

**Ruling of the Director
of the Central European Institute of Technology of Masaryk University
No. 8/2016**

Works forbidden to pregnant and breastfeeding female employees and to female employees who have recently given birth until the 9th month after delivery

(effective as of 1 December 2016)

Pursuant to Part Three, Art. 7 (2) f) of the Rules of Organisation of the Central European Institute of Technology of Masaryk University (hereinafter "CEITEC MU" or the "Institute") and pursuant to the provisions of Section 238 and 239 of Act No. 262/2006 Coll., the Labour Code, as amended (hereinafter the "Labour Code"); Decree No. 180/2015 Coll., on Works and Workplaces Forbidden to Pregnant and Breastfeeding Employees and Female Employees - Mothers Until the End of the 9th Month After Childbirth, on Works and Workplaces Forbidden to Adolescent Employees, and on Conditions Under Which Adolescent Employees may Exceptionally Perform These Works as the Preparation for Their Future Profession, as amended (hereinafter the "Decree on Forbidden Works and Workplaces"); and the Chancellor's Guideline No. 10/2009 "Determination of the Organisational Measures of Occupational Safety and Health Protection at MU", I hereby issue this Ruling:

Article 1

Subject Matter

- (1) This Ruling of the Director of CEITEC MU (hereinafter the "Ruling") regulates the types of work and workplaces prohibited to female employees of CEITEC MU who are pregnant (hereinafter "pregnant employees"), breastfeeding employees or female employees or who are mothers until the end of the ninth month after childbirth.
- (2) This Ruling further applies to all pregnant women, breastfeeding women and women-mothers until the end of the ninth month after childbirth who perform any activities at the workplaces of CEITEC MU on any other grounds than employment relationship (e.g. study programs, scholarships, etc.).

Article 2

**Works forbidden to pregnant female employees
pursuant to Section 2 of the Decree on Forbidden Works and Workplaces**

Works forbidden to pregnant employees:

- a) risky works, with the exception of:
 - i. works classified pursuant to another legal regulation pertaining to classification of works in categories as works risky due to mental stress based on the criterion of night time work;

- ii. works associated with the exposure to the measles (rubeola) virus, another biological agent of classes 2 to 4 classified as risky or as the cause of toxoplasmosis, if it is possible to prove the pregnant employee's immunity against the biological agent that can be taken into consideration in the course of the relevant work; and
 - iii. works the conditions of the performance of which are determined by legal regulations pertaining to the utilisation of nuclear energy and ionising radiation;
- b) works requiring the use of insulating breathing apparatuses;
- c) works performed by large muscle groups with a prevailing dynamic aspect of muscle work pursuant to another legal regulation pertaining to the occupational health conditions:
 - i. where the per-minute permissible energy expenditure exceeds 14.5 kJ/min and the average per-shift energy expenditure exceeds 3.4 MJ;
 - ii. associated with manual handling of loads the weight of which exceeds 10 kg in the case of occasional handling or 5 kg in the case of frequent handling;
 - iii. where the per-shift aggregate weight of manually handled loads exceeds 2,000 kg per average shift;
 - iv. performed in sitting position, associated with frequent lifting or carrying of loads the weight of which exceeds 2 kg;
 - v. associated with the working position in deep forward bend, in kneeling, squatting or lying position, in tip-toe standing position, in a position with the arms above the shoulder level, with the trunk rotation or bending by more than 10° in the case of repeatedly performed work operations;
 - vi. associated with pressure on the abdomen;
 - vii. where the parameters of the workplace cannot be adjusted to reflect the anthropometric changes of the body;
 - viii. performed in standing or sitting position with a prevailing proportion of static work, without the possibility of its change;
 - ix. associated with the transportation of loads by means of simple motorless vehicles with the need to exert a pulling force of 115 N or a pushing force exceeding 160 N;
- d) performed in a forced work pace;
- e) where they could be exposed to impacts;
- f) associated with the exposure to overall horizontal or vertical vibrations exceeding the permissible exposure limit reduced by 10 dB;
- g) **associated with exposure to chemical substances or chemical mixtures** labelled by standard statements designating their specific hazardous nature according to another legal regulation pertaining to chemical substances or

chemical mixtures or by standard hazard statements according to a directly applicable regulation of the European Union:

