

ENGELHARD CORP SPECIALTY CHEMCALS DIV -- 30673 CALIBRATING GAS -- 6830-00-203-1492

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

Product ID:30673 CALIBRATING GAS

MSDS Date:07/21/1993

FSC:6830

NIIN:00-203-1492

MSDS Number: BRFML

==== Responsible Party ===

Company Name:ENGELHARD CORP SPECIALTY CHEMCALS DIV

Address:2655 US RT #22

City:UNION

State:NJ

ZIP:07083-8505

Country:US

Info Phone Num:908-205-2700

Emergency

Phone Num:908-205-2700

Preparer's Name:HMIS

CAGE:23016

==== Contractor Identification ===

Company Name:ENGELHARD CORP SPECIALTY CHEMCALS DIV

Address:2655 US RT #22

Box:City:UNION

State:NJ

ZIP:07083-8505

Country:US

Phone:908-205-2700

CAGE:23016

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

Ingred Name:HYDROGEN

CAS:1333-74-0

RTECS #:MW8900000

Fraction by Wt: 2.4-2.6%

Other REC Limits:NONE RECOMMENDED

Ingred Name:OXYGEN 20.3-20.7%

CAS:7782-44-7

RTECS #:RS2060000

Fraction

by Wt: >20.3%

Other REC Limits: NONE RECOMMENDED

Ingred Name: NITROGEN 76.03-76.07%.

CAS: 7727-37-9

RTECS #: QW9700000

Fraction by Wt: >76.03%

Other REC Limits: NONE RECOMMENDED

ACGIH TLV: ASPHYXIANT; 9293

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

LD50 LC50 Mixture: LD50 (ORAL RAT) IS NOT APPLICABLE.

Routes of Entry: Inhalation: YES Skin: NO Ingestion: NO

Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO

Health Hazards Acute and Chronic: ACUTE: NONE AT ATMOSPHERIC PRESSURE.

CHRONIC: NONE.

Explanation of Carcinogenicity: NONE OF THE COMPOUNDS IN THIS PRODUCT IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

Effects of Overexposure: NONE

Medical Cond Aggravated by Exposure: NONE

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

First Aid: NOT APPLICABLE.

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

Extinguishing Media: USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL AS APPROPRIATE FOR SURROUNDINGS. MATERIAL IS NOT

FLAMMABLE.

Fire Fighting Procedures: WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard: CYLINDER MAY EXPLODE IN FIRE. COMBUSTION MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS. CONTAINS HYDROGEN BELOW ITS LOWER EXPLOSIVE LIMIT.

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

Spill Release Procedures: EVACU

ATE ALL PERSONNEL FROM RELEASE AREA.

Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:PROTECT CYLINDERS FROM PHYSICAL DAMAGE. STORE AWAY FROM EXTREME HEAT AND IGNITION SOURCES. KEEP CYLINDER VALVES CLOSED WHEN NOT IN USE AND WHEN EMPTY.

Other Precautions:DO NOT DEFACE CYLINDERS OR LABELS. HANDLE CYLINDERS WITH PROPER CAUTION. AVOID USE OF OIL IN HIGH PRESSURE SYSTEMS. USE PRESSURE REDUCING REGULATORS. RETURN TO MANUFACTURER OR DISTRIBUTOR FOR REFILLING. SEGREGATE FULL AND EMPTY CYLINDERS.

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

Protective Gloves:WORK GLOVES FOR HANDLING CYLINDERS.

Eye Protection:APPROVED SAFETY GLASSES

Other Protective Equipment:SAFETY SHOES AND HEARING PROTECTION.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. USE PROPER CARE WHEN HANDLING AND STORING CYLINDERS.

Supplemental Safety and Health

MSDS NOT AVAILABLE FROM MFR AND WAS GENERATED BY HMIS. SECURE CYLINDERS AT ALL TIMES. NEVER USE DIRECT FLAME TO HEAT CONTENTS. CONTAINS HYDROGEN AT CONCENTRATION BELOW LEL. COMPOSITION COMES FROM DLSC TIR.

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

HCC:G3

Appearance and Odor:GAS MIXTURE IS ODORLESS AND COLORLESS

Percent Volatiles by Volume:100

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

Stability Indicator/Materials

to Avoid:YES

AVOID USE OF OIL IN CYLINDER SYSTEMS, AVOID OXIDIZING MATERIALS. SOME STEELS SUSCEPTIBLE TO HYDROGEN ATTACK.

Stability Condition to Avoid:HIGH HEAT WHICH WOULD CAUSE EXCESSIVE PRESSURE IN GAS CYLINDER. AVOID FLAMES, SPARKS OR OTHER IGNITION SOURCES.

Hazardous Decomposition Products:NONE

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

Waste Disposal Methods:MOVE LEAKY CYLINDER TO OUTDOORS OR INTO VENTILATED HOOD. ALLOW GAS TO DISCHARGE AT MODERATE

E RATE. REMOVE

ALL FLAMMABLE MATERIALS FROM VICINITY. DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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