to chemicals than adults.

The child's first three years of age are considered to be the most critical period for the child's development.

#### Special characteristics of the risks of chemicals to children:

- In relation to weight, a child has a higher exposure level than an adult concerning foreign substances in drinking water, air, and dust.
- A child's energy consumption is larger than that of an adult relative to size, due to loss of heat via the skin, physical activity, growth, and other factors. Similarly, the consumption of water and food is many times larger compared to that of an adult. For the same reason, children also breathe more frequently.
- Often, children try to put anything and everything into their mouths. Because substances that are hazardous to health may be released from articles, you should not allow small children to suck on household items that are not intended for use by children (such as remote controls for home electronics, pet equipment, or keys and key fobs).
- The larger skin surface area in relation to weight, compared to adults, may cause a proportionately higher exposure to substances contained in cosmetics, for example.
- Absorption of foreign substances, metabolism, and excretion change as the child grows older.
- A child has more years of life left than an adult, which also means the possibility of longer exposure. Exposure to a chemical that occurred as a child can also manifest itself later in adulthood.
- Sensitivity also depends on the dosage. When the level of exposure is low enough, the reactions of children do not differ from those of adults.



**DURING PREGNANCY, IT IS IMPORTANT** to be careful and avoid unnecessary exposure to chemicals. The most critical stage of foetal development is early in the pregnancy, the first trimester, during which the foetus is particularly sensitive. The foetus is protected by the placenta, which acts as a barrier between the mother and the foetus. The placenta reduces the passage of some chemicals into the foetus, for example, but it cannot protect the foetus from everything.

Much of the advice in this guide is worth taking into account already during pregnancy, in order to protect the unborn child.

There are separate nutrition recommendations for pregnancy and lactation; you can find more information about these at the maternity clinic.



### READ THE LABELS AND ASK THE SELLER, IF NECESSARY

- Extensive EU legislation applies to chemicals; among other things, the legislation provides for setting restrictions on the most dangerous chemicals and supplying information on the chemicals to the authorities, consumers, and professionals.
- If chemicals such as paints, glues, and washing-up liquids have been found to contain dangerous characteristics, they must have hazard pictograms. It is the consumer's responsibility to read the text on the label and to act in accordance with the safety instructions provided. In Finland, the text of the warning label for dangerous chemicals must always be in both Finnish and Swedish. Should you not understand these labels yourself, try to get someone to explain them to you. Do not ignore them; they contain important information.
- Cosmetics such as soaps, shampoos, and skin creams must always have an ingredient list.
- Articles such as clothes, toys, and electronics may also contain dangerous chemicals, and it is possible to be exposed to them. The use of the most harmful substances in articles is restricted by law.
- If an article contains substances of very high concern, the consumer has the right to request and receive information within 45 days, from the supplier of the item.

## A SAFE NURSERY

### ENSURING ELECTRICAL SAFETY

The wall sockets in the nursery – as well as in other areas at home – should be childproofed. You should avoid using extension cables in a nursery. Enough wall sockets for both lighting and other electrical devices should be installed from the start. The light fixtures in the nursery must be sturdy, fireproof, and electrically safe.

#### How to choose a light fixture for the nursery and place it correctly:

- A light fixture is not a toy. Avoid purchasing light fixtures that resemble toys for the nursery. You should not use light fixtures that heat up in the nursery, or they should at least be placed in well-ventilated spots and out of reach of children.
- You should not place light fixtures equipped with clamps and plugged into wall sockets next to a child's bed – or even in the nursery.
- Toddlers always see hanging power cords as an interesting challenge. For this reason, it is safest to hide the cords from the light fixtures in the nursery behind a chest of drawers, for example.
- Wall-mounted light fixtures must be fastened with screws tightly enough that they will not fall down even if the child pulls the power cord. Visible cords can be attached to the wall using cord clips.
- The shade of a light fixture must not touch the lamp, and the light must not flicker or blink.

In addition to light fixtures, baby monitors often also have cords that can cause a risk to the child, if they are not placed correctly. Unfortunately, small children have even died because of cords inside the bed. For this reason, all cords must be kept away from the bed, or they must be fastened tightly to the wall so that they cannot be pulled into loops.

Teaching the child, placing the electrical equipment correctly, and using additional protection all help to build an electrically safe home for a family with children. Broken electrical devices or extension cables must not be left within reach of children.

### HOME RENOVATION

Parents expecting a child often want to make everything ready for the baby. The child's bedroom is painted or wallpapered, and a new bed and bedding are purchased. But sometimes it might be better to stick with the old things. Chemicals can be released from painted surfaces, construction materials, and textiles, especially when they are new.

