

Article 222 The configuration of carbon dioxide fire-suppression equipment shall apply mutatis mutandis to the case as referred to in Article 82 through 97. The ingredient dosage of whole area spraying carbon dioxide fire-suppression equipment shall be calculated according to the following subparagraphs:

1. The required ingredient dosage shall be calculated according to the cubage of the protected area and the quantity of fire-suppression equipment per cubic meter of the protected area stated in the table below. When the calculated value is less than the value stated, the dosage shall be calculated according to the basic minimum quantity.

Volume of the protected area (cubic meter)	Ingredient dosage of fire-suppression per cubic meter of the protected area (kg / m^3)	Basic quantity of ingredient dosage in fire-suppression (kg)
$V < 5$	1.2	1
$5 \leq V < 15$	1.1	6
$15 \leq V < 50$	1.0	17
$50 \leq V < 150$	0.9	50
$150 \leq V < 1500$	0.8	135
$V > 1500$	0.75	1200

2. Where the opening of the protected area is not equipped with an automatic closing device under the paragraph 1, additional 5 kg per square meter of area of the opening shall be added in addition to the dosage calculated.

When in the range of protected area or the protection subjects are related with storing or processing public hazardous materials, the dosage calculated under paragraph 1 or 2 shall be multiplied by a coefficient prescribed in the table below. For the public hazardous materials other than prescribed below, the coefficient shall be worked out using the test method recognized by the central competent authority.

Type of fire extinguishing agent	Carbon dioxide	Dry powder			
		Type I	Type II	Type III	Type IV
Public hazardous materials					
Acrylonitrile	1.2	1.2	1.2	1.2	1.2
Acetaldehyde	—	—	—	—	—
Acetonitrile	1.0	1.0	1.0	1.0	1.0
Acetone	1.0	1.0	1.0	1.0	1.0
Anilide	1.0	1.0	1.0	1.0	1.0
Isooctane	1.0	—	—	—	—
Isoprene	1.0	—	—	—	—
Isopropylamine	1.0	—	—	—	—
Isopropyl ether	1.0	—	—	—	—
Isohexane	1.0	—	—	—	—
Isoheptane	1.0	—	—	—	—
Isopentane	1.0	—	—	—	—
Ethanol	1.2	1.2	1.2	1.2	1.2
Ethylamine	1.0	—	—	—	—
Chloroethylene	—	—	—	1.0	—
Octane	1.2	—	—	—	—
Gasoline	1.0	1.0	1.0	1.0	1.0
Ethyl formate	1.0	—	—	—	—
Propyl formate	1.0	—	—	—	—
Methyl formate	1.0	—	—	—	—
Naphtha	1.0	1.0	1.0	1.0	1.0
Crude oil	1.0	1.0	1.0	1.0	1.0
Acetic acid	—	1.0	1.0	1.0	1.0
Ethyl acet	1.0	1.0	1.0	1.0	1.0
Methyl acetate	1.0	—	—	—	—
Propylene oxide	1.8	—	—	—	—
Cyclohexane	1.0	—	—	—	—
Diethylamine	1.0	—	—	—	—
Ethyl ether	1.2	—	—	—	—
Dioxan	1.6	1.2	1.2	1.2	1.2
Heavy oil	1.0	1.0	1.0	1.0	1.0
Lubricant	1.0	1.0	1.0	1.0	1.0
Tetrahydrofuran	1.0	1.2	1.2	1.2	1.2
Kerosene	1.0	1.0	1.0	1.0	1.0
Triethylamine	1.0	—	—	—	—
Toluene	1.0	1.0	1.0	1.0	1.0
Naphtha	1.0	1.0	1.0	1.0	1.0
Vegetable oil	—	1.0	1.0	1.0	1.0
Carbon disulfide	3.0	—	—	—	—
Ethylene glycol	1.2	—	—	—	—
Pyridine	—	1.0	1.0	1.0	1.0
N-butanol	—	1.0	1.0	1.0	1.0
N-propanol	1.0	1.0	1.0	1.0	1.0
Isopropanol	1.0	—	—	—	—
Propylamin	1.0	—	—	—	—
Hexane	1.0	1.2	1.2	1.2	1.2

Heptane	1.0	1.0	1.0	1.0	1.0
Benzene	1.0	1.2	1.2	1.2	1.2
Pentane	1.0	1.4	1.4	1.4	1.4
Boiled oil		1.0	1.0	1.0	1.0
Formaldehyde	1.6	1.2	1.2	1.2	1.2
Methyl ethyl ketone	1.0	1.0	1.0	1.2	1.0
Chlorobenzene		—	—	1.0	—
Note: Substances marked with an "—" shall not be used as fire extinguishing agent.					