- i. causing acute or chronic poisoning with serious or irreversible effects on health, labelled with statements R 23, R 24, R 25, R 26, R 27, R 28 or R 39 or a combination thereof, or with the statement R 68 in combination with statements R 20, R 21 or R 22, or with the statement R 48 in combination with statements R 23, R 24 or R 25, or with statements H300, H301, H310, H311, H330 or H331 or a combination thereof, or with statements H370, H371 or H372;
 - ii. classified as a carcinogen of class 1, 2 or 3 with the statements R 45, R 49 or R 40 or as a carcinogen of class 1A, 1B or 2 with the statements H350, H350i or H351;
 - iii. classified as a mutagen of class 1, 2 or 3 with the statements R 46 or R 68 or as a mutagen in germ cells of class 1A, 1B or 2 with the statements H340 or H341;
 - iv. toxic for reproduction with effects on the foetus of class 1, 2 or 3 with the statements R 61 or R 63, or of class 1A, 1B or 2 with the statements H360, H360D, H360FD, H360Fd, H360Df, H361, H361d or H361fd;
 - v. sensitising for the respiratory tract or skin with the statements R 42 or R 43 or a combination thereof, or with the statements H334 or H317;
- h) associated with exposure to other chemical substances or chemical mixtures not specified in paragraph 7, if it cannot be excluded on the basis of the health risk assessment that the health of the pregnant employee or the foetus could be damaged;
- i) in the manufacture of pharmaceuticals or veterinary preparations containing hormones, antibiotics or other biologically highly effective substances, if it cannot be excluded on the basis of the health risk assessment that the health of the pregnant employee or the foetus could be damaged;
- j) in the manufacture of cytostatic or antimetabolic drugs, their preparation for injection application, their administration or in the treatment of patients treated by cytostatic or antimetabolic drugs;
- k) associated with exposure to the dust of hard woods having carcinogenic effects;
- l) associated with exposure to the measles (rubeola) virus, **another biological agent of classes 2 to 4** classified as risky or as the cause of toxoplasmosis, unless it is possible to prove the pregnant employee's immunity against the biological agent that can be taken into consideration in the course of the relevant work.

Article 3

Other works forbidden to pregnant employees pursuant to Section 2 of the Decree on Forbidden Works and Workplaces

Further works forbidden to pregnant employees:

- a) works in the manufacture and processing of explosives or explosive items and handling thereof;
- b) works with the risk of collapse of a structure or buildings or the risk of fall of items;
- c) works in the height above 1.5 m, above uncovered depth of more than 1.5 m or on a seamless plane inclined from the horizontal level by 10° or more;
- d) works on high voltage facilities;
- e) tending animals requiring special attention pursuant to another legal regulation pertaining to the determination of animal species requiring special attention;
- f) works associated with the keeping/breeding of animals pursuant to another legal regulation pertaining to the manner of work organisation and working methods in connection with keeping/breeding of animals;
- g) slaughtering animals at a slaughterhouse;
- h) works performed inside of closed tanks or containers;
- i) treatment of patients at closed psychiatric wards;
- j) mining underground works.

Article 4

Workplaces forbidden to pregnant female employees pursuant to Section 2 of the Decree on Forbidden Works and Workplaces

Pregnant employees are forbidden to work at workplaces where:

- a) the atmospheric pressure is higher than the surrounding atmospheric pressure by more than 20 kPa;
- b) the oxygen concentration in the air is lower than 20% by volume;
- c) the maximum permissible limits of non-ionising radiation are exceeded that are determined for the population by another legal regulation pertaining to health protection against the effects of non-ionising radiation;
- d) according to the health risk assessment performed by the employer, the exposure to chemical substances or mixtures or to biological agents of class 2 to 4 could endanger their health or the health of the foetus.

Article 5

Works forbidden to breastfeeding employees pursuant to Section 3 of the Decree on Forbidden Works and Workplaces

(1) Works and workplaces forbidden to breastfeeding employees:

- a) as specified in Article 2, paragraphs 7, 10, 11 above;
- b) works with chemical substances or chemical mixtures damaging breastfed children through the mother's milk, labelled with statements R 64 or H362, works with

chemical substances or chemical mixtures toxic for reproduction and having effects on fertility, labelled with statements R 60 or R 62 or a combination thereof, or with statements H360, H360F, H360FD, H360Fd, H360Df, H361, H361f or H361fd.

- (2) Breastfeeding employees are further forbidden to perform works or work at workplaces where, according to the health risk assessment performed by the employer, the exposure to chemical substances or mixtures could endanger their health or the health of their breastfed children.