If you renovate or paint the nursery, it is important to ventilate it properly and wait a few weeks before allowing the child to sleep there. Chemical compounds will always evaporate from construction materials into the air indoors. For this reason, sufficient ventilation must be ensured during renovation. Some of the compounds in the construction materials are easily attached to dust. Therefore, cleaning up dust is especially important after renovation. Normal cleaning also promotes chemical safety.



### **NURSERY FURNISHINGS:**

#### **CUPBOARDS, SHELVES, CURTAINS**

Nursery furniture, such as drawers and shelves, must be attached to the wall. This ensures that they will not fall down even if an enthusiastic small child climbs on them.

Make sure that there are no long strings or loops from roller blinds or blind shades within reach of small children. Long strings and loops create a risk of strangulation for small children. Place the furniture so that small children cannot reach the strings of blind shades. Ordinary curtains are a safer option, in particular for keeping the nursery dark.

#### **BABY-CHANGING TABLE**

The most common accident that can occur to a baby is falling off the changing table. Never leave the baby unsupervised on the changing table, not even for a moment. Choose a changing table that preferably has elevated edges and room for supplies, so they can be kept at hand. If necessary, you can also purchase a harness for the changing table. However, the harness itself can cause dangerous situations, such as the risk of strangulation, if the baby is left unsupervised in the harness or the harness is used as a toy.

### **STORAGE BOXES**

You should not choose just any storage box for children's toys and other objects that interest children. A safe, large toy box has open sides (made out of net, for example), and it has no heavy parts such as a wooden lid. Heavy lids cause a risk of injury and suffocation for small children. The lid may fall on the child's head or neck. If the child hides in a large box, the lid may be too heavy for the child to open from the inside.

### **BABY WALKING FRAMES**

Baby walking frames cause risks to which the baby would not be otherwise exposed, because the walking frame allows the baby to move faster and reach, for example, tables and objects more easily.

A baby in a walking frame may suffer a serious head injury, for example by falling down the stairs in the frame, or by hitting their head on the edge of a table. If you use a walking frame, make sure that the frame has a mechanism that stops the frame on a staircase landing, to prevent the frame from falling down the stairs. Accidents also happen because the walking frame gives a false sense of security: the baby is not safe, even if they cannot leave the walking frame. Never leave a baby in a walking frame unsupervised!



## SWEET DREAMS

### INFANT BED

Choose a sturdy bed or a cradle with a dense mattress of the right size as a place for the baby to sleep. The large gap left between a mattress that is too small and the side of the bed may cause a risk of suffocation for babies, who cannot turn around or support their heads. The baby may accidentally turn around in the bed so that their face or head is caught between the mattress and the side of the bed.

When choosing an infant bed, you should invest in safety instead of aesthetics. There must not be any protruding parts on the bed, for example in the headboard or footboard, where the baby's clothes might get caught. Check that the sides of the bed are properly attached. If the sides come loose, they may create openings, causing a risk of suffocation between the sides and the bed frame.

### A SAFE BED HAS NOTHING UNNECESSARY

- The child is safest sleeping in their own bed, when there is nothing unnecessary in it.
- Make sure that the baby's bed does not have a duvet that is too large or thick, or a sleeping bag, pillow, or large soft toys that may cause a risk of suffocation or make the baby uncomfortably hot.
- It is also recommended that you should not put any objects into the bed that could prevent the baby from turning, because they may cause a risk of suffocation.

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*All cords must be kept away from beds, or they must be fastened tightly to the wall so that they cannot be pulled into loops. This also applies to baby monitors.*

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### **BEDDING – WASH BEFORE USE**

New bed sheets, duvet covers, and pillowcases should always be washed before use. New textiles may contain residue from chemicals used in manufacturing the fabric, or to prevent the fabric from becoming mouldy or wrinkled during transport.

Check that the bedding, side padding, and clothing, such as a sleeping bag, have no long strings that might cause a risk of strangulation.

### **MATTRESSES – AIR OUT NEW ONES**

Dangerous chemicals may be used in the manufacture of foam plastic mattresses. However, the finished mattresses should not contain such substances. As a precaution, a new mattress should still be aired out before use. For reasons of hygiene, the mattress should be protected with an easily washable mattress top, for example.

### **THE BABY GROWS AND THE BED CHANGES**

When the baby knows how to stand up supported, it is time to remove the side padding from the bed. This prevents the baby from climbing over the side of the bed and falling down accidentally. A cot should be changed into an ordinary child bed to avoid accidental falls when the child learns how to climb over the side of the cot. Usually the child reaches this stage of development at the age of two years at the latest.

