

MBAA Safety Toolbox Talk

Chemical Safety / Hazard Communication

By the MBAA Safety Committee

Overview

Many chemicals are used in the brewing process that have hazards, including chemical burns from corrosives, fire hazards from flammables, and pressure hazards from compressed gases. Chemicals must be used, stored, and disposed of properly to prevent accidents or environmental releases.

General Chemical Safety Requirements

- Always wear proper PPE.
- Inspect PPE to ensure there are no holes, rips, or tears.
- Do not eat or smoke in production areas.
- Know where emergency eyewash and shower stations are located and ensure there is a clear pathway to the nearest station.
- Understand the chemical(s) you're working with by reading the applicable Safety Data sheet(s).
- NEVER mix strong acids and bases.

Hazard Communication

OSHA's Hazard Communication Standard (HCS) is designed to ensure that information about chemical hazards and associated protective measures is disseminated. All employers with hazardous chemicals in their workplaces must prepare and implement a written hazard communication program and must ensure that all containers are labeled, employees are provided access to SDSs, and an effective training program is conducted for all potentially exposed employees.

Learn more here: <https://www.osha.gov/dsg/hazcom/whatishazcom.html>

Safety Data Sheets (SDSs)

An SDS must be available to all employees, for every chemical used.

The SDS includes information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical.

Personal Protective Equipment (PPE)

Chemical Handling PPE typically includes: safety goggles, face shield, chemical apron, chemical gloves, and rubber or waterproof boots/shoes.

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Follow requirements from the SDS of the specific chemical you're handling for any specifics not covered.

NOTE: It is recommended to wear safety goggles AND a faceshield when handling bulk chemicals. There have been incidents in the brewing industry of severe eye injuries from corrosive chemicals, while wearing just a face shield and safety glasses.

Chemical Storage

Store hazardous chemicals on or in secondary containment, such as containment pallets or storage cabinets.

DO NOT store incompatible chemicals together. Ensure that chemicals are stored and used in containers/piping that are compatible with the hazards of the chemical. Many resources, such as <https://www.coleparmer.com/Chemical-Resistance> are available to help determine that system components will not react with chemicals.

Container Labels

Every container containing a hazardous chemical must be labeled. This includes primary containers (i.e., the original chemical container) and secondary containers such as spray bottles, buckets, and grease guns.

Secondary container labels must include at least the following:

- Product identifier.
- Words, pictures, symbols or combination thereof which provide general information regarding the hazards of the chemical.

Training

All employees must be trained on the hazards of the chemicals they are working with. This must include:

- Safe handling of the chemicals in their work area
- Necessary equipment to protect themselves

Use your vendors! Many chemical suppliers offer training on the materials they provide you, often at no cost.

Global Harmonized System (GHS)

The OSHA Hazard Communication Standard - (CFR 29) Part 1910.1200, has been updated to align with the European Global Harmonized Standard.

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To learn more about this, see the Tool Box Talk on GHS here:

<https://www.mbaa.com/brewresources/brewsafety/BrewSafety/Global%20Harmonized%20Standard.pdf>

FOR MORE INFORMATION ON BREWERY SAFETY, PLEASE VISIT THE MBAA BREWERY SAFETY WEBSITE AT: <http://www.mbaa.com/brewresources/brewsafety>

For more information about the Master Brewers Association of the Americas, visit the website at <https://www.mbaa.com>.

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A homebrewer since 1989, Dana consults for craft breweries, wineries & distilleries on food safety & sanitation practices. He has more than 25 years of experience serving Birko's brewery customers and is known in the industry as one of the leading voices on sanitation. He has formulated many Birko products, has authored numerous articles, is a frequent speaker, and leads many industry support committees.