SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**DIHYDROGEN MONOXIDE (DHMO)**

Synonyms: Dihydrogen Oxide, Hydrogen Hydroxide, Hydronium Hydroxide, Hydric Acid

SECTION 2 - HAZARDS INDENTIFICATION

Prolonged exposure to solid causes severe tissue damage. Gaseous form can cause severe burns. Accidental inhalation even in small quantities can cause death.

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component Name** | **CAS**  **Number** | **Formula** | **Formula weight** | **Concentration** |
| Hydrogen  Oxygen | 1333-74-0  7782-44-7 | H2  O2 | 2.01588  15.9994 | 67%  33% |

SECTION 4 - FIRST AID MEASURES

Eyes: In case of contact if irritation occurs flush with normal saline solution. Seek medical attention if condition persists.

Ingestion: if swallowed, do not induce vomiting.

Inhalation: In case of excessive respiratory exposure to liquid, remove to fresh air, apply artificial respiration and/or CPR if patient is not breathing spontaneously and/or has no detectible pulse.

Skin: In case of contact, remove excess with soft absorbent material. Contaminated clothing should be removed and dried before reuse. Keep exposed persons warm if chilled. May cause discomfort depending on temperature.

SECTION 5 - FIRE FIGHTING MEASURES

Will not burn.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Contain release as much as possible. Divert to proper disposal areas whenever possible

SECTION 7 - HANDLING AND STORAGE

Keep container tightly closed. Suitable for any general chemical storage area. Dihydrogen monoxide is considered a non-regulated product, but reacts vigorously with some materials. These include sodium, potassium and other alkali metals; elemental fluoride; and strong dehydrating agents such as sulfuric acid. It forms explosive gases with calcium carbide. Avoid contact with all materials until investigation shows substance is compatible. Expands significantly upon freezing. Do not store in rigid container and protect from freezing.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Local Exhaust: Maintain ventilation sufficient to reduce the level of hazardous ingredient(s) below the stated concentration levels.

Personal Protective Equipment:

Eyes: Wear safety glasses or goggles. Air tight goggles may be needed in some circumstances. Contact lenses should NEVER be worn when working with this or any chemical.

Hands: Depending on circumstances and possible dissolved or suspended contaminants, wear gloves, non-permeable to product. Gloves are recommended where prolonged or repeated exposure is anticipation to avoid reported wrinkling of the skin.

Respiratory: Do not inhale liquid or high temperature vapors.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

|  |  |
| --- | --- |
| Colorless odorless liquid | Boiling point: 100° C (212° F)  Melting point: 0° C (32° F)  Vapor Pressure: 23.769 mm Hg  pH: 7.00  Specific gravity: 1.000  Vapor density: <1 |

SECTION 10 - STABILITY AND REACTIVITY

Generally considered stable. Avoid all drying agents such as Sulfuric acid, and most concentrated (dry) active chemicals such as caustic soda and active metals such as Sodium and Potassium. May cause corrosion of ferrous alloys, avoid contact with electrical equipment.

SECTION 11 - TOXICOLOGY INFORMATOIN

Eyes: May be an irritant to eyes

Skin: Has been known to cause temporary wrinkling of skin.

Other: Inhalation of liquid can cause serious discomfort, possible tissue damage and is often fatal.

SECTION 12 - ECOLOGICAL INFORMATON

Does not decompose.

SECTION 13 - DISPOSCAL CONSIDERATOINS

Dispose in accordance with all applicable federal, state and local environmental regulations.

SECTION 14 - TRANSPORT INFORMATON

Not regulated.

SECTION 15 - REGULATORY INFORMATION

Not regulated.

SECTION 16 - OTHER INFORMATION

The above information is accurate to the best of our knowledge. However, since data safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, there is no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaimer of all liability for reliance thereon is hereby given. User should satisfy himself that he as al current data relevant to his particular use.

SECTION 17 – SOURCE INFORMATION

Dihydrogen Monoxide Research Division – dihydrogen monoxide info. (2018). Retrieved from http://www.dhmo.org