

1. TITLE OF THE CERTIFICATE (CZ)⁽¹⁾

**Výuční list z oboru vzdělání:
28-52-H/01 Chemik (denní studium)**

⁽¹⁾ In the original language

2. TRANSLATED TITLE OF THE CERTIFICATE⁽²⁾

**Apprenticeship Certificate in:
28-52-H/01 Chemist (full-time study)**

⁽²⁾ This translation has no legal status.

3. PROFILE OF SKILLS AND COMPETENCES
General competences:

- take responsibility for completion of tasks in work or study;
- adapt own behaviour to circumstances in solving problems;
- be familiar with various methods of learning, use sources of information well, show functional literacy;
- understand assignments or identify the cores of problems, exert variable solutions, work both independently and within a team;
- communicate in one foreign language at the level of at least A2+ of the Common European Framework of Reference for Languages;
- cope with changing socio-economic conditions, be financially literate;
- be aware of the labour market mechanisms, and of the employee-employer relationships, act on career decisions responsibly, understand the significance of lifelong learning;
- use basic mathematics and the basic principles of physics and chemistry when needed in daily situations;
- work with the means of information and communication technologies, exploit adequate sources of information, handle information effectively;
- act in an environmentally-conscious manner and in compliance with strategies for sustainability;
- support values of local, national, European and world cultures, recognize the value of life;
- exert fundamentals of health protection, occupational safety, and fire prevention and safety;
- exert norms and prescriptions in the field.

Vocational competences:

- have knowledge of the types of raw materials and excipients, their properties and use in various branches of chemical production;
- learn the basic principles, theories, methods and rules in dealing with activities and situations in different areas of chemistry (by focus);
- operate machines and equipment upon acceptance, treatment and processing of raw materials and intermediates in the handling of chemicals at various stages of production with regard to production efficiency and minimize the negative impact on working and living environment and perform basic setup of machines and equipment, cleaning and routine maintenance;
- comply with the prescribed procedures of technological operations and processes for the chemical industry and keep records about the operation of machinery and equipment and the technological parameters and the process of receiving, storing and shipping of raw materials, intermediate products and finished products;
- learn principles, procedures and use of methods of chemical analysis in various fields of chemistry (by focus);
- operate and ensure the operability of laboratory techniques in various types of laboratories;
- remove and modify samples for analysis, carry out measurements in accordance with prescribed instructions, process and evaluate the results of the analysis;
- implement the control analysis of raw materials, excipients, intermediates, products and chemical waste production and seek the causes of any failures of technological process;
- comply with relevant standards and standard procedures for chemical analyzes.



4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

The graduate is employed in the field of chemical and pharmaceutical industry, in various manufacturing industries of chemical nature, in different types of chemical laboratory and the commercial-economic activities.
 Examples of possible jobs: chemist of operating equipment, lab chemist.

5. OFFICIAL BASIS OF THE CERTIFICATE

Name and status of the body awarding the certificate Masarykova střední škola zemědělská a přírodovědná, Opava, příspěvková organizace Purkyňova 12 Opava 746 01 CZ public school	Name and status of the national/regional authority providing accreditation/recognition of the certificate Ministry of Education, Youth and Sports Karmelitská 7 118 12 Praha 1 Czech Republic
Level of the certificate (national or international) Upper secondary education completed by the final examination (Apprenticeship Certificate) ISCED 353, EQF 3	Grading scale / Pass requirements 1 excellent (výborný) 2 very good (chvalitebný) 3 good (dobrý) 4 satisfactory (dostatečný) 5 fail (nedostatečný) <i>Overall assessment::</i> Prospěl s vyznamenáním: Pass with Honours (the average mark is $\leq 1,5$) Prospěl: Pass (an examination mark is not worse than 4) Neprospěl: Fail (the examination mark in one or more subjects is 5)
Access to next level of education / training ISCED 354, EQF 4	International agreements
Legal basis Law No. 561/2004 on Pre-school, Basic, Secondary, Post-secondary and Other Education (School Act) as amended by later regulations	

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

Description of vocational education and training received	Percentage of total programme	Duration
<ul style="list-style-type: none"> School- / training centre-based Workplace-based Accredited prior learning 	The ratio between theoretical education and practical training is defined by education providers themselves with regard to the respective educational programme and the employers' needs.	
Total duration of the education / training leading to the certificate		3 years / 3 072 lessons
Entry requirements Completed compulsory school education		
Additional information More information (including a description of the national qualifications system) available at: EQF , EURYDICE , NPI		
National Pedagogical Institute of the Czech Republic – National Europass Centre Czech Republic, Senovážné nám. 872/25, 110 00 Praha 1		  stamp and signature Done at Prague for the school year 2024/2025

(*) Explanatory note

The Certificate supplement provides additional information about the certificate and does not have any legal status in itself. Its format is based on the Decision (EU) 2018/646 of the European Parliament and of the Council of 18 April 2018 on a common framework for the provision of better services for skills and qualifications (Europass) and repealing Decision No 2241/2004/EC.

© European Union, 2002-2022 | <https://www.europass.eu>, <https://www.europass.cz>