

# SAFETY DATA SHEET

Issuing Date: 25-Jun-2015

Version 1

## #1 Network PHOTAdirect Activator

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	#1 Network PHOTAdirect Activator
<b>Product code</b>	28502-49
<b>Product Use</b>	Plate developer.
<b>Supplier Address</b>	#1 Network, Inc. 309 Professional Park Avenue Effingham, IL 62401
<b>Company Phone Number</b>	217-536-5737
<b>Emergency Telephone</b>	Transport-CHEMTREC Inside NA: 800-424-9300 Transport CHEMTREC Outside NA: 703-527-3887

### 2. HAZARDS IDENTIFICATION

#### Classification

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive Toxicity	Category 1B

#### GHS Label elements, including precautionary statements

Danger

#### Hazard Statements

Causes severe skin burns and eye damage  
May cause an allergic skin reaction  
May damage fertility or the unborn child



#### Precautionary Statements

**Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves/protective clothing/eye protection/face protection

**Response**

Immediately call a POISON CENTER or doctor/physician  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

**Storage**

Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not classified

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
POTASSIUM HYDROXIDE	1310-58-3	3-7%
SODIUM HYDROXIDE	1310-73-2	1-5%
AMINOETHYLETHANOLAMINE	111-41-1	1-5%

### 4. FIRST AID MEASURES

**First aid measures for different exposure routes**

<b>General advice</b>	Immediate medical attention is required. Do not get in eyes, on skin, or on clothing. Take off contaminated clothing and shoes immediately. Do not breathe dust/fume/gas/mist/vapors/spray.
<b>Eye contact</b>	In case of contact with substance, immediately flush eyes with running water for at least 30 minutes. Do not rub affected area. Keep eye wide open while rinsing. Call a physician immediately.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 30 minutes. Remove contaminated clothing and shoes. Call a physician immediately.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.

**Most important symptoms/effects, acute and delayed**

Burning feeling and temporary redness. May cause allergic skin reaction.

**Indication of immediate medical attention and special treatment needed, if necessary**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

None known.

**Specific hazards arising from the chemical**

May cause sensitization by skin contact.

**Explosion Data**

**Sensitivity to Mechanical Impact** none

**Sensitivity to Static Discharge** none

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use personal protective equipment. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

**7. HANDLING AND STORAGE****Precautions for safe handling**

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid exposure during pregnancy.

**Conditions for safe storage, including any incompatibilities**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
POTASSIUM HYDROXIDE	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	
SODIUM HYDROXIDE	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>	
AMINOETHYLETHANOLAMINE		(vacated) TWA: 0.1 mg/m <sup>3</sup> Formaldehyde	TWA: 0.1 mg/m <sup>3</sup> Formaldehyde	

**Exposure controls**

**Engineering Measures** Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Tightly fitting safety goggles. Face-shield.

**Skin and body protection** Wear protective gloves/clothing. Protective shoes or boots.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Clear To Pale Yellow	<b>Odor</b>	Slight amine
<b>Odor Threshold</b>	Not available	<b>Physical State @20°C</b>	Aqueous Solution
<b>pH</b>	13.6	<b>Molecular Weight</b>	Not available
<b>Specific Gravity</b>	1.11	<b>Autoignition temperature</b>	Not available
<b>Flash point</b>	> 201 °F / > 94 °C	<b>Boiling point / boiling range</b>	212 °F / 100 °C
<b>Decomposition temperature</b>	Not available	<b>Freezing Point</b>	Not available
<b>Melting point / melting range</b>	Not available	<b>Explosive Property Details</b>	Not available
<b>Flammability Limit in Air</b>	Not available	<b>Partition coefficient</b>	Not available
<b>Oxidizing Properties</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Solubility</b>	completely soluble	<b>Density</b>	Not available
<b>Evaporation rate</b>	Not available	<b>VOC (g/l)</b>	0
<b>Vapor density</b>	Not available		
<b>VOC (lb/gal)</b>	0		
<b>Dynamic viscosity</b>	Not available		

**10. STABILITY AND REACTIVITY****Reactivity**

Stable under recommended storage conditions

**Chemical stability**

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

None under normal processing.

#### Conditions to Avoid

Excessive heat. Freezing.

#### Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases. Nitrites.

#### Hazardous Decomposition Products

None known.

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

##### Product Information

##### **Acute toxicity**

##### **Inhalation**

Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause additional effects as listed under "Ingestion".

##### **Eyes**

Corrosive to the eyes and may cause severe damage including blindness.