### **HANGING CRADLES**

In order to prevent risks of suffocation and becoming caught, hanging cradles should not have any gaps in which the baby's limbs or head could be caught. Do not leave the baby in a hanging cradle unsupervised, even if the baby is wearing a harness. Hanging cradles or similar are not recommended for use during the night.

So-called fast mounting hooks are not recommended for mounting hanging cradles, because they may become loose and fall down, causing injuries to the baby inside the cradle. A safe way to mount the cradle is to use a so-called pigtail hook, for example. The attachment method should be selected based on the material of the base. Fast mounting hooks or similar must not be hung from decorative moulding on the door frame! Always check that a hanging cradle has sufficient instructions for installing the cradle safely.

### **IN THE FAMILY BED**

When the baby sleeps in the same bed with the parents and/or siblings (a so-called family bed, or co-sleeping), you must ensure that there is no gap between the mattress and the wall. For example, the baby may turn inside the bed so that their face is caught in the gap between the wall and the side of the bed. Their limbs may also get caught in the gap, which may, for example, cut off blood circulation. The baby may also get too hot. Keep a blanket just for the baby. Make sure that the baby will not slip down too deep in the adult bed.



## CLOTHING

### CLOTHING AND OTHER TEXTILES

A good basic rule is to wash all new clothing that touches the skin before use. Chemicals may be used, for example, to dye the textiles or to improve their fire safety or other technical characteristics. Often chemicals are also added to clothing to prevent it from wrinkling or being damaged by moisture during transport.

If you know that your child is allergic to a substance, check the ingredient list to make sure that the detergent or fabric conditioner does not contain this substance.

Rivets, zips, buckles, and other metal parts in clothing may contain nickel. Long-term exposure to nickel may cause an allergy.

A metal detail in contact with the skin is only allowed to release a certain amount of nickel, but if the legislation has not been followed, the parts may contain more than the allowed amount of nickel.

Other substances whose use in clothing has been restricted include chromium, formaldehyde, and azocolourants, because they may cause allergic reactions, for example.

*It is good to wash new clothes and textiles that are in contact with the skin*

#### STRINGS IN THE NECK AREA ARE FORBIDDEN IN CLOTHING FOR SMALL CHILDREN

In clothing for small children (sizes up to 134 cm and clothing for children under 7 years of age), there must not be any drawstrings in the hood or around the neck area, because they cause a risk of getting caught or strangulation. It is possible to get caught by the clothes in climbing frames or trees, for example. Strings tied behind the neck are also forbidden. You can cut most strings off clothing before giving it to a child to wear.

**Tip:** Teach the child to take off their bicycle helmet immediately after getting off their bicycle. In Finland, there have been accidents where a child has been caught by the bicycle helmet in a climbing frame, for example, and been left hanging.

### SHOES

Plastic shoes or plastic parts in shoes occasionally contain phthalates. Shoes may also contain chromium or anti-mould agents, which may cause allergic reactions. For example, one such anti-mould agent is dimethylfumarate (DMF); its use in articles has been restricted in the EU.

### JEWELLERY

Jewellery and other metal objects may contain nickel and other heavy metals, such as lead or cadmium, which are hazardous to health. The use of these chemicals in jewellery has been restricted by law. The restriction applies to all types of jewellery (precious jewellery, imitation jewellery, and hair decorations). Despite the restrictions, jewellery may contain prohibited substances. Contact the seller to ask if the jewellery may contain nickel or another allergenic metal.



### SHAMPOOS, SOAPS, AND BATH FOAMS

Shampoos, soaps, and bath foams contain surfactants. Their special chemical characteristics are responsible for the actual washing, but at the same time, they dry out the skin. Often colourants, perfumes, and preservatives are also added to detergents. Some of these may cause allergies. For this reason, all cosmetic products must have an ingredient list. This enables users to avoid substances to which they are allergic. The simplest way to lower risks is to use small amounts of the substance, and to choose mild and unscented products. For a very small child, you can consider whether you need any soap or shampoo at all.

During a stomach illness, for example, it may sometimes be necessary to use a hand sanitiser under the supervision of an adult, but regular soap is enough for normal everyday cleaning.

### BABY WIPES

Baby wipes may seem practical when changing a nappy. However, they usually contain perfumes and preservatives, and there is no need to expose the baby to these substances. Choose unscented baby wipes and use them in emergencies, not as a part of the daily routine.