Article 6

Works forbidden to mothers until the end of the 9th month after childbirth pursuant to Section 4 of the Decree on Forbidden Works and Workplaces

Female employees-mothers until the end of the ninth month after childbirth are forbidden to perform works or work at workplaces specified in:

- a) Article 2, paragraph 1 above, in the case of risky works with vibrations or risky works under heat or cold stress;
- b) Article 2, paragraphs 2, 3 a) through f) and h) and paragraphs 4 and 5 above;
- c) Article 3 above;
- d) Article 4, paragraphs 1 and 2 above.

Article 7

Works forbidden to pregnant female employees at CEITEC MU institute

- (1) Works classified as risky in category 3 in terms of biological agents:

- a) Centre for Structural Biology

Structural Virology worksite

- expert professional
- laboratory technician

- b) Centre for Molecular Medicine

Genomics workplace

- specialist (selected employees)
- laboratory assistant (selected employees)

Medical Genomics workplace

- specialist (selected employees)

Molecular Oncology II – solid cancer workplace

- specialist (selected employees)

- (2) Works associated with biological agents of class 2:

- a) Centre for Structural Biology

- Glycobiology workplace
- specialist (selected employees)

- (3) Other works with chemical substances and mixtures pursuant to H- and R-statements, biological agents, etc.
- (4) The risky nature of any particular type of work for pregnant employees shall be assessed by the Occupational Health and Safety Manager in coordination with the head of the relevant research group, centre or core facility, as applicable.

Article 8

Requirements stipulated by the Labour Code

- (1) If a pregnant female employee performs the type of work which pregnant women are prohibited from doing or which, under a medical certificate, puts at hazard her pregnancy, the employer shall transfer her temporarily to alternative suitable work where she can attain the same earnings as in her hitherto type of work. If a pregnant female employee who works at night requests to be transferred to day work, the employer must comply with her request. The provisions of this paragraph shall similarly apply to a female employee-mother until the end of the ninth month after childbirth and to a female employee who is breastfeeding.
- (2) If, through no fault of her own, a female employee attains lower earnings doing the type of work to which she has been transferred than in doing her previous work, she shall be provided with a compensation benefit under special legal regulations.
- (3) Pregnant employees, female employees and male employees taking care of children of up to the age of eight years may only be instructed to go on a business trip outside the municipality (locality) of their workplace or home address with their consent; the employer may only transfer them to another location (municipality) at their own request. The same shall apply to a single female employee or a single male employee taking care of a child until the child reaches the age of 15 years, as well as to an employee who proves that he or she, mostly on his or her own, takes long-term care of a person who is under a special legal regulation classified as a person being dependent on another individual's assistance in grade II (dependency of medium seriousness), grade III (serious dependency) or grade IV (full dependency).
- (4) If a female or male employee taking care of a child under the age of 15 years, a pregnant employee or an employee who proves that he or she, mostly on his or her own, takes long-term care of a person who is under a special legal regulation classified as a person being dependent on another individual's assistance in grade II (dependency of medium seriousness), grade III (serious dependency) or grade IV (full dependency) requests to work only part-time or requests some other suitable adjustment to her or his weekly working hours, the employer is obliged to comply with such request unless this is prevented by serious operational reasons.
- (5) It is prohibited to employ pregnant employees on overtime work. Female and male employees taking care of a child who is younger than one year may not be ordered by their employer to work overtime.
- (6) In addition to usual work breaks, the employer shall grant a female employee who is breastfeeding her child special breaks for breastfeeding.

- (7) A female employee who works standard weekly working hours is entitled to two half-hour breaks per shift for each child until the child reaches the age of one year, and to one half-hour break per shift in the subsequent three months. If a female employee works part-time (but at least half of standard weekly working hours), she is entitled to one half-hour break for each child until the child reaches the age of one year.
- (8) Breaks for breastfeeding are included into working hours with the entitlement to compensatory wage or salary in the amount of average earnings.
- (9) The employer shall be obliged to transfer a female employee to a different type of work if a pregnant employee, breastfeeding employee or female employee-mother until the end of the ninth month after childbirth performs any work forbidden to these employees or endangering, according to the relevant medical certificate, their pregnancy or maternity.
- (10) The employer shall be obliged to adjust rest areas at the workplace for the pregnant employees, breastfeeding employees and female employees-mothers until the end of the ninth month after childbirth. It is prohibited to employ female employees by those types of work which endanger their maternity. The Ministry of Health shall lay down in its Decree types of work and workplaces prohibited to female employees who are pregnant, breastfeeding or who are mothers until the end of the ninth month after childbirth.
- (11) It is prohibited to employ a pregnant female employee, a female employee who is breastfeeding and a female employee-mother until the end of the ninth month after childbirth by those types of work for which they are not fit under the relevant medical certificate.

