

17. GUIDELINES FOR HEALTH AND ENVIRONMENTAL PROTECTION

17.1 Field of Application

- 17.1.1 These Guidelines shall apply to the manufacture and handling of all flavourings and raw materials used for their production, including storage, production and plant design, in the flavour industry.
- 17.1.2 These Guidelines may require revision if future developments in the industry make it necessary.
- 17.1.3 The application of these Guidelines does not exempt individual manufacturers from the obligation to comply with all national or international regulations which are relevant to their operations.

17.2 Basic Principles

- 17.2.1 The protection of health in the workplace and the protection of the environment are of primary concern to the flavour industry. These Guidelines express a determination to protect human health and the environment from adverse effects by measures which may be additional to those required to comply with national or international regulations.
- 17.2.2 Risks to human health and the environment shall be minimized by taking all appropriate precautions and actions which are practicable, compatible with operational requirements and consistent with local conditions and national regulations. Measures taken should be appropriate to the degree of risk involved.
- 17.2.3 Free exchange of information on health and environmental subjects among individual companies should be encouraged.

17.3 Definitions

- 17.3.1 Manufacturing: All operations involved in the production of a flavour material including processing, compounding, packaging and labeling (see 7.6).
- 17.3.2 Environment: Water, air and soil and their inter-relationship as well as relationship between them and any living organisms.
- 17.3.3 Waste: Any unavoidable material, resulting from an industrial process, which must be disposed of.

17.4 Health Protection

- 17.4.1 All personnel involved in the manufacture and handling of flavourings and raw materials used for their production shall be protected from health hazards of a physical nature (e.g. noise, radiation, vibration) or chemical effects of gases, vapors or dusts in accordance with all relevant regulations.
- 17.4.2 Companies shall make their best efforts to eliminate or minimize exposure to health hazards by taking those precautions which are necessary in the light of experience, feasible according to the state of technology, and appropriate to the operating conditions.
- 17.4.3 Priority should be given to technical measures and improvements such as closed systems, the use of less hazardous materials, source venting and general ventilation.
- 17.4.4 If technical and organizational measures are not sufficiently effective, personal protective clothing and equipment should be worn such as respiratory protection (gas mask, breathing apparatus, etc.), eye and ear protection (safety glasses, face visor, ear plugs, etc.), hand and body protection (gloves, suit, apron, shoes, etc.).
- 17.4.5 Specific information and instructions on required protective measures should be provided to personnel in order to avoid health hazards in the workplace.
- 17.4.6 Companies should periodically audit any of their workplaces that have potential health hazards, with regard to health protection performance. If necessary, exposure-monitoring surveys should be carried out.
- 17.4.7 Where law requires no safety data sheets, recommendations on safe storage and handling should nevertheless be provided to customers.

17.5 Environmental Protection

- 17.5.1 The environment should be protected from adverse effects by appropriate organizational and technical measures. Companies should comply with all relevant regulations and avoid pollution that affects water, air, soil and public health.
- 17.5.2 Emissions that can have an adverse effect on the environment should be identified, assessed and, if feasible, reduced.
- 17.5.3 Provision should be made to avoid accidental discharges into the environment which could pose a risk to health of personnel or the general public, or could adversely effect the environment.

17.5.4 Companies should create awareness of environmental protection among all personnel handling materials and instruct them on emergency procedures in case of accidental discharge.

17.5.5 Recommendations should be provided to customers on storage and handling precautions in those cases where this is required to protect the environment.

17.6 Water Protection

17.6.1 Technical and administrative measures should be taken to make sure that discharged wastewater complies with the legal requirements relevant to the receiver (water stream, public or private sewer, or treatment plant).

17.6.2 Provision should be made to avoid discharging polluting materials into surface water drains.

17.7 Air protection

17.7.1 The emission of inorganic or organic materials into the atmosphere must be kept within the levels specified in national or local regulations, whichever are most stringent.

17.7.2 Technical and administrative measures should be taken to avoid the accidental discharge into the atmosphere of quantities of materials hazardous to health or to the environment.

17.8 Soil and Groundwater Protection

17.8.1 The soil shall be protected from adverse contamination by inorganic or organic materials.

17.8.2 Technical and organizational measures shall be taken to avoid contamination of groundwater arising from soil contamination.

17.9 Waste Disposal

17.9.1 Priority should be given to reducing the quantity of waste material produced. Efforts should be made to recycle waste where practical as feedstock, to use it for energy production or for other purposes.

17.9.2 Chemical wastes shall be disposed of according to national or international legal requirements. Only officially approved disposal sites shall be used.

17.9.3 The most appropriate disposal methods should be selected for each waste so as to ensure adequate protection of the public and the environment. Currently, incineration is to be preferred to landfill, wherever possible.

17.9.4 Appropriate waste management methods should be applied. Adequate records of all disposed wastes should be kept. Landfill disposal records should be maintained in accordance with relevant regulations.