

SCOTT SPECIALTY GASES -- CALIBRATING GASES, MIXTURE VARIOUS COMPONENTEN --
6830-00-498-4241

===== Product Identification =====

Product ID:CALIBRATING GASES, MIXTURE VARIOUS COMPONENTEN

MSDS Date:01/01/1987

FSC:6830

NIIN:00-498-4241

MSDS Number: BGTGV

=== Responsible Party ===

Company Name:SCOTT SPECIALTY GASES

Address:ROUTE 611 NORTH

Box:D-11

City:PLUMSTEADVILLE

State:PA

ZIP:18949

Country:US

Info Phone

Num:215-766-8861;313-589-2950 (MI)

Emergency Phone Num:215-766-8861

Preparer's Name:RECORD DEVELOPED FROM 4

CAGE:51847

=== Contractor Identification ===

Company Name:SCOTT SPECIALTY GASES

Address:6141 EASTON RD (6141 ROUTE 611)

Box:310

City:PLUMSTEADVILLE

State:PA

ZIP:18934

Country:US

Phone:215-766-8861/ FAX: 215-766-0416

CAGE:51847

===== Composition/Information on Ingredients =====

Ingred Name:CARBON DIOXIDE

CAS:124-38-9

RTECS #:FF6400000

Fraction by Wt: 1.3%

OSHA PEL:5000

PPM
ACGIH TLV:5000PPM/30000STEL;93

Ingred Name:HYDROGEN
CAS:1333-74-0
RTECS #:MW8900000
Fraction by Wt: 1.1%
OSHA PEL:ASPHYXIAN
ACGIH TLV:ASPHYXIAN

Ingred Name:OXYGEN
CAS:7782-44-7
RTECS #:RS2060000
Fraction by Wt: 21%

Ingred Name:NITROGEN
CAS:7727-37-9
RTECS #:QW9700000
Fraction by Wt: 76%
ACGIH TLV:ASPHYXIAN; 9192

Ingred Name:TRACE AMTS OF: CARBON MONOXIDE 45 PPM;
DICHLORODIFLUOROMETHANE 65 PPM; DICHLOROTETRAFLOROETHANE 65 PPM!

Ingred Name:DICHLOROTETRAFLUROETHANE (SARA III)
CAS:
76-14-2
RTECS #:KI1101000
Fraction by Wt: 60-70%*
Other REC Limits:NONE SPECIFIED
OSHA PEL:1000 PPM
ACGIH TLV:1000 PPM; 9192
Ozone Depleting Chemical:1

Ingred Name:NITROGEN
CAS:7727-37-9
RTECS #:QW9700000
Fraction by Wt: BALANCE
Other REC Limits:NONE SPECIFIED
ACGIH TLV:ASPHYXIAN; 9192

===== Hazards Identification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO

IARC:NO OSHA:NO

Health Hazards Acute and Chronic:MIXTURE ACTS AS SIMPLE ASPHYXIANT, CONTACT WITH LIQUID CAN CAUSE FROSTBITE. BREATHING HIGH PRESSURE OXYGEN MAY CAUSE CENTRAL NERVOUS SYSTEM DISTURBANCES.

Explanation of Carcinogenicity:NONE OF THE GASES IN THIS MIXTURE ARE CURRENTLY LISTED AS CARCINOGENIC BY OSHA, NTP OR IARC.

Effects of Overexposure:RAPID RESPIRATION, MUSCULAR INCOORDINATION, FATIGUE, NAUSEA AND VOMITING, UNCONSCIOUSNESS, LIGHTHEADEDNESS, GIDDINESS, CARDIA

C ARRHYTHMIAS, DISORIENTATION, SKIN CONTACT MAY

CAUSE FROSTBITE, HEADACHE, VISUAL/HEARING DISTURBANCES, SEIZURES.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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===== First Aid Measures =====

First Aid:REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. IN CASE OF CONTACT WITH LIQUID, REMOVE VICTIM FROM SOURCE OF CONTACT. FLUSH AFFECTED AREA WITH LOTS OF TEPID WATER. DO NOT APPLY DIRECT HEAT. DO NOT RUB FROZEN AREA.

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===== Fire Fighting Measures =====

Flash Point:NONE

Lower Limits:4% (H2)

Upper Limits:75% (H2)

Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, HALOGENATED GAS

Fire Fighting Procedures:DO NOT EXTINGUISH UNLESS FLOW OF GAS CAN BE STOPPED AT SOURCE. KEEP FIRE-EXPOSED CYLINDERS COOL WITH WATER SPRAY. WEAR SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:

HIGH OXIDIZING ATMOSPHERE INCREASES

CHANCE OF FIRES. FLASH DANGER IS PRESENT. CYLINDERS MAY RUPTURE. TOXIC FUMES MAY BE EMITTED DURING COMBUSTION.

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===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE AND VENTILATE AREA. SHUT OFF SOURCE OF SPILL. REMOVE SOURCES OF HEAT AND IGNITION, AND IF POSSIBLE, COMBUSTIBLES.

Neutralizing Agent:NONE

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===== Handling and Storage =====

Handling and Storage P

recautions:STORE IN WELL-VENTILATED AREAS ONLY.

KEEP VALVE PROTECTION CAP ON CYLINDERS WHEN NOT IN USE AND SECURE CYLINDER WHEN USING TO PROTECT FROM FALLING.

Other Precautions:USE SUITABLE HANDTRUCK TO MOVE CYLINDERS. BE SURE CYLINDER IS A CLOSED PRESSURIZED CYLINDER.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE A SELF-CONTAINED BREATHING APPARATUS IN CASE OF EMERGENCY.

Ventilation:PROVIDE ADEQUATE LOCAL EXHAUST VENTILATION TO MAINTAIN

CONCENTRATION BELOW EXPOSURE LIMITS.

Protective Gloves:RUBBER

Eye Protection:SAFETY GOGGLES

Other Protective Equipment:SAFETY SHOES, EYEWASH, EMERGENCY SHOWER.

Work Hygienic Practices:PROTECT CONTAINERS FROM PHYSICAL DAMAGE. DO NOT DEFACE CYLINDERS OR LABELS.

Supplemental Safety and Health

CYLINDERS SHOULD BE REFILLED BY QUALIFIED PRODUCERS OF COMPRESSED GASES. SHIPMENT OF A COMPRESSED GAS CYLINDER WHICH HAS NOT BEEN FILLED BY THE OWNER OR WITH HIS WRITTEN CONSENT IS A V

IOLATION OF

FEDE RAL LAW.

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===== Physical/Chemical Properties =====

HCC:G4

Boiling Pt:B.P. Text:GAS

Vapor Pres:GAS

Evaporation Rate & Reference:GAS

Solubility in Water:SLIGHT

Appearance and Odor:CLEAR, COLORLESS GAS MIXTURE, SLIGHT ETHERAL ODOR FROM DICHLORODIFLUOROMETHANE

Percent Volatiles by Volume:100 %

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===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ALKALI OR ALKALINE EARTH METALS, OXIDI

ZINC AGENTS, PHOSPHINE,
HYDRAZINE, ETHERS, ALCOHOLS, HYDROGEN SULFIDE, HYDROCARBON
Stability Condition to Avoid: EXTREME TEMPERATURES, PHYSICAL DAMAGE
Hazardous Decomposition Products: HYDROCHLORIC ACID, HYDROFLUORIC ACID,
TOXIC FUMES OF PHOSGENE & FLUORIDE, HALOGENS, CARBONYL HALIDES.

===== Disposal Considerations =====

Waste Disposal Methods: RETURN CYLINDERS TO SUPPLIER FOR PROPER DISPOSAL
WITH ANY VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTI
ON
CAP IN PLACE.

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