

MATERIAL SAFETY DATASHEET

According to 91/55/EEC

I. Identification of the substance, preparation and of the company

Trade name: INERGEN 52.40.08 IG541
Manufacture/Supplier: Fire Eater A/S
Vølundsvej 17
DK- 3400 Hillerød
Denmark
www.fire-eater.dk
tel: +45 7022 2769
fax: +45 7023 2769
Emergency number: +45 4068 2769

II. Composition / Information on ingredients

Chemical formula: gas mixture with:
52 Vol. % Nitrogen (N₂).
40 Vol. % Argon (Ar).
8 Vol. % Carbon dioxide (CO₂).

Substances with exposure limits:

Carbon dioxide > 5 Vol. %
MAK-Value: 5000 ppm
TRK-Value: -
BAT-Value: -

III. Hazards Identification

For human: See paragraph XI and XV
For environment: - none-

IV. First Aid Measures

Inhalation: Take the injured person(s) into open air, If necessary consult a doctor of medicine
Eye contact: -None-
Skin contact: -None-
Ingestion: n.a.

V. Fire-Fighting Measures

n.a.

VI. Accidental Release Measures

Personal precautions: Provide sufficient ventilation. Do not inhale gasses/vapors/mist, if necessary leave the room.

Environmental precautions: n.a.

Clean up methods: Ventilation of the room.

VII. Storage and Handling

Handling: Make sure containers and connections are tight; use in well vented areas only, only instructed persons may handled compressed gas containers.

Storage: To be stored only in original containers, Protect containes from exposure to temperatures above 50°C.

VIII. Exposure Controls / Personal Protection

Breath protection: If oxygen level is below 10 Vol. % or in case of long exposure a breathing apparatus (Independent of circulating air) is necessary.

Hand protection: n.a.

Eye protection: n.a.

Body protection: n.a.

IX. Physical and Chemical Properties

Chemical properties: Form: Compressed gas, gaseous phase only.
Colour: Colourless.
Odour: Odourless.

Physical properties: Relative density: 1.4236 kg/m³ at 15 °C.
Vapour pressure: n.a.
Viscosity: n.a.
Solubility in water: 17.1 ml/l a 0 °C.
PH-value: Neutral.
Flash point: None flammable.
Ignition temperature: None flammable.
Explosive properties: None flammable.
Change of condition: -none-

Other data: None flammable

X. Stability and Reactivity

Conditions to avoid: Avoid exposure of compressed gas cylinders to increased heat.

Materials to avoid: n.a.

Hazardous decomposition products: n.a.

XI. Toxicological Information

Asphyxiant in high concentrations.

In pure INERGEN - atmosphere exists the danger of suffocation (oxygen displacement).

XII. Ecological Information

Degradability: n.a.
Environmental impact rating: -none-
Acute aquatic toxicity: n.a.
Other indications: -none-

XIII. Disposal Considerations

Product: -none-

XIV. Transport Information

Country transportation: ADR/RID 1956 only named as compressed gas, contains nitrogen, carbondioxid class 2, number 1A
Inland navigation: ADNR.Class 2, number 12
Maritime shipping: IMDG/GGVSea-class 2, UN-Nr.: 1956, page 2124
Aviation: ICAO/IATA-class 2.2
UN-Nr.: 1956, page 220, compressed gases

XV. Regulatory Information

EEC-Labeling

Symbols: n.a.
R-phrases n.a.
S-phrases: n.a.
Other information: Identification of the compressed gas cylinder in conformity with the shipping instructions and ISO 7225

XVI. Other information

For application in fire extinguishing systems, the INERGEN quality is mainly designed to create oxygen concentrations between 10 and 15 Vol. % and CO2 concentrations between 2 and 5 Vol. % in the flooded area. There are no hazards known for the healthy human during short exposure in this atmosphere. However combustion products from the fire itself could be highly toxic, therefore people shall always leave the room when it is flooded with INERGEN.