Article 9

Final Provisions

- (1) The secretary of the Institute shall be responsible for the interpretation of this Ruling.
- (2) The Occupational Health and Safety and Fire Prevention manager shall be responsible for updating this Ruling from time to time.
- (3) The Occupational Health and Safety and Fire Prevention manager is appointed to supervise the observance of this Ruling.
- (4) This Ruling shall become valid as of the execution date hereof.
- (5) This Ruling shall become effective as of 1 December 2016.

Annexes: No. 1 - Examples of substances to which pregnant employees may not be exposed
No. 2 - List of standard hazard statements
No. 3 - 3 R-statements

In Brno, on 24 November 2016

Jiří Nantl
Director of the Institute

Annex No. 1 - Examples of substances to which pregnant employees may not be exposed

Pregnant employees may not be exposed, for example, to the following chemicals (and may not be present in the laboratory during the work with these substances):

Substance	Reason according to H-statements
Acrylamide	H301 – Toxic if swallowed. H340 – May cause genetic defects. H350 – May cause cancer. H372 – Causes damage to organs through prolonged or repeated exposure
Sodium azide	H300 – Fatal if swallowed.
Ethidium bromide	H330 – Fatal if inhaled. H341 – Suspected of causing genetic defects.
Phenol	H341 – Suspected of causing genetic defects. H331 - Toxic by inhalation. H311 - Toxic in contact with skin. H301 – Toxic if swallowed.
Formaldehyde	H350 - May cause cancer. H341 – Suspected of causing genetic defects. H331 - Toxic by inhalation. H311 - Toxic in contact with skin. H301 – Toxic if swallowed. H370 – Causes damage to organs.
Chloroform	H351 – Suspected of causing cancer. H372 – Causes damage to organs through prolonged or repeated exposure H331 - Toxic by inhalation. H361d – Suspected of damaging fertility or the unborn child.
Potassium cyanide	H300 – Fatal if swallowed. H310 – Fatal in contact with skin. H330 – Fatal if inhaled. H372 – Causes damage to organs through prolonged or repeated exposure.
Formic acid	H331 - Toxic by inhalation.
Methanol	H301 – Toxic if swallowed. H311 - Toxic in contact with skin. H331 - Toxic by inhalation. H370 – Causes damage to organs.
Mercury	H330 – Fatal if inhaled. H360 – May damage fertility or the unborn child. H372 – Causes damage to organs through prolonged or repeated exposure.

Annex No. 2 - Overview of standard hazard statements

H-statements

- H200** – Unstable explosive.
- H201** – Explosive; mass explosion hazard.
- H202** – Explosive; severe projection hazard.
- H203** – Explosive; fire, blast or projection hazard.
- H204** – Fire or projection hazard.
- H205** – May mass explode in fire.
- H220** – Extremely flammable gas.
- H221** – Flammable gas.
- H222** – Extremely flammable aerosol.
- H223** – Flammable aerosol.
- H224** – Extremely flammable liquid and vapour.
- H225** – Highly flammable liquid and vapour.
- H226** – Flammable liquid and vapour.
- H228** – Flammable solid.
- H240** – Heating may cause an explosion.
- H241** – Heating may cause a fire or explosion.
- H242** – Heating may cause a fire.
- H250** – Catches fire spontaneously if exposed to air.
- H251** – Self-heating; may catch fire.
- H252** – Self-heating in large quantities; may catch fire.
- H260** – In contact with water releases flammable gases which may ignite spontaneously.
- H261** – In contact with water releases flammable gases.
- H270** – May cause or intensify fire; oxidizer.
- H271** – May cause fire or explosion; strong oxidizer.
- H272** – May intensify fire; oxidizer.
- H280** – Contains gas under pressure; may explode if heated.
- H281** – Contains refrigerated gas; may cause cryogenic burns or injury.
- H290** – May be corrosive to metals.
- H300** – Fatal if swallowed.
- H301** – Toxic if swallowed.
- H302** – Harmful if swallowed.
- H304** – May be harmful if swallowed and enters airways.
- H310** – Fatal in contact with skin.
- H311** – Toxic in contact with skin.
- H312** – Harmful in contact with skin.
- H314** – Causes severe skin burns and eye damage.
- H315** – Causes skin irritation.
- H317** – May cause an allergic skin reaction.
- H318** – Causes serious eye damage.
- H319** – Causes serious eye irritation.
- H330** – Fatal if inhaled.
- H331** – Toxic if inhaled.
- H332** – Harmful if inhaled.
- H334** – May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335** – May cause respiratory irritation.
- H336** – May cause drowsiness or dizziness.
- H340** – May cause genetic defects.
- H341** – Suspected of causing genetic defects.
- H350** – May cause cancer.
- H351** – Suspected of causing cancer.
- H360** – May damage fertility or the unborn child.
- H361** – Suspected of damaging fertility or the unborn child.
- H362** – May cause harm to breast-fed children.
- H370** – Causes damage to organs.