### SKIN CREAMS

If the child has dry skin, you need to apply cream. Most skin creams contain perfumes and preservatives. These

#### ALWAYS SUPERVISE THE BABY IN A BATH SEAT

- A bath seat used in the bathtub must be attached to the bottom of the bathtub securely enough to make the seat safe. Place the bath seat far enough from the tap that the baby cannot touch the tap; hot water can cause burns.
- Bath seats are not suitable for small babies. The baby must be big enough to sit firmly in the seat.
- A baby in the bath seat needs constant supervision by a parent. You cannot leave a child alone in the bath, not even for a short phone call. When the parent is away, the bath seat may, for example, fall down, or the baby can push themselves out of the seat and fall off.
- You should consider whether you need a bath seat, because the bath seat can cause risks and its period of usefulness is short.

may cause allergies, but on the other hand, it is difficult to find completely preservative-free skin creams, and they may also become spoiled faster than other creams. Always check the ingredient list to make sure that the product does not contain any substances to which your child is allergic.



## MEALS FOR BABIES AND PRE-SCHOOLERS

### HIGH CHAIRS

Always supervise a child in a high chair, in order to prevent accidents.

When choosing a high chair, you should pay attention to its stability. The high chair must withstand a small child's movements and climbing by older siblings. Keep the high chair close enough to the table that the child cannot push against the edge of the table and topple the high chair. If necessary, get a harness for the high chair. However, the harness may also cause dangerous situations, if it is used as a toy or without supervision.

Pay special attention to the fastening of chairs that are attached to the table or an adult chair.

### PLASTIC PACKAGING AND BABY BOTTLES

Avoid heating gruel or baby food in plastic packaging or plastic bottles that are not intended for this kind of use. You should preferably keep the food in glass containers.

The use of bisphenol-A, which is suspected of having a negative impact on reproduction, has been prohibited in baby bottles throughout the EU since 2011. You can find more information on the subject on the website of the Finnish Food Safety Authority Evira.

### PLANT PROTECTION PRODUCT RESIDUE IN FOOD

The amounts of plant protection products in food imported outside the EU were significant regarding exposure, according to a study by the Finnish Food Safety Authority Evira, the National Institute for Health and Welfare (THL), and the Customs Laboratory.

By eating a balanced diet and preferring food products produced within the EU, it is possible to decrease exposure to plant protection products. In Finland, the consumption of fruit and vegetables is one of the lowest in the OECD countries. Increasing the consumption of vegetables is recommended and safe.

The Finnish Food Safety Authority Evira has issued recommendations on restrictions on the use of certain foods (such as meat products and Baltic sea fish) for children. You can find more information about nutrition recommendations on Evira's website: [www.evira.fi/portal/en/](http://www.evira.fi/portal/en/)



References: OECD Health Statistics 2013 "<http://www.oecd.org/els/health-systems/oecdhealthdata.htm>"

Ravinnon kasvinsuojeluainejäämät – kumulatiivinen riskinarviointi. ("Dietary exposure to plant protection products – a cumulative risk assessment"; in Finnish, with an abstract in English.) Evira Research Reports 3/2010

<http://www.evira.fi/portal/fi/tietoa+evirasta/julkaisut/?a=view&productId=234>

**TOYS ARE A GROUP OF PRODUCTS** where special requirements are set for safety. Old toys may contain dangerous substances that can no longer be used today.

### Checklist for buying toys

- Make sure that the labels on the packaging and instructions are in both Finnish and Swedish.
- Soft toy animals and dolls must be washable.
- Make sure that the wheels and other parts of toy cars have been properly attached.
- Throw away plastic packaging before the child can get hold of it.
- Be careful with the small objects inside chocolate eggs. They can cause a risk of suffocation.
- Avoid toys that make a loud noise. Toy guns and whistles can damage hearing.
- Avoid easily breakable toys made of hard plastic. Toys for children under 3 years of age must be especially durable – they must withstand being thrown and beaten without breaking.
- Watch out for plastic stickers and other details glued onto rattles that are easy to peel away.
- Do not give toys with small, strong magnets to small children. For example, old magnetic construction sets may contain strong magnetic parts that the child can swallow. Based on the current requirements, parts of toys that contain strong magnets must be large enough that the child cannot swallow them.
- Touch and feel the toy. Usually, a dangerous filling (such as plastic beads) crackles or feels grainy. Ask the seller about the filling.
- Be particularly careful if you are buying toys from the market or other temporary sales locations.
- If you have doubts about the safety of a toy, ask the seller first. If you suspect that the product might be dangerous, you can also report it to Tukes ([www.tukes.fi](http://www.tukes.fi)).



## THE WORLD OF TOYS

### PLASTIC TOYS

Plastic toys are a part of a child's life from babyhood. Babies like to suck on and chew teethingers and other soft plastic toys. Many toys have been manufactured out of plastic, to which other substances have been added as stabilisers and plasticisers. Some of these substances may be hazardous to health and the environment.

