

AGA GAS INC SPECIALTY GAS DIV -- HYDROGEN SULFIDE IN NITROGEN 0.1 PPM TO 5% --
6830-01-331-9024

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

Product ID:HYDROGEN SULFIDE IN NITROGEN 0.1 PPM TO 5%

MSDS Date:09/28/1998

FSC:6830

NIIN:01-331-9024

MSDS Number: CKWTF

=== Responsible Party ===

Company Name:AGA GAS INC SPECIALTY GAS DIV

Address:6421 MONCLOVA RD

City:MAUMEE

State:OH

ZIP:43537

Country:US

Info Phone Nu

m:419-893-7226

Emergency Phone Num:419-893-7226

Resp. Party Other MSDS Num.:2100

CAGE:0FUP3

=== Contractor Identification ===

Company Name:AGA GAS INC

Address:6055 ROCKSIDE WOODS BLVD

Box:94737

City:CLEVELAND

State:OH

ZIP:44131-2329

Country:US

Phone:216-642-6652

Contract Num:SP0450-01-M-D432

CAGE:1E6A1

Company Name:AGA GAS INC

Address:6055 ROCKSIDE WOODS BLVD

Box:94737

City:CLEVELAND

State:OH

ZIP:44131-2329

Country:US

Phone:216-642-6652

Contract Num:SP0450-01-M-ZA10

CAGE:1E6A1

Company Name:AGA G

AS INC
Address:6055 ROCKSIDE WOODS BLVD
Box:94737
City:CLEVELAND
State:OH
ZIP:44131-2329
Country:US
Phone:216-642-6652
Contract Num:SP0450-99-M-JN77
CAGE:1E6A1
Company Name:AGA GAS INC SPECIALTY GAS DIV
Address:6421 MONCLOVA RD
Box:City:MAUMEE
State:OH
ZIP:43537
Country:US
Phone:419-893-7226
Contract Num:SPO450-01-M-D449
CAGE:0FUP3

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

Ingred Name:HYDROGEN SULFIDE (SARA 302/313) (CERCLA)
CAS:7783-06-4
RTECS #:MX1225000
Fraction b

y Wt: 700 PPM HAVE BEEN FATAL. NITROGEN IS A
SIMPLE ASPHYXIANT.

Explanation of Carcinogenicity:NO DATA PROVIDED BY MANUFACTURER.

Effects of Overexposure:EYES: IRRITATION, CONJUNCTIVITIS, PHOTO PHOBIA,
CORNEAL BULLAC, TEARING, PAIN, BLURRED VISION. SKIN: IRRITATION.
INHALATION: IRRITATION OF MUCOUS MEMBRANES, HEADACHE, DIZZINESS,
NAUSEA, OLFACTORY FATI GUE, PARALYSIS OF SMELL, RESPIRATORY ARREST,
COMA, TRACT IRRITATION, DIZZINESS, HEADACHE , NAUSEA, ASPHYXIATION.
HIGHER

CONCENTRATIONS OF HYDROGEN SULFIDE GAS (200-300 PPM) MAY
RESULT IN RESPIRATORY A RREST LEADING TO COMA OR UNCONSCIOUSNESS.
EXPOSURE TO MORE THAN 30 MINUTES AT CONCENTRATIOINS GREATER THAN
700 PPM HAVE BEEN FATAL.

Medical Cond Aggravated by Exposure:BLOOD DISORDERS.

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

First Aid:EYES: IMMEDIATELY FLUSH WITH LOW PRESSURE, COOL WATER FOR AT
LEAST 15 MINUTES, OPENING EYELIDS. GET IMMEDIATE MEDICAL ATTENTION.
SKIN

: FLUSH AFFECTED AREA WITH COPIOUS QUANTITIES OF WATER. REMOVE CONTAMINATED CLOTHING AS RAPIDLY AS POSSIBLE. SEEK IMMEDIATE MEDICAL ATTENTION. INGESTION: TREAT IN A MANNER SIMILAR TO INHALATION EXPOSURE. SEEK MEDICAL ATTENTION AS SOON AS POSSIBLE. INHALATION: RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SCBA. QUICKLY REMOVE PERSON FROM EXPOSURE. IF UNCONSCIOUS, GIVE ARTIFICIAL RESPIRATION & SUPPLEMENTAL OXYGEN. GET IMMEDIATE MEDICAL CARE.

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

Flash Point:N/A-GAS
Lower Limits:4.0% H₂S
Upper Limits:44.0% H₂S
Extinguishing Media:USE WATER, CARBON DIOXIDE, DRY CHEMICALS.
Fire Fighting Procedures:IF POSSIBLE, STOP FLOW OF GAS. USE WATER SPRAY TO COOL SURROUNDING CONTAINERS.
Unusual Fire/Explosion Hazard:HYDROGEN SULFIDE IS FLAMMABLE IN AIR OVER A WIDE RANGE. ELIMINATE ALL SOURCES OF IGNITION. INCREASE VENTILATION TO PREVENT AN EXPLOSION HAZARD. KEEP APPARATUS AWAY FROM AREAS WHERE FLAMMABLE GAS MAY ACCUMULATE.

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

Spill Release Procedures:EVACUATE PERSONNEL FROM AREA. USE APPROPRIATE EQUIPMENT. STOP FLOW OF GAS USING A VALVE FROM REMOTE LOCATION IF POSSIBLE. EXTINGUISH ALL IGNITION SOURCES. VENTILATE AREA TO PREVENT BUILD-UP OF TOXIC OR FLAMMABLE/EXPLOSIVE ATMOSPHERES. ALL ELECTRICAL EQUIPMENT MUST BE EXPLOSION-PROOF IF USED TO VENTILATE SPILL AREA. KEEP NON-ESSENTIAL PERSONNEL AWAY AT ALL TIMES.
Neutralizing Agent:NO DATA PROVIDED BY MANUFACTURER.

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

Handling and Storage Precautions:PROTECT CYLINDERS FROM DAMAGE. STORE IN COOL (NOT TO EXCEED 125°F TEMPERATURE), DRY, WELL VENTILATED AREA AWAY FROM HEAVILY TRAFFICKED AREAS AND EMERGENCY EXITS. STORE CYLINDERS UPRIGHT, FIRMLY SECURED. USE "FIRST IN, FIRST OUT" INVENTORY TO PREVENT FULL CYLINDERS BEING STORED FOR EXCESSIVE TIME.
Other Precautions:

ons:KEEP VALVE CAPS IN PLACE UNLESS CONTAINER IS SECURED
AND VALVE CONNECTED TO USE POINT. CLOSE VALVE AFTER EACH USE AND
WHEN EMPTY. DO NOT DRAG, SLIDE, ROLL CYLINDERS. USE HAND TRUCK.
USE REDUCING REGU LATOR WHEN CONNECTING TO SYSTEMS. DO NOT USE GAS
DIRECTLY FROM CYLINDER OR HEAT CONTAINER TO INCREAS E DISCHARGE
RATE.

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

Respiratory Protection:A TYPE C RESPIRATOR WITH FULL FACE PIECE
EQUIPPED WITH AN ES

CAPE BOTTLE OR A SELF- CONTAINED BREATHING
APPARATUS SHOULD BE AVAILABLE FOR EMERGENCY USE OR WHEN
CONCENTRATIONS EXCEED EXPOSURE LIMITS.

Ventilation:USE LOCAL EXHAUST TO REDUCE CONCENTRATIONS TO WITHIN
EXPOSURE LEVELS. A LABORATORY TYPE HOOD IS SUITABLE FOR HANDLING
SMALL OR LIMITED QUANTITIES.

Protective Gloves:PROTECTIVE GLOVES: NEOPRENE, BUTYL RUBBER, PVC,
POLYEHTYLENE.

Eye Protection:SAFETY GLASSES OR GOGGLES.

Other Protective Equipment:SAFETY SHOES, SAFETY SHOWER, EYEWAS
H

FOUNTAIN.

Work Hygienic Practices:NO DATA PROVIDED BY MANUFACTURER.

Supplemental Safety and Health

THIS PRODUCT FOR NSN 6830-01-331=9024 CONTAINS BETWEEN 9.0 PPM AND 11.0
PPM OF HYDROGEN SULFIDE IN NITROGEN AND IS THEREFORE A NONFLAMMABLE
MIXTURE (LESS THAN 4.0% HYDROGEN SULFIDE).