H371 – May cause damage to organs.

H372 – Causes damage to organs through prolonged or repeated exposure <other exposure routes are not hazardous>.

H373 – May cause damage to organs through prolonged or repeated exposure <other exposure routes are not hazardous>.

H400 – Very toxic to aquatic life.

H410 – Very toxic to aquatic life with long-lasting effects.

H411 – Toxic to aquatic life with long-lasting effects.

H412 – Harmful to aquatic life with long-lasting effects.

H413 – May cause long-lasting harmful effects to aquatic life.

EUH 001 – Explosive when dry.

EUH 006 – Explosive with or without contact with air.

EUH 014 – Reacts violently with water.

EUH 018 – In use may form flammable/explosive vapour-air mixture.

EUH 019 – May form explosive peroxides.

EUH 044 – Risk of explosion if heated under confinement.

EUH 029 – Contact with water liberates toxic gas.

EUH 031 – Contact with acids liberates toxic gas.

EUH 032 – Contact with acids liberates very toxic gas.

EUH 066 – Repeated exposure may cause skin dryness or cracking.

EUH 070 – Toxic by eye contact.

EUH 071 – Corrosive to the respiratory tract.

EUH 059 – Hazardous to the ozone layer.

EUH 201 – Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.

EUH 201A – Warning! Contains lead.

EUH 202 – Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of reach of children.

EUH 203 – Contains chromium (VI). May cause an allergic reaction.

EUH 204 – Contains isocyanates. May cause an allergic reaction.

EUH 205 – Contains epoxy constituents. May cause an allergic reaction.

EUH 206 – Warning! Do not use together with other products. May release dangerous gases (chlorine).

EUH 207 – Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer.

Comply with the safety instructions.

EUH 208 – Contains ... May cause an allergic reaction.

EUH 209 – Can become highly flammable in use.

EUH 209A – Can become flammable in use.

EUH 210 – Safety data sheet available on request.

EUH 401 – To avoid risks to human health and the environment, comply with the instructions for use.

Annex No. 3 - R-statements

- R1 - Explosive when dry
- R2 - Risk of explosion by shock, friction, fire or other sources of ignition
- R3 - Extreme risk of explosion by shock, friction, fire or other sources of ignition
- R4 - Forms very sensitive explosive metallic compounds
- R5 - Heating may cause an explosion
- R6 - Explosive with or without contact with air
- R7 - May cause fire
- R8 - Contact with combustible material may cause fire
- R9 - Explosive when mixed with combustible material
- R10 - Flammable
- R11 - Highly flammable
- R12 - Extremely flammable
- R14 - Reacts violently with water
- R15 - In contact with water releases extremely flammable gases
- R16 - Explosive when mixed with oxidising substances
- R17 - Spontaneously flammable in air
- R18 - In use, may form flammable/explosive vapour-air mixture
- R19 - May form explosive peroxides
- R20 - Harmful by inhalation
- R21 - Harmful in contact with skin
- R22 - Harmful if swallowed
- R23 - Toxic by inhalation
- R24 - Toxic in contact with skin
- R25 - Toxic if swallowed
- R26 - Very toxic by inhalation
- R27 - Very toxic in contact with skin
- R28 - Very toxic if swallowed
- R29 - Contact with water liberates toxic gas
- R30 - Can become highly flammable in use
- R31 - Contact with acids liberates toxic gas
- R32 - Contact with acids liberates very toxic gas
- R33 - Danger of cumulative effects
- R34 - Causes burns
- R35 - Causes severe burns
- R36 - Irritating to eyes
- R37 - Irritating to respiratory system
- R38 - Irritating to skin
- R39 - Danger of very serious irreversible effects
- R40 - Suspected of carcinogenic effects
- R41 - Risk of serious damage to eyes
- R42 - May cause sensitisation by inhalation
- R43 - May cause sensitisation by skin contact
- R44 - Risk of explosion if heated under confinement
- R45 - May cause cancer
- R46 - May cause inheritable genetic damage