Phthalates are very common in our living environment, and they are often used as plasticisers for PVC plastic (polyvinyl chloride). The use of three phthalates, DEHP, DBP, and BBP, has been restricted in toys and child care products because they are toxic to reproduction. As a precaution, the use of the phthalates DINP, DIDP, and DNOP has also been restricted in toys and child care articles that can be inserted into the mouth. Child care articles refer to all products intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children.

You should be aware that the harmful phthalates are only prohibited in toys and certain child care products. This means that other plastic products may still contain them.

### CRAYONS, PENCILS, WATERCOLOURS, GLUES

Children must be able to draw, paint, and glue without causing harm to their health. Most paints and glues meant for children are water-based. However, even water-based

products may contain preservatives that can cause allergies. Despite this, water-based products are safer than solvent-based, because it is known that some solvents have a harmful effect on the nervous system.

Oil paint may contain toxic colourants or require the use of solvents, which makes them unsuitable for children. Acrylic colours are a better option for older children who want to try "real painting".

### COSMETICS AND FACE PAINT

All cosmetic products must have an ingredient list, so that users can avoid substances to which they are allergic. The use of cosmetics and colours for face painting with children carries the risk of becoming allergic to the substances used in them.

However, cosmetic products intended for children are sometimes badly labelled, and they may not have an ingredient list.

Do not buy products without an ingredient list stating the contents of the product. Toy cosmetics, meaning cosmetics intended for children and doll cosmetics, must conform to the safety requirements for both toys and cosmetics.

*DEPH = bis(2-ethylhexyl)phthalate, DBP = dibutyl phthalate, BBP = benzyl butyl phthalate, DINP = di-isononyl phthalate, DIDP = di-isodecyl phthalate, DNOP = di-n-octyl phthalate.*



### TEMPORARY TATTOOS

Temporary tattoos that are directly painted or glued onto skin may be tempting. They are often available abroad, but also at markets and festivals in Finland. You should consider them with caution.

The colour black, in particular, may contain paraphenylenediamine, which may cause strong allergic reactions. The allergic reactions may appear immediately, or after a few days.

### ELECTRONIC TOYS AND EQUIPMENT

Computers and game consoles often contain fire retardant products, which improve fire safety. However, many fire retardant products are hazardous to both health and the environment. When the devices are used, small amounts of fire retardant products may evaporate from them. The risk is the greatest when the devices are new.

In 2006, regulations on electrical and electronic products were introduced in the EU. They restrict the use of lead, mercury, cadmium, hexavalent chromium, and the brominated fire retardant products polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE). These regulations also concern toys with only minor electronic functions, such as blinking LED lights.

Children must never be allowed to screw open electrical equipment. Electrical equipment may contain small parts, sharp edges, and live components that cause a danger even when the power is not on.

### TOYS WITH FLASHING LIGHTS AND NOISE

Many toys have batteries that make lights on the toys blink, horns toot, or music play. If the device is battery-operated, make sure that the child cannot remove the battery from the toy easily. If swallowed, batteries may be dangerous.

Ordinary batteries should not be thrown out with other rubbish, because they may contain metals that are hazardous to the environment. Small items, such as birthday cards, have button batteries that usually contain mercury. If a battery contains mercury, this should be stated on the battery or its packaging.

Before a toy can be taken to a place for recycling electric and electronic devices, the battery must first be removed from the toy and put into a battery recycling bin. If it is not possible to remove the battery, the whole object can be taken to an electric and electronic device recycling point.



### OBJECTS THAT CONTAIN LIQUIDS

Decorative objects containing liquids that generate colour or light effects when they mix, such as lava lamps, may contain mineral oil. If such an object is broken and a child swallows some of the contents, the liquid may enter the lungs and cause a dangerous chemical pneumonia. Lamp oil must absolutely be stored out of reach of children. Liquids inside glow sticks that glow in the dark may contain harmful substances, and the sticks must not be chewed.

### SCENTED TOYS

Allergenic substances may be released from scented toys. The use in toys of certain perfumes that cause allergies was forbidden in 2013, and many of the perfumes must be mentioned by name on the toy's packaging.

## THE WORLD OF TOYS

### MODELLING CLAY, MODELLING PASTE, AND JOKE SLIME

The various types of modelling clays and pastes are usually manufactured from plastic. If the modelling clay is intended for children to play with, there are more restrictions on the chemicals it is allowed to contain. Joke slime, on the other hand, is often intended for use by adults, which means that the restrictions on heavy metal content are not as strict as for toys. For this reason, you should only allow a child to play with modelling clay, paste, or joke slime that is intended as a child's toy. Adults are responsible for making sure that children can play safely and that the instructions for use are followed.

