



# HardWire

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 12/07/2015

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Version: 4.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : HardWire

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Native Earth  
20504 4th Street Suite A  
Rupert, ID 83350 - USA  
T 208-254-4484 - F 208-254-4715  
[info@ntvearth.com](mailto:info@ntvearth.com) - [nativeearthinnovation.com](http://nativeearthinnovation.com)

#### 1.4. Emergency telephone number

No additional information available

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Acute toxicity (oral) H302  
Category 4  
Skin corrosion/irritation H315  
Category 2  
Hazardous to the H401  
aquatic environment -  
Acute Hazard Category  
2

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning  
Contains : Monocarbamide dihydrogen sulfate; Tallow amine ethoxylate ; Alkanolamine  
Hazard statements (GHS-US) : H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H401 - Toxic to aquatic life  
Precautionary statements (GHS-US) : P264 - Wash skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P273 - Avoid release to the environment  
P280 - Wear eye protection, protective gloves  
P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell  
P302+P352 - If on skin: Wash with plenty of water  
P321 - Specific treatment (see the first aid section on this label)  
P330 - Rinse mouth  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P362+P364 - Take off contaminated clothing and wash it before reuse  
P501 - Dispose of contents/container to comply with local, state, and federal regulations

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Tallow amine ethoxylate *	(CAS No) Trade Secret	30 - 40	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400
Monocarbamide dihydrogen sulfate	(CAS No) 21351-39-3	0 - 10	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Alkanolamine*	(CAS No) Trade Secret	< 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314
phosphoric acid, conc=85%	(CAS No) 7664-38-2	< 10	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318
ethanol	(CAS No) 64-17-5	< 10	Flam. Liq. 2, H225 Carc. 1A, H350

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Rinse mouth.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : moderate eye irritation. moderate skin irritation.  
Symptoms/injuries after inhalation : May cause slight irritation.  
Symptoms/injuries after skin contact : Irritation.  
Symptoms/injuries after eye contact : May cause irritation.  
Symptoms/injuries after ingestion : May cause gastrointestinal discomfort.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8 Exposure controls/personal protection" "

#### 6.2. Environmental precautions

Avoid release to the environment.

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### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8 : Exposure-controls/personal protection".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : May be corrosive to metals.  
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.  
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.  
Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.  
Storage area : Keep container in a well-ventilated place. Protect against frost. Meet the legal requirements.  
Special rules on packaging : meet the legal requirements. correctly labelled.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Monocarbamide dihydrogen sulfate (21351-39-3)

Not applicable

#### Alkanolamine

ACGIH	ACGIH TWA (ppm)	3 ppm
ACGIH	ACGIH STEL (ppm)	6 ppm
ACGIH	Remark (ACGIH)	Eye & skin irr
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	3 ppm

#### phosphoric acid, conc=85% (7664-38-2)

ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
ACGIH	Remark (ACGIH)	URT, eye, & skin irr
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

#### Tallow amine ethoxylate

Not applicable

#### ethanol (64-17-5)

ACGIH	ACGIH STEL (ppm)	1000 ppm (Ethanol; USA; Short time value; TLV - Adopted Value)
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### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Hand protection : Protective gloves.  
Eye protection : Safety glasses.  
Skin and body protection : Wear suitable protective clothing.  
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.  
Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

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Color	: Mixture contains one or more component(s) which have the following colour(s): Brown Colourless On exposure to air: yellow-brown
Odor	: There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): Characteristic odour Unpleasant odour Ammonia odour Smell of fish Odourless Alcohol odour Pleasant odour
Odor threshold	: No data available
pH	: 7 - 8
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.21 g/ml
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

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ATE US (oral)	440.133 mg/kg body weight

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<b>Monocarbamide dihydrogen sulfate (21351-39-3)</b>	
LD50 oral rat	355 mg/kg
LD50 dermal rat	>= 2000 mg/kg
LD50 dermal rabbit	May be corrosive to skin
ATE US (oral)	355.000 mg/kg body weight

<b>Alkanolamine</b>	
LD50 oral rat	1720 mg/kg (Rat)
LD50 dermal rabbit	1018 mg/kg (Rabbit)
ATE US (oral)	1720.000 mg/kg body weight
ATE US (dermal)	1018.000 mg/kg body weight
ATE US (dust, mist)	1.500 mg/l/4h

<b>Tallow amine ethoxylate</b>	
LD50 oral rat	200 - 2000 mg/kg (Rat)
ATE US (oral)	200.000 mg/kg body weight

<b>ethanol (64-17-5)</b>	
LD50 oral rat	10740 mg/kg body weight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit; Literature study)
ATE US (oral)	10740.000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.  
pH: 7 - 8

Serious eye damage/irritation : Not classified  
pH: 7 - 8

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified.

