



Safety Data Sheet

Spartan Chemical Company, Inc.

Revision Date: 24-Mar-2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: H2-D2
Product Number: 2485
Recommended Use: Cleaning agent
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier: Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

24 Hour Emergency Phone Numbers:

Medical Emergency/Information: 888-314-6171
Transportation/Spill/Leak: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification

Acute Toxicity - Oral: Category 4
Acute toxicity - Inhalation (Vapors): Category 4
Skin Corrosion/Irritation: Category 1 Sub-category B
Serious Eye Damage/Eye Irritation: Category 1
Corrosive to Metals: Category 1

GHS Label Elements

Signal Word:

Symbols:

Danger



Hazard Statements:

Harmful if swallowed.
Harmful if inhaled.
Causes severe skin burns and serious eye damage.
May be corrosive to metals.

Precautionary Statements:

Prevention:

Wash hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area.
Do not breathe mist, vapors or spray.
Wear protective gloves. Wear eye / face protection. Wear protective clothing.
Keep in original or other corrosion resistant container.

Response:

-Eyes

IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

-Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.

-Inhalation:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
-Ingestion:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
-Specific Treatment:	See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.
Spill:	Absorb spillage to prevent material damage.
Storage:	Store locked up. Store in corrosion resistant container.
Disposal:	Dispose of contents and container in accordance with local, state and federal regulations.
Hazards Not Otherwise Classified:	Not Applicable
Other Information:	<ul style="list-style-type: none"> • Corrosive. • Harmful contact may not cause immediate pain. • Inhalation of vapors or mist may cause respiratory irritation or damage. • Take off and destroy contaminated shoes. • Harmful if absorbed through skin. • Keep out of reach of children. • NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
water	7732-18-5	40-70
2-butoxyethanol	111-76-2	10-30
sodium xylene sulfonate	1300-72-7	3-7
tetrapotassium pyrophosphate	7320-34-5	1-5
potassium hydroxide	1310-58-3	1-5
alcohol ethoxylate	68439-46-3	1-5
phosphate ester	68130-47-2	1-5
sodium nitrite	7632-00-0	1-5

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

-Eye Contact:	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
-Skin Contact:	Take off immediately all contaminated clothing and shoes. Rinse with water or shower for at least 15 minutes. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Wash contaminated clothing before reuse. Discard or destroy contaminated shoes.
-Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
-Ingestion:	Rinse mouth. Do NOT induce vomiting. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Never give anything by mouth to an unconscious person.
Note to Physicians:	NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire
Specific Hazards Arising from the Chemical:	Dried product is capable of burning. Combustion products are toxic.
Hazardous Combustion Products:	May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.
Protective Equipment and Precautions for Firefighters:	Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
Environmental Precautions: Do not rinse spill onto the ground, into storm sewers or bodies of water.
Methods for Clean-Up: Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

7. HANDLING AND STORAGE

Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.
Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
2-butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
potassium hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

Engineering Controls: Provide good general ventilation.
 If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.
 Eye wash stations and shower facilities should be readily accessible in areas where the product is handled.

Personal Protective Equipment

Eye/Face Protection: Wear splash goggles. For severe use-conditions, wear a face shield over the goggles.
Skin and Body Protection: Wear rubber or other chemical-resistant gloves. Use of impervious apron, boots and other protective equipment should be considered in order to prevent or minimize contact with this product.

Respiratory Protection: Not required with expected use.
 If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.

General Hygiene Considerations: Wash hands and any exposed skin thoroughly after handling.
 See 29 CFR 1910.132-138 for further guidance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State:	Liquid
Color:	Orange
Odor:	Mild
pH:	13.5-14.0
Melting Point / Freezing Point:	No information available.
Boiling Point / Boiling Range:	100 °C / 212 °F
Flash Point:	> 100 °C / > 212 °F ASTM D56
Evaporation Rate:	< 1 (Butyl acetate = 1)
Flammability (solid, gas)	No information available.
Upper Flammability Limit:	No information available.
Lower Flammability Limit:	No information available.
Vapor Pressure:	No information available.
Vapor Density:	No information available.
Specific Gravity:	1.07
Solubility(ies):	Soluble in water
Partition Coefficient:	No information available.
Autoignition Temperature:	No information available.
Decomposition Temperature:	No information available.
Viscosity:	No information available.