### ASSEMBLY KITS

Assembly kits for cars, aeroplanes, and ships are intended for older children. Always follow the age limit on the toy: the small parts in assembly kits are dangerous for small children. If an assembly kit is sold as a toy, the glues and paints it contains are not allowed to contain dangerous solvents. The strict requirements for toys do not apply to assembly kits for children over 14 years of age.

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*You should not let children play with old equipment that can be screwed open and dismantled. The equipment may contain harmful substances.*

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## BABY IN A PRAM

When using a pram, just as with all child care equipment, it is important to read the instructions for use and to follow them.

**Never leave the baby in a pram unsupervised.** If you have left the baby sleeping in the pram, you should stay within sight and within hearing distance. A baby monitor is a good help, but you should not leave the baby alone with it. Always lock the pram's brakes, even if it is only for a moment.

Avoid using heavy blankets and pillows in the pram. If they cover the baby's face, they may increase the risk of suffocation. To avoid the risk of suffocation, you should also make sure that the baby cannot slide too far down inside the pram, under the safety bar or inside the sleeping bag.

**Always take the weather conditions into account.** Especially when the weather grows warm, parents should make sure that the baby is not uncomfortably hot inside the pram.



The temperature inside the pram rises quickly in a sunny spot. Blankets, sleeping bags, and other warm items easily make the pram unbearably hot. Take into account the risk of snow falling from the roof and other similar dangers.

Do not leave the pram in a place where it may move or fall over, for example due to high wind, uneven ground, or brake failure.

Stop using a pram without a safety harness when the baby starts to learn how to move and, for example, roll over or get up on their knees. When using a pushchair unit or a pushchair without a basket, always use the safety harness on the baby. In some prams, you can thread the harness through holes in the bottom of the basket, which makes it possible to use the harness with the basket.

## SLINGS AND BABY CARRIERS

If you use a baby sling, make sure that the baby is in the right position, so that there is no danger of the baby not getting enough air. The baby must be on top of the chest, and the baby must not slide towards the armpit, for example.

If you are using an ordinary front carrier instead of an ergonomic model, hold the child in the front carrier for a maximum of 15–20 minutes at a time. In an ordinary carrier, the baby's legs point straight down instead of moving into a frog position as in the ergonomic carrier. Staying in the ordinary front carrier for too long endangers the circulation of blood in the legs.

When buying a baby carrier, make sure that the openings for the baby's legs are not too big. This ensures that the baby will not accidentally fall out of the carrier. Remember that a small baby will need proper support for the neck.

When the ground is slippery, a pushchair or pram is a safer option than a sling or a baby carrier. In sunny weather, do not forget to make sure that the baby is completely protected from the sun.

## WOODEN SANDPITS AND PLAYGROUND STRUCTURES

On playgrounds, some of the structures, such as climbing frames, sandpits, and benches, are often made out of wood. Wood used in outdoor play equipment is often impregnated to ensure that it is durable enough. Today, such wood no longer contains arsenic or chromium. The new impregnating agents usually use copper or organic, metal-free active ingredients.

## OUTSIDE

You can build a sandpit in your own yard from untreated wood, and if necessary, you can protect it with wood oil, for example.

You should not give children pieces of impregnated wood to play with, or allow them to crawl freely on a terrace made out of impregnated wood. Even though the crawling does not present an immediate danger for the child, you should nevertheless avoid exposing small children to chemicals whenever possible.

### MOSQUITO AND TICK REPELLENTS

Mosquito and tick repellents may contain substances that irritate the eyes and the skin, and excessive use may cause poisoning. Use them as sparingly as possible, and dress the child in clothes that cover the skin. Only apply repellent on places that cannot be covered by clothes. Avoid applying the substance around the eyes and the mouth, or on the hands. Mosquito and tick repellents should not be applied at all on children under three years of age.

### IN THE GARDEN

Chemical plant protection products intended for weed and insect control are often hazardous to health, and they must

be handled very carefully. Try to take care of the garden without chemical plant protection products. If you must use them, make sure that their instructions for use are followed, and that the plant protection products are stored in a safe place.

### IN THE SUN

It is important to use sunblock with children, because the rays of the sun may burn the child's sensitive skin. The result of repeated, long-term exposure may be an elevated risk of skin cancer as an adult. The child's primary protection from sun is staying in the shade and wearing clothes that do not allow UV rays to penetrate, such as a long-sleeved outfit and something to cover the head. The areas exposed to the sun should be protected using sunblock intended for children.