<b>ethanol (64-17-5)</b>	
IARC group	1 - Carcinogenic to Humans

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause slight irritation.

Symptoms/injuries after skin contact : Irritation.

Symptoms/injuries after eye contact : May cause irritation.

Symptoms/injuries after ingestion : May cause gastrointestinal discomfort.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life.

<b>Monocarbamide dihydrogen sulfate (21351-39-3)</b>	
LC50 fish 1	≈ 80 mg/l <i>Gasterosueus Aculeatus</i>
EC50 Daphnia 1	433 g/l

<b>Alkanolamine</b>	
LC50 fish 1	150 mg/l 96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> )
EC50 Daphnia 1	140 mg/l (24 h; <i>Daphnia magna</i> )
LC50 fish 2	329.16 mg/l (96 h; <i>Lepomis macrochirus</i> )
TLM fish 1	100 - 1000,96 h; Pisces
TLM other aquatic organisms 1	100 - 1000,96 h
Threshold limit algae 1	0.97 mg/l (192 h; <i>Scenedesmus quadricauda</i> ; Inhibitory)

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<b>Alkanolamine</b>	
Threshold limit algae 2	35 mg/l (72 h; Algae)
<b>phosphoric acid, conc=85% (7664-38-2)</b>	
LC50 fish 1	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	100 - 1000 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)
<b>Tallow amine ethoxylate</b>	
LC50 fish 1	1.3 mg/l (LC50; 96 h)
EC50 Daphnia 1	1.7 mg/l (EC50; 48 h)
<b>ethanol (64-17-5)</b>	
LC50 fish 1	14200 mg/l (LC50; US EPA; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)

### 12.2. Persistence and degradability

<b>Alkanolamine</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.80 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.34 g O <sub>2</sub> /g substance
ThOD	2.49 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.32 % ThOD
<b>phosphoric acid, conc=85% (7664-38-2)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>Tallow amine ethoxylate</b>	
Persistence and degradability	Inherently biodegradable. Not readily biodegradable in water.
<b>ethanol (64-17-5)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.70 g O <sub>2</sub> /g substance
ThOD	2.10 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.43

### 12.3. Bioaccumulative potential

<b>Alkanolamine</b>	
Log Pow	-1.91
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>phosphoric acid, conc=85% (7664-38-2)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>Tallow amine ethoxylate</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>ethanol (64-17-5)</b>	
BCF fish 1	1 (BCF; Other; 72 h; Cyprinus carpio; Static system; Fresh water; Read-across)
Log Pow	-0.31 (Experimental value)

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ethanol (64-17-5)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

Alkanolamine	
Surface tension	0.050 N/m

ethanol (64-17-5)	
Surface tension	0.022 N/m (20 °C)
Log Koc	Koc,PCKOCWIN v1.66; 1; Read-across

### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Sewage disposal recommendations : Prevent liquid from entering sewers, watercourses, underground or low areas.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

### TDG

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Monocarbamide dihydrogen sulfate (21351-39-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Alkanolamine	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

phosphoric acid, conc=85% (7664-38-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Not listed on SARA Section 313 (Specific toxic chemical listings)	
CERCLA RQ	5000 lb

Tallow amine ethoxylate	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e., Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))

ethanol (64-17-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. International regulations

#### CANADA

No additional information available

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### EU-Regulations

No additional information available

### National regulations

#### ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)

### 15.3. US State regulations

#### Alkanolamine

U.S. - New Jersey - Right to Know Hazardous Substance List

#### phosphoric acid, conc=85% (7664-38-2)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

#### ethanol (64-17-5)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Revision date : 04/21/2017

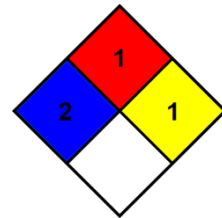
Full text of H-phrases:

H225	Highly flammable liquid and vapor
H227	Combustible liquid
H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H332	Harmful if inhaled
H350	May cause cancer
H400	Very toxic to aquatic life
H401	Toxic to aquatic life

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*