SDS

SAFETY DATA SHEET

Oakwood Products, Inc 730 Columbia HWY N Estill, SC 29918

www.oakwoodchemical.com

Phone Numbers:

Product Information 803-739-8800 Transportation Emergency 800-451-8346 Outside the USA 760-602-8700

MATERIAL IDENTIFICATION

NAME: Hydrogen CAS#: [1333-74-0] CAT#: 101507 For R&D use only.

HAZARDS IDENTIFICATION

GHS Classification

Flammable gases (Category 1)

Gases under pressure (Compressed gas)

GHS Label elements, including precautionary statements

Pictograms



Signal Word Danger

Hazard Statement(s)

H220 Extremely flammable gas

H280 Contains gas under pressure; may explode if heated

Precautionary Statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. — No

smoking.

P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381 Eliminate all ignition sources if safe to do so.

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

COMPOSITION/INFORMATION ON INGREDIENTS

Formula : H2 Molecular Weight : 2.02

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CAS	Description	Concentration
1333-74-0	Hydrogen	99.99%

FIRST AID MEASURES

In case of eye contact

Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

In case of skin contact

Wash thoroughly with soap and plenty of water. Seek medical attention.

If inhaled

Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

If swallowed

Do not induce vomiting. Give water to victim to drink. Seek medical attention.

FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards/decomposition of product

emits toxic fumes under fire conditions.

ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

Environmental precautions

Prevent further leakage if safe to do so.

Methods and materials for containment and clean up

Absorb spills on sand or vermiculite and place in closed container for disposal.

HANDLING AND STORAGE

Precautions for safe handling

Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.

Precautions for safe storage

Keep container tightly closed. Store in a cool, dry, well-ventilated area.

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EXPOSURE CONTROL/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Eye/face protection

Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand/skin protection

Avoid all direct contact with product.

Wear chemical-resistant gloves.

Wear protective clothing and boots.

After contact with skin, wash immediately.

Respiratory protection

Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance Gas

Odour no data available Odour Threshold no data available Melting point/Freezing Point no data available **Boiling Point** no data available Flash Point <-150°C-closed cup **Evaporation Rate** no data available Flammability (solid, gas) no data available Upper/Lower Flammability or Explosive limits no data available Vapour pressure no data available Relative Density no data available Solubility(ies) no data available Partition coefficient: n-octanol/water no data available Auto-ignition temperature no data available no data available Decomposition temperature Viscosity no data available Refractive Index no data available

STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

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Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

May evolve

TOXICOLOGICAL INFORMATION

Acute toxicity Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

Exposure Routes

Signs and Symptoms of Exposure

Simple Asphyxiant

Additional Information

RTECS: MW8900000

To the best of our knowledge, the health hazards of this material have not been fully investigated.

ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

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Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

DISPOSAL CONSIDERATIONS

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

TRANSPORT INFORMATION

DOT

Hydrogen, compressed 2.1 UN1049

IMDG

Hydrogen, compressed 2.1 UN1049 EMS-No: F-D, S-U

IATA

Hydrogen, compressed 2.1 UN1049

IATA Passenger: Forbidden for transport

REGULATORY INFORMATION

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

New Jersey Right to Know Components

This product contains a chemical on the New Jersey Right to Know Components List.

CAS

Hydrogen 1333-74-0

California Prop. 65 Components

This product does not contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

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OTHER INFORMATION

Version: 1.0

Revision Date: 2/6/2017

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.

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