R48 - Danger of serious damage to health by prolonged exposure

R49 - May cause cancer by inhalation

R50 - Very toxic to aquatic life

R51 - Toxic to aquatic life

R52 - Harmful to aquatic life

R 53 - May cause long term adverse effects in the aquatic environment

R54 - Toxic to flora

R55 - Toxic to fauna

R56 - Toxic to soil organisms

R57 - Toxic to bees

R53 - May cause long term adverse effects in the environment

R59 - Hazardous to the ozone layer

R60 - May impair fertility

R61 - May cause harm to the unborn child

R62 - Possible risk of impaired fertility

R63 - Possible risk of harm to the unborn child

R64 - May cause harm to breast-fed babies

R65 - Harmful: may cause lung damage if swallowed

R66 - Repeated exposure may cause skin dryness or cracking

R67 - Vapours may cause drowsiness and dizziness

R68 - Possible risk of irreversible effects

R14/15 - Reacts violently with water, liberating extremely flammable gases

R15/29 - Contact with water liberates toxic, extremely flammable gases

R20/21 - Harmful by inhalation and in contact with skin

R20/22 - Harmful by inhalation and if swallowed

R21/22 - Harmful in contact with skin and if swallowed

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

R23/24 - Toxic by inhalation and in contact with skin

R24/25 - Toxic in contact with skin and if swallowed

R23/25 - Toxic by inhalation and if swallowed

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

R26/27 - Very toxic by inhalation and in contact with skin

R26/28 - Very toxic by inhalation and if swallowed

R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed

R27/28 - Very toxic in contact with skin and if swallowed

R36/37 - Irritating to eyes and respiratory system

R36/38 - Irritating to eyes and skin

R37/38 - Irritating to respiratory system and skin

R36/37/38 - Irritating to eyes, respiratory system and skin

R39/23 - Toxic: danger of very serious irreversible effects through inhalation

R39/24 - Toxic: danger of very serious irreversible effects in contact with skin

R39/25 - Toxic: danger of very serious irreversible effects if swallowed

R39/23/24 - Toxic: danger of very serious irreversible effects through inhalation and in contact with skin

R39/23/25 - Toxic: danger of very serious irreversible effects through inhalation and if swallowed

R39/24/25 - Toxic: danger of very serious irreversible effects in contact with skin and if swallowed

R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed

R39/26 - Very Toxic: danger of very serious irreversible effects through inhalation

R39/26/27 - Very Toxic: danger of very serious irreversible effects through inhalation and in contact with skin

R39/27 - Very Toxic: danger of very serious irreversible effects in contact with skin

R39/28 - Very Toxic: danger of very serious irreversible effects if swallowed

R39/26/28 - Very Toxic: danger of very serious irreversible effects through inhalation and if swallowed

R39/27/28 - Very Toxic: danger of very serious irreversible effects in contact with skin and if swallowed

R39/26/27/28 - Very Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed

R68/20 - Harmful: possible risk of irreversible effects through inhalation

R68/21 - Harmful: possible risk of irreversible effects in contact with skin

R68/22 - Harmful: possible risk of irreversible effects if swallowed

R68/20/21 - Harmful: possible risk of irreversible effects through inhalation and in contact with skin

R68/20/22 - Harmful: possible risk of irreversible effects through inhalation and if swallowed

R68/21/22 - Harmful: possible risk of irreversible effects in contact with skin and if swallowed

R68/20/21/22 - Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed

R42/43 - May cause sensitization by inhalation and skin contact

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

R48/21 - Harmful: danger of serious damage to health by prolonged exposure in contact with skin

R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed

R48/20/21 - Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin

R48/20/22 - Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed

R48/21/22 - Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed

R48/20/21/22 - Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed

R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation

R48/24 - Toxic: danger of serious damage to health by prolonged exposure in contact with skin

R48/25 - Toxic: danger of serious damage to health by prolonged exposure if swallowed

R48/23/24 - Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin

R48/23/25 - Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed

R48/24/25 - Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed

R48/23/24/25 - Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment