

Nitrous Oxide , technical liquid in tanker

SAP No.: 9331
E 942, F O O D G A S E S

CAS-Number 10024-97-2

Characterization acc. ADR UN 2201, Nitrous Oxide, REFRIGERATED LIQUID,
2.2 (5.1) Class 2, 30

Essential properties

Colourless, odorless, oxidizing, narcotic gas, liquified, heavier than air

Symbols of Risks oxidizing, gas

Physical Properties

molecular weight: 44,013 kg/kmol
gas density at 0°C and 1,013 bar: 1,9781 kg/m³
density ratio to air: 1,5299
vapour pressure at 20°C: 50,599 bar

For additional safety information see Material-/safety data sheet No. *-N2O-093A

Composition

N₂O > 99 Vol.-%

Impurities

H₂O < 0,05 Vol.%

CO < 30 ppmv

NO_x < 10 ppmv

Remarks Nitrous oxide is approved as a foodstuff by EU. Time of use 3 years

Description

Colourless, oxidizing, liquified gas slightly sweet taste and pleasant smell. In a mixture with air-Oxygen intoxicant and narcotic. Forms explosive mixtures with hydrocarbons, ammonia, carbon monoxide, carbon disulphide, fluorine, phosphine, sulphur dioxide, hydrogen sulphide. No contact to oil, grease, glycerine, carbon and flammable organic substances!

Safety data

TLV 100 ml/m³, (recommendation)

Materials

Pressure Vessels and Valves: any usual materials
danger of stress corrosion cracking caused by humidity at brass
or copper(-alloys). Keep fittings and pipes free from oil and grease!
Seals: PTFE, PCTFE
Time of use 3 years