It is important to apply enough sunblock often enough, and apply it again after swimming and drying with a towel. Read the product's instructions and remember that the sunblock never provides perfect protection from the sun. The best protection is clothing.





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*There are many good ways to lower the risks caused by chemicals: think and only buy items you truly need, read the labels and instructions for use - and follow them! Only use the amount required, store the chemicals in their original packaging and out of reach of children, and dispose of any extra chemicals appropriately.*

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## IN THE WORLD OF ADULTS

**CHILDREN USUALLY WANT TO JOIN IN** and help with all the exciting things adults do. Many kinds of chemicals are stored at home, in the garden and the garage. These jars of household chemicals, car-care products, fuels, and detergents contain many substances that may be dangerous.

Chemicals can be dangerous if used incorrectly. There are many good ways to lower the risks: think and only buy items you truly need, read the labels and instructions for use – and follow them! Only use the amount required,

store the chemicals in their original packaging and out of reach of children, and dispose of any extra chemicals appropriately.

Even a childproof package does not guarantee that a child cannot open the package; it will only take longer. If an accident occurs despite everything, and the child swallows or comes into contact with something that may be dangerous, call the emergency number or the Poison Information Centre.

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## *Emergency number 112 Poison Information Centre +358 (0) 9 471 977*

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### **DOING LAUNDRY, CLEANING, WASHING THE DISHES**

Detergent packages must be kept out of reach of small children. Dishwasher detergents, for example, are usually irritants or corrosive, and there is a hazard pictogram on the packaging as a caution against these dangers.

Even though hygiene is important, the home does not need to be clinically clean. Antibacterial agents are not normally needed.

Drain cleaners that contain sodium hydroxide (commonly known as lye) are highly corrosive, and they are not usually needed at home. You can open a blocked sewer using mechanical means, such as a sewer snake.

Clean regularly, using modern cleaning equipment and as mild substances as possible.

### **PAINTING, BUILDING, REPAIRS**

White spirits, paints, lacquers, and sprays that contain organic solvents must not be used in a room in which children are staying. Do not leave paint brushes to soak in solvent in a place where children could get hold of them. Cover them with a lid or a plastic bag.

### **LAMP OILS AND GRILL LIGHTER FLUIDS**

Some lamp oils have caused accidents. If a child swallows this kind of liquid, it may enter the lungs and cause a dangerous chemical pneumonia. Lamps filled with lamp oil must be kept out of reach of children, because if swallowed, just a sip of lamp oil – or even sucking on the wick – may lead to life-threatening lung damage. The sale of coloured and scented lamp oils is prohibited today.

Grill lighter fluids must also be kept out of reach of children, because if swallowed, just a sip of grill lighter fluid may lead to life-threatening lung damage.

### **THE CAR**

Car-care products may be hazardous to health, and they must be kept out of reach of children. For example, vapours that are hazardous to health evaporate from petrol, coolant (glycol) is harmful, battery acid is highly corrosive, and windscreen washer fluids may contain toxic methanol. Windscreen washer fluid that contains methanol is one of the few toxic chemicals sold to consumers, and swallowing even a small amount of the fluid may cause blindness or even death.

### **ENERGY SAVING LAMPS**

Energy saving lamps and fluorescent lamps contain mercury. Mercury is a metal that is harmful to the nervous system. An energy saving lamp that has been turned on contains mercury vapour. If a warm lamp breaks, open the window, close the door to the room, and air it out properly. Then collect the parts of the cooled-off lamp in a glass container, wipe the floor with a damp rag, and then also put the rag into the glass container. Label the container with a description of its contents and leave it at a collection point for waste that is hazardous to the environment. Do not use a vacuum cleaner, because this will spread the mercury into the air.

### **HAIR COLOURS**

Both permanent and semi-permanent hair colours contain strong chemicals that may be harmful and cause allergic reactions. For this reason, they are not recommended for use by people under 16 years of age.

## WHAT DO THE HAZARD PICTOGRAMS MEAN?

**THE HAZARDS OF CHEMICALS** are stated in hazard pictograms. The hazard pictograms on orange background will be replaced in the next few years by hazard pictograms with red frames. The new hazard pictograms are presented below, with a description of the hazardous chemicals they refer to.



Chemicals which are acutely toxic by ingestion, skin contact and/or inhalation. Chemicals with this pictogram can be lethal.



Chemicals which may cause chronic effects such as cancer, genetic damage and impaired fertility or damage to the unborn child. Also includes chemicals which cause allergy by inhalation, specific organ toxicity and aspiration toxicity.