10. STABILITY AND REACTIVITY

Reactivity:	This material is considered to be non-reactive under normal conditions of use.
Chemical Stability:	Stable under normal conditions.
Possibility of Hazardous Reactions:	Contact with aluminum or other reactive metals may release hydrogen gas.
Conditions to Avoid:	Extremes of temperature and direct sunlight.
Incompatible Materials:	Strong oxidizing agents. Strong acids.
Hazardous Decomposition Products:	May include carbon monoxide, carbon dioxide (CO ₂) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Eyes, Skin, Ingestion, Inhalation.
Symptoms of Exposure:	
-Eye Contact:	Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause permanent damage.
-Skin Contact:	Pain, redness, blistering and possible chemical burn.
-Inhalation:	Irritation or damage to the mucus membranes of the respiratory tract. Nasal discomfort and coughing.
-Ingestion:	Damage or chemical burns to mouth, throat and stomach. Pain, nausea, vomiting and diarrhea.
Immediate, Delayed, Chronic Effects	
Product Information:	Data not available or insufficient for classification.
Chronic Toxicity:	May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.
Target Organ Effects:	Blood. Central nervous system. -Eyes. hematopoietic system. kidney. Liver. Respiratory System. -Skin.
Numerical Measures of Toxicity	
The following acute toxicity estimates (ATE) are calculated based on the GHS document.	
ATE _{mix} (oral):	1903 mg/kg
ATE _{mix} (dermal):	6404 mg/kg
ATE _{mix} (inhalation-dust/mist):	14.4 mg/l
ATE _{mix} (inhalation-vapor):	14.5 mg/l

Component Acute Toxicity Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
water 7732-18-5	> 90 mL/kg (Rat)	Not Available	Not Available
2-butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 2270 mg/kg (Rat) = 220 mg/kg (Rabbit)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h
sodium xylene sulfonate 1300-72-7	= 7200 mg/kg (Rat)	Not Available	Not Available
tetrapotassium pyrophosphate 7320-34-5	Not Available	> 4640 mg/kg (Rabbit)	Not Available
potassium hydroxide 1310-58-3	= 214 mg/kg (Rat)	Not Available	Not Available
alcohol ethoxylate 68439-46-3	= 1378 mg/kg (Rat)	> 2 g/kg (Rabbit)	Not Available
sodium nitrite 7632-00-0	= 85 mg/kg (Rat)	Not Available	= 5.5 mg/L (Rat) 4 h

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
2-butoxyethanol 111-76-2	Not Available	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	Not Available	1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50
tetrapotassium pyrophosphate 7320-34-5	Not Available	100: 96 h Oncorhynchus mykiss mg/L LC50	Not Available	100: 48 h water flea mg/L EC50
potassium hydroxide 1310-58-3	Not Available	80: 96 h Gambusia affinis mg/L LC50 static	Not Available	Not Available
sodium nitrite 7632-00-0	Not Available	0.19: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.092 - 0.13: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.4 - 0.6: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.65 - 1: 96 h Oncorhynchus mykiss mg/L LC50 static 2.3: 96 h Pimephales promelas mg/L LC50 flow-through 20: 96 h Pimephales promelas mg/L LC50 static	Not Available	Not Available

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.

US EPA Waste Number: D002

14. TRANSPORT INFORMATION

DOT:

UNID No:	UN1760
Proper Shipping Name:	Corrosive liquids, n.o.s., (contains potassium hydroxide)
Hazard Class:	8
Packing Group:	II

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)

All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313

This product contains the following listed substances:

2-butoxyethanol

CAS No 111-76-2 applies to R-(OCH₂CH₂)_n-OR', where n = 1, 2, or 3, R=Alkyl C7 or less, or R = Phenyl or Alkyl substituted phenyl, R' = H or Alkyl C7 or less, or OR' consisting of Carboxylic acid ester, Sulfate, Phosphate, Nitrate, or Sulfonate, Chemical Category N230

sodium nitrite

CAS No 7632-00-0

SARA 311/312 Hazard Categories

Acute Health Hazard:	Yes
Chronic Health Hazard:	Yes
Fire Hazard:	No
Sudden release of pressure hazard:	No
Reactive Hazard:	No

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
dioxane - 123-91-1	Carcinogen
acetaldehyde - 75-07-0	Carcinogen

WARNING: This product contains a chemical known to the State of California to cause cancer.

16. OTHER INFORMATION

NFPA	Health Hazards: 3	Flammability: 0	Instability: 0	Special: N/A
HMIS	Health Hazards: 3*	Flammability: 0	Physical Hazards: 0	

Revision Date: 24-Mar-2015
Reasons for Revision: No information available.

Disclaimer:

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet