# MDR

# **SAFETY DATA SHEET**

# 1.1 Products and Company identification:

Product Name: MDR

Product form......Mixture

Product code:

1.2 Relevant identifier

Use of substance/ mixture .......Acid cleaner

1.3 Details of supplier of SDS

International Stoneworks, Inc. 8650 Fairbanks N. Houston Rd. Houston, TX. 77064 sales@intlstoneworks.com

Validation date:

08 / 01 / 2018

### 2. Hazards Identification

### 2.1 <u>Hazardous Classification</u> Skin Corr. 1A H314

2.2 Label Elements Hazardous Pictogram



Signal

2.3 Hazardous Statements. H314 - Causes severe burns and eve damage.

Precautionary Statements....

..P260 - Do not breathe dust/ mist/spray.

P264 - Wash hands and forearms thoroughly after handling.

P280 - Wear protective gloves/eye protection/face protection.

P301+P330+P331- If swallowed rinse mouth. Do NOT induce vomiting.

P303+P361+P353- If on skin (or hair): Immediately take of all contaminated clothing. Rinse with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P304+P340 - If inhaled: Remove person to tresh all and Reep controlled breathing.
P308+P38I+P338- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center/doctor.
P321 - Specific treatment (see First aid measures on this label).
P363 - Wash contaminated clothing before use.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

# 3. Composition Information

Component	CAS Registry#	Component (%)	Classification (GHS-US)
Phosphoric acid, conc=85%	7664-38-2	20-30	Skin Corr. 1B, H314
Ammonium Hydrogen Di-Fluoride	1341-49-7	1-5	Acute Tox. 3 (oral), H301 Skin Corr. 1B, H314
2-Butoxyethanol	111-76-2	1-5	Flam. Liq. 4, H227 Acute Tox. 4 (oral), H302 Acute Tox. 3 (dermal), H311 Acute Tox. 2 (Inhalation gas), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Proprietary Surfactant	N/A	<1%	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

# 4. First-aid Measures

4.1 Description of first aid measures

First-aid measures general:

Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show label where possible).

First-aid measures afterinhalation:

Remove to fresh air at rest in a position comfortable for breathing. Immediately call

a POISON CENTER or doctor/physician.

First-aid measures after skin contact:

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

First-aid measure after eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor or

First-aid measure afteringestion:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or

doctor/physician.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries:

Causes sever skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed

No additional information available

## 5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media: Unsuitable extinguishing media:

Foam, dry powder, carbon dioxide, water spray and sand.

Do not use a heavy water stream.

5.2 Special hazards arising from substance or mixture

Reactivity:

Thermal decomposition generates: Corrosive vapors.

Advice for firefighters

Firefighting instructions:

Protection during firefighting:

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory

protection.

# 6. Accidental Release Measure

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures: 6.1.2 For emergency responders

Evacuate unnecessary personnel.

Protective Equipment:

Equip cleanup crew with proper protection.

Emergency procedures:

Ventilate area.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and materials for containment and cleaning up

Methods for cleaning up:

Soak up spills with inert solids such as clay or diatomaceous earth as soon as

possible. Collect spillage. Store away from other materials.

Reference to other sections

See Heading 8, exposure controls and personal protection

# 7. Handling and Storage

Precautions for safe handling

Precautions for safe handling:

Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process areas to prevent formation of vapor. Do not breathe dust/mist/spray. Avoid contact

during pregnancy/while nursing.

Wash hands and forearms thoroughly after handling as with any chemicals.

Conditions for safe storage, including any incompatibilities

Technical measures:

Hygiene measures:

Comply with applicable regulations.

Storage conditions:

Keep only in the original container in a cool, well ventilated place away from: Keep

container closed when not in use.

Incompatible Products: Incompatible Materials:

Strong bases. Strong Acids.

Source of ignition. Direct sunlight.

Specific end use(s)

No additional information available.

# 8. Exposure controls and personal protection

Exposure controls

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protections:

Wear protective gloves/eye protection/face protection/protective gloves. Chemical goggles or face shield.

Eve protection:

Wear suitable work boots.

Foot Protection:

Wear suitable protective clothing

Skin and body protection: Respiratory protection:

wear appropriate mask.

Other information:

Do not eat, drink or smoke during use.

# 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance: Blue

Odor: mild odor

Solubility in water: soluble in water, 63g/100mL

Specific Gravity: 1.03

Boiling Point (F°): Approx. 212 Flash Point (F°): ≥ 200 Vapor Pressure: N/A

# 10. Stability and Reactivity

### 10.1

Thermal decomposition generates: Corrosive Vapors.

#### 10.2 **Chemical Stability**

Stable under normal conditions. Notestablished.

#### Possibility of hazardous reactions 10,3

Not established.

#### 10.4 Conditions to avoid

Direct sunlight. Extremely high or lowtemperatures.

#### 10.5 Incompatible materials

Strong acids. Strong Bases.

#### Hazardous decomposition products 10.6

Fume. Carbon monoxide. Carbon Dioxide. Thermal decomposition generates: Corrosive Vapors.