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

HCC:G3

Solubility in Water:SLIGHT

Appearance and Odor:A COLORLESS GAS OR LIQUID. ROTTEN EGG ODOR.

===== Stability and R
eactivity Data =====

Stability Indicator/Materials to Avoid:YES

MANY METALS CORRODE RAPIDLY IF EXPOSED TO HYDROGEN SULFIDE IN A WET
ATMOSPHERE. AVOID USING HARD OR HIGHLY STRESSED STEELS WHICH MAY BE
SUSCEPTIBLE TO HYDROGEN EMBRITTLEMENT FROM H₂S.. AVOID COPPER AND
COPPER BASED MATERIAL

Stability Condition to Avoid:HEAT, SPARKS, OPEN FLAMES AND OTHER
IGNITION SOURCES.

Hazardous Decomposition Products:OXIDES OF SULFUR.

Conditions to Avoid Polymerization:WILL NOT OCCU

R.

===== Toxicological Information =====

Toxicological Information:HYDROGEN SULFIDE SHOULD BE REGARDED AS HIGHLY TOXIC. TOXICOLOGICALLY, IT REACTS WITH ENZYMES IN THE BLOODSTREAM AND INHIBITS CELLULAR RESPIRATION RESULTING IN PULMONARY PARALYSIS, SUDDEN COLLAPSE AND DEATH. THIS EFFECTS OVERSHADOWS THE IRRITANT PROPERTIES. OLFACTORY FATIGUE OR PARALYSIS OF SMELL IS ALSO POSSIBLE THUS DETECTION OF HYDROGEN SULFIDE BY ITS ODOR IS NOT POSSIBLE.

NITROGEN IS CONSIDERED A SIMPLE ASPHYXIAN. THE MAJOR HAZARD FROM EXPOSURE IS THE EXCLUSION OF AN ADEQUATE SUPPLY OF OXYGEN TO THE LUNGS.

===== Ecological Information =====

Ecological:THIS PRODUCT DOES NOT CONTAIN ANY INGREDIENTS WHICH ARE REGULATED ON THE US EPA LIST OF TOXIC CHEMICALS (40 CFR 372) AND IS THEREFORE NOT SUBJECT TO RELEASE REPORTING UNDER SECTION 313 OF EPCRA/SARA TITLE III.

===== Disposal Considerations

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Waste Disposal Methods:DO NOT ATTEMPT TO DISPOSE OF WASTE OR UNUSED QUANTITIES. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED, WITH VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE TO MANUFACTURER FOR PROPER DISPOSAL. DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:H₂S < 4%: PROPER SHIPPING NAME: COMPRESSED GAS.

N.O.S.. (HYDROGEN SULFIDE, NITROGEN); HAZARD CLASS: 2.2; UN 1958; DOT SHIPPING LABEL: NONFLAMMABLE GAS. H₂S > 4%: PROPER SHIPPING NAME: COMPRESSED GAS, FLAMMABLE, N.O.S.. (HYDROGEN SULFIDE, NITROGEN); HAZARDOUS CLASS: 2.1; UN 1954; DOT SHIPPING LABEL: FLAMMABLE GAS. DLA-HMIS NOTE: THIS NSN 6830-01-331-9024 IS FOR PRODUCT CONTAINING BETWEEN 9 PPM AND 11 PPM OF HYDROGEN SULFIDE IN NITROGEN AND THEREFORE IS NONFLAMMABLE GAS.

===== Regulatory Informa

tion =====

SARA Title III Information:SARA TITLE I I I - HAZARD CLASSES: ACUTE HEALTH HAZARD; CHRONIC HEALTH HAZARD; FIRE HAZARD; SUDDEN RELEASE OF PRESSURE HAZARD. THIS PRODUCT DOES NOT CONTAIN ANY INGREDIENTS WHICH ARE REGULATED ON THE U.S. EPA LIST OF TOXIC CHEMICALS (40 CFR 372). AND IS THEREFORE NOT SUBJECT TO RELEASE REPORTING UNDER SECTION 313 OF EPCRA/SARA TITLE I I I.

Federal Regulatory Information:NO DATA PROVIDED BY MANUFACTURER
State Regulatory Information:NO DATA PROVIDED BY MANUFACTURER.

===== Other Information =====

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