TABLE 47.11—DEFINITIONS—Continued

Term	Definition for purposes of HazCom
	(1) An operator prepares in accordance with Table 47.52—Contents of MSDS; or (2) An employer prepares in accordance with 29 CFR 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59, or 1928.21 (OSHA Hazard Communication regulations); or (3) An independent source prepares which contains equivalent information, such as International Chemical Safety Cards (ICSC) and Workplace Hazardous Material Information Sheets (WHMIS).
Mixture	Any combination of two or more chemicals which is not the result of a chemical reaction.
Ordinary consumer use	Household, family, school, recreation, or other personal use or enjoyment, as opposed to business use.
OSHA	The Occupational Safety and Health Administration, U.S. Department of Labor.
Physical hazard	A chemical for which there is scientifically valid evidence that it is— (1) *Combustible liquid:* (i) A liquid having a flash point at or above 100 °F (37.8 °C) and below 200 °F (93.3 °C); or (ii) A liquid mixture having components with flashpoints of 200 °F (93.3 °C) or higher, the total volume of which make up 99% or more of the mixture. (2) *Compressed gas:* (i) A contained gas or mixture of gases with an absolute pressure exceeding: (A) 40 psi (276 kPa) at 70 °F (21.1 °C); or (B) 104 psi (717 kPa) at 130 °F (54.4 °C) regardless of pressure at 70 °F. (ii) A liquid having a vapor pressure exceeding 40 psi (276 kPa) at 100 °F (37.8 °C) as determined by ASTM D–323–82. (3) *Explosive:* A chemical that undergoes a rapid chemical change causing a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature. (4) *Flammable:* A chemical that will readily ignite and, when ignited, will burn persistently at ambient temperature and pressure in the normal concentration of oxygen in the air. (5) *Organic peroxide:* An explosive, shock sensitive, organic compound or an oxide that contains a high proportion of oxygen-superoxide. (6) *Oxidizer:* A chemical, other than an explosive, that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases. (7) *Pyrophoric:* Capable of igniting spontaneously in air at a temperature of 130 °F (54.4 °C) or below. (8) *Unstable (reactive):* A chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or become self-reactive under conditions of shock, pressure, or temperature. (9) *Water-reactive:* A chemical that reacts with water to release a gas that is either flammable or a health hazard.
Produce	To manufacture, process, formulate, generate, or repackage.
Raw material	Ore, valuable minerals, worthless material or gangue, overburden, or a combination of these, that is removed from natural deposits by mining or is upgraded through milling.
Trade secret	Any confidential formula, pattern, process, device, information, or compilation of information that is used by the operator and that gives the operator an opportunity to obtain an advantage over competitors who do not know about it or use it.
Use	To package, handle, react, or transfer.
Work area	Any place in or about a mine where a miner works.

[67 FR 42383, June 21, 2002; 67 FR 57635, Sept. 11, 2002]

Subpart C—Hazard Determination

§47.21 Identifying hazardous chemicals.

The operator must evaluate each chemical brought on mine property and each chemical produced on mine property to determine if it is hazardous as specified in Table 47.21 as follows:

TABLE 47.21—IDENTIFYING HAZARDOUS CHEMICALS

Category	Basis for determining if a chemical is hazardous
(a) Chemical brought to the mine	The chemical is hazardous when its MSDS or container label indicates it is a physical or health hazard; or the operator may choose to evaluate the chemical using the criteria in paragraphs (b) and (c) of this table.
(b) Chemical produced at the mine	The chemical is hazardous if any one of the following that it is a hazard: (1) Available evidence concerning its physical or health hazards. (2) MSHA standards in 30 CFR chapter I. (3) Occupational Safety and Health Administration (OSHA), 29 CFR part 1910, subpart Z, *Toxic and Hazardous Substances.*

TABLE 47.21—IDENTIFYING HAZARDOUS CHEMICALS—Continued

Category	Basis for determining if a chemical is hazardous
(c) Mixture produced at the mine	(4) American Conference of Governmental Industrial Hygienists (ACGIH), *Threshold Limit Values and Biological Exposure Indices* (2001). (5) U.S. Department of Health and Human Services, National Toxicology Program (NTP), *Ninth Annual Report on Carcinogens,* January 2001. (6) International Agency for Research on Cancer (IARC), Monographs and related supplements, Volumes 1 through 77. (1) If a mixture has been tested as a whole to determine its hazards, use the results of that testing. (2) If a mixture has not been tested as a whole to determine its hazards— (i) Use available, scientifically valid evidence to determine its physical hazard potential; (ii) Assume that it presents the same health hazard as a non-carcinogenic component that makes up 1% or more (by weight or volume) of the mixture; and (iii) Assume that it presents a carcinogenic health hazard if a component considered carcinogenic by NTP or IARC makes up 0.1% or more (by weight or volume) of the mixture. (3) If evidence indicates that a component could be released from a mixture in a concentration that could present a health risk to miners, assume that the mixture presents the same hazard.

Subpart D—HazCom Program

§ 47.31 Requirement for a HazCom program.

Each operator must—

(a) Develop and implement a written HazCom program,

(b) Maintain it for as long as a hazardous chemical is known to be at the mine, and

(c) Share relevant HazCom information with other on-site operators whose miners can be affected.

§ 47.32 HazCom program contents.

The HazCom program must include the following:

(a) How this part is put into practice at the mine through the use of—

(1) Hazard determination,

(2) Labels and other forms of warning,

(3) Material safety data sheets (MSDSs), and

(4) Miner training.

(b) A list or other record identifying all hazardous chemicals known to be at the mine. The list must—

(1) Use a chemical identity that permits cross-referencing between the list, a chemical's label, and its MSDS; and

(2) Be compiled for the whole mine or by individual work areas.

(c) At mines with more than one operator, the methods for—

(1) Providing other operators with access to MSDSs, and

(2) Informing other operators about—

(i) Hazardous chemicals to which their miners can be exposed,

(ii) The labeling system on the containers of these chemicals, and

(iii) Appropriate protective measures.

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Subpart E—Container Labels and Other Forms of Warning

§ 47.41 Requirement for container labels.

(a) The operator must ensure that each container of a hazardous chemical has a label. If a container is tagged or marked with the appropriate information, it is labeled.

(1) The operator must replace a container label immediately if it is missing or if the hazard information on the label is unreadable.

(2) The operator must not remove or deface existing labels on containers of hazardous chemicals.

(b) For each hazardous chemical produced at the mine, the operator must prepare a container label and update this label with any significant, new information about the chemical's hazards within 3 months of becoming aware of this information.

(c) For each hazardous chemical brought to the mine, the operator must