# 11. Toxicology Information

Acute toxicity:

Not classified

2-butoxyethanol (111-76-2)	
ATE US (oral)	530.000000000 mg/kg body weight
ATE US (dermal)	435.0000000000 mg/kg body weight
ATE US (gases)	450.000000000 ppmV/4h
ATE US (vapors)	2.1700000000 mg/l/4h
ATE US (dust, mist)	2.1700000000 mg/l/4h

2-propanol (67-63-0)	
LD50 oral rat	5045 mg/kg (Rat; ECD 401; Acute Oral Toxicity; Experimental value; 5840 mg/kg bodyweight; Rat)
LD50 dermal rabbit	12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 14,4; Rabbit
LC50 inhalation rat (mg/l)	73mg/l/4h (Rat)
ATE US (oral)	5045.000000000 mg/kg body weight
ATE US (dermal)	12870.00000000 mg/kg body weight
ATE US (vapors)	73.000000000 mg/l/4h
ATE US (dust, mist)	73.000000000 mg/l/4h

Skin Corrosion/irritation

Causes severe skin burns and eye damage. pH: 2

Serious eye damage/irritation:

Not classified

Respiratory or skin sensitization:

pH: 2

Not classified

Germ mutagenicity:

Not classified

Carcinogenicity:

Not classified

# 2-butoxyethanol (111-76-2)

IARC group 3 - Not classifiable Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Specific target organ toxicity (repeated exposure): Not classified

Not classified

Aspiration hazard:

Potential Adverse human health effects;

Not classified

Based on available data, the classification criteria are not met.

and symptoms

# 12. Ecological Information

#### 12.1 Toxicity

LC50 fish	562 mg/l (96 h; Brachydanio rerio)	
LC50 other aquatic organisms 1	10-100, 96 h	
LC50 fish 2	237 mg/l (96 h; Brachydanio rerio)	
Threshold limit other aquatic organisms 1	10-100: 96 h	,

LC50 fish	138 mg/l (96 h; Pisces; Pure substance)	
LC50 other aquatic organisms 1	100-1000 mg/l (96 h; Protozoa; Pure substance)	
LC50 fish 2	600 mg/l (Pisces; Pure substance)	
LC50 other aquatic organisms 2	240 mg/l (Pure substance)	
TLM fish 1	138 ppm (24 h; Gambusia affinis; Pure substance)	
Threshold limit other aquatic organisms 1	100-1000 (96 h; Protozoa; Pure substance)	
Threshold limit other aquatic organisms 2	240 mg/l (Pure substance)	

2-butoxyethanol (111-76-2)		
LC50 fish 1	116 ppm (96 h; Cyprinodon variegatus; Normal concentration)	
EC50 Daphnia 1	1700 mg/l (48 h; Daphnia sp.; Normal concentration)	
EC50 Daphnia 2	1341 ppm (96 h; Lepomis macrochirus)	
LC50 fish 2	1720 mg/l (24 h; Daphnia magna)	
TLM fish 1	100-1000, 96 h; Pisces	
TLM other aquatic organisms 1	100-1000, 96 h	
Threshold limit algae 1	900 mg/l (168 h; Scenedesmus quadricauda)	
Threshold limit algae 2	35 mg/l (192 h; microcystis aeruginosa)	-

# 13. Disposal Considerations

13.1 Waste treatment methods Waste disposal recommendations:

Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/containers in accordance with local/regional/national/international

regulations.

Ecology - waste materials: Avoid release into the environment.

# 14. Transport Information

In accordance with DOT regulations

Transport document description:

UN-No.(DOT):

DOT NA no.:

Reportable Quantities:

Proper Shipping Name (DOT):

DOT Hazard Classes:

Hazard labels (DOT):

8 - Corrosive

NA1760 Compounds, cleaning liquid Contains Phosphoric acid, 8, III

1760

NA1760

5000lbs (2270 Kg)

Compounds, cleaning liquid

Contains Phosphoric Acid

Class 8 - Corrosive material 49 CFR 173.136



DOT Symbols:

D – Proper shipping name for domestic use only, or to and from Canada, G –

Identifies PSN requires technical name

Packing group (DOT):

III - Medium Danger

### DOT Special Provisions (49 CFR 172.102):

 $\rm B2$  – MC 300, MC 301, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

IB2 – Authorized IBCs: Metal (31A, 31B and 31N): Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional requirement: Only liquids with vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

N37 – This material may be shipped in an integrally-lined fiber drum (1G) which meets general packaging requirements of subpart B of part 137 of this subchapter, the requirement of part 178 of this subchapter at the packing group assigned for the material and to any other special provisions of column 7 of the 172.101 table. T11 – 6 178.273(d)(2) Normal........178.275(d)(3)

TP2 – a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum meanbulk temperature during transport, tf is the temperatures in degrees Celsius of the liquid during filling, and a is the mean coefficient of the cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees Celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where d15 and d50 are the densities (in units of mass per volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP27 – A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 time the MAWP.

# 15. Regulatory Information

### 15.1 US Federal Regulations

Ammonium Hydrogen Di-Fluoride (134		
Listed in the United States TSCA (Toxic Su	bstances Control Act) inventory	
Not listed on the United States SARA Secti	on313	
RQ (Reportable quantity, section 304 of	100lb	
EPAs List of Lists):		

Phosphoric Acid, conc=85% (7664-38-	2)
Listed in the United States TSCA (Toxic Su Not listed on the United States SARA Secti	bstances Control Act) inventory on 313
RQ (Reportable quantity, section 304 of EPAs List of Lists):	5000lb

### 15.2 Regulations

15.2.1 International

CANADA

No additional information is available.

**EU-Regulations** 

No additional information is available.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not Classified

15.2.2 National

No additional information is available.

# 16. Other Information

### **HMIS RATINGS**

Health:

[3] Serious hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability Classification: Reactivity:

[0] Minimal hazard [1] Slight hazard

Pers. Protection:

[E]

### Disclaimer:

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