Chemicals which cause skin and eye irritation, allergic skin reactions, irritation to airways, drowsiness or dizziness, and which are acutely toxic. Chemicals which are hazardous to the ozone layer.



Chemicals which cause skin corrosion, serious eye damage, or corrode metals.



Explosive chemicals and explosive articles (objects).



Chemicals which are hazardous to the aquatic environment.



Flammable liquids and their vapours, gases, aerosols and solids.



Chemicals (gas, liquid or solid), which cause or contribute to the combustion of another material.



Gases in containers under pressure (2 bar or higher).

## VOCABULARY AND CONCEPTS

### CHILD CARE PRODUCTS

Products that make it easier for the child to calm down, sleep, or eat, or easier to take care of hygiene and nurse.

### PBT SUBSTANCES

Persistent, bioaccumulative and toxic substances.

### CMR SUBSTANCES

Substances that cause cancer or genetic damage, or that are toxic for reproduction. An acronym of carcinogenic, mutagenic, or reprotoxic.

### ECHA

European Chemicals Agency

### THE CANDIDATE LIST

A list by the EU of Substances of Very High Concern (SVHC). The substances may be, for example, CMR or PBT substances (see above). The Candidate List is updated regularly and it can be seen on the ECHA website.

### CHEMICALS

In this guide, the term “chemicals” refers to both chemical substances and their mixtures. Not all substances and mixtures are hazardous. This guide discusses substances and mixtures that may be hazardous to health or the environment in some way.

### COSMETIC PRODUCTS

Cosmetic products are often defined as substances or preparations intended to be applied externally on the human body, the teeth, or the mucous membranes inside the mouth, and whose sole or main purpose is to clean, alter the scent, alter the appearance, protect, maintain in good condition, or prevent bad odours. Such products include, for example, make-up, soaps, and skin creams.

### TOY SAFETY DIRECTIVE

EU legislation determining how toys must be labelled and what they can contain. The new, stricter requirements on chemicals entered into force on 20 July 2013.

### RAPEX

EU's rapid alert system for dangerous products. In Finland, the Finnish Safety and Chemicals Agency (Tukes) acts as the RAPEX contact point. Links to the website of the RAPEX system can be found on the websites of the European Commission, Tukes, and the Finnish Competition and Consumer Authority.

### REACH

EU Regulation on the Registration, Evaluation, Authorisation, and Restriction of Chemicals.

### CLP

EU Regulation on the Classification, Labelling, and Packaging of Substances and Mixtures.

### ROHS DIRECTIVE

EU legislation restricting the use of mercury, cadmium, lead, hexavalent chromium, and the fire retardant products PBB and PBDE in electrical and electronic products. Valid starting from 1 July 2006.

### SUBSTANCE OF VERY HIGH CONCERN (SVHC)

If an article contains more than 0.1 per cent of a substance on the Candidate List, the consumer has the right to request and receive information to enable the safe use of the article. The information must be delivered free of charge within 45 days of receiving the request.

### ARTICLES

The European chemicals legislation REACH differentiates between substances, mixtures, and articles. Articles are defined as objects that, during production, are given a special shape, surface, or design that determines their function to a greater degree than does their chemical composition. For example, clothing, toys, and electronics are articles.



The logo for TUKES, the Finnish Safety and Chemicals Agency, features the word "tukes" in a lowercase, rounded, sans-serif font. The letters are white and set against a blue background.

Finnish Safety and Chemicals Agency

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ROVANIEMI Valtakatu 2, FI-96100 Rovaniemi

TELEPHONE +358 29 5052 000 | [www.tukes.fi](http://www.tukes.fi)

#### **Further information:**

[\*\*www.tukes.fi/en\*\*](http://www.tukes.fi/en)

Safety of toys and child care products:

[\*\*www.tukes.fi/consumersafety\*\*](http://www.tukes.fi/consumersafety)

Chemicals:

[\*\*www.tukes.fi/en/For-Consumers\*\*](http://www.tukes.fi/en/For-Consumers)

#### **Eurosafe Child Product Safety Guide**

[www.childsafetyeurope.org/archives/news/2013/dec-05-product-safety.html](http://www.childsafetyeurope.org/archives/news/2013/dec-05-product-safety.html)

#### **US Consumer Product Safety Commission**

[www.cpsc.gov](http://www.cpsc.gov)

You can find out more information on preventing accidents on the website of the National Institute for Health and Welfare [www.thl.fi/tapaturmat](http://www.thl.fi/tapaturmat)

#### **Ecolabels**

In Finland, Motiva manages both the Nordic Ecolabel (the Swan) and the EU Ecolabel [www.joutsenmerkki.fi](http://www.joutsenmerkki.fi)