##### **Skin**

Corrosive to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

##### **Ingestion**

Ingestion causes burns of the upper digestive and respiratory tracts. Can burn mouth, throat, and stomach.

##### Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
POTASSIUM HYDROXIDE	214 mg/kg ( Rat )		
SODIUM HYDROXIDE	-	1350 mg/kg ( Rabbit )	-
AMINOETHYLETHANOLAMINE	= 2000 mg/kg ( Rat )	= 3560 µL/kg ( Rabbit )	

#### Information on toxicological effects

No information available.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

##### **Irritation**

Causes severe irritation and or burns.

##### **Corrosivity**

Corrosive to eyes. Corrosive to skin.

##### **Sensitization**

May cause sensitization by skin contact.

##### **Mutagenic Effects**

No information available.

##### **Reproductive Toxicity**

Product is or contains a chemical which is a known or suspected reproductive hazard.

##### **Carcinogenicity**

None known.

##### **STOT - single exposure**

No information available.

##### **STOT - repeated exposure**

No information available.

##### **Target Organ Effects**

Skin, Eyes, Respiratory system, Reproductive system.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5565 mg/kg  
ATEmix (dermal) 31818 mg/kg

ATE: Acute toxicity estimate

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Chemical Name	Algae toxicity	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
AMINOETHYLETHANOLAMINE		Pimephales promelas: 728 mg/L at 96 h		

**Persistence and degradability**

No information available.

**Bioaccumulation**

Chemical Name	Octanol Water Partition Coefficient (log pow)
POTASSIUM HYDROXIDE	0.65
AMINOETHYLETHANOLAMINE	-1.46

**Mobility**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods**

Dispose of in accordance with local regulations.

**Contaminated packaging**

Do not re-use empty containers.

<b>14. TRANSPORT INFORMATION</b>
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**DOT**

<b>Proper Shipping Name</b>	Potassium hydroxide, solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide, solution, 8, II
<b>Emergency Response Guide Number</b>	154
<b>Packaging Exceptions</b>	154
<b>Non-bulk Packaging</b>	202
<b>Bulk Packaging</b>	242

**TDG**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**MEX**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**ICAO**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**IATA**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**IMDG**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>EmS-No</b>	F-A, S-B
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II

**ADR/RID**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Classification Code</b>	C5

<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II
<b>ADR/RID-Labels</b>	8

**ADN**

<b>Proper Shipping Name</b>	Potassium hydroxide solution
<b>UN/ID No</b>	UN1814
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Classification Code</b>	C5
<b>Description</b>	UN1814, Potassium hydroxide solution, 8, II
<b>Hazard Labels</b>	8
<b>Limited quantity</b>	1 L

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Yes
<b>DSL/NDSL</b>	Yes
<b>PICCS</b>	Yes
<b>EINECS/ELINCS</b>	Yes
<b>ENCS</b>	No
<b>IECSC</b>	Yes
<b>KECL</b>	Yes
<b>AICS</b>	Yes

\*Yes - All component(s) of this product are included or are exempt from listing on the inventory.

\*No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations****TSCA Sections 4, 5 and 12(b)**

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):



Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
POTASSIUM HYDROXIDE	1000 lb			X
SODIUM HYDROXIDE	1000 lb			X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
POTASSIUM HYDROXIDE	1000		RQ 1000 lb final RQ RQ 454 kg final RQ
SODIUM HYDROXIDE	1000		RQ 1000 lb final RQ RQ 454 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
POTASSIUM HYDROXIDE	X	X	X		X
SODIUM HYDROXIDE	X	X	X		X
AMINOETHYLETHANOLAMINE	X	X	X		X

**International Regulations****Canada - NDSL**

This product does not contain any NDSL chemicals.

**Mexico - Grade**

No information available

**Mexico - Carcinogen Status and Exposure Limits**

Chemical Name	Carcinogen Status	Exposure Limits
SODIUM HYDROXIDE		Mexico: Ceiling 2 mg/m <sup>3</sup>

**Other Regulations**

No information available

<b>16. OTHER INFORMATION</b>
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<b>NFPA</b>	Health Hazard 3	Flammability 1	Instability 0	Physical and chemical hazards - Personal protection C
<b>HMIS</b>	Health Hazard 3*	Flammability 1	Physical Hazard 0	

\*Indicates a chronic health hazard.

Revision Date

25-Jun-2015

**Revision Note  
Disclaimer**

No information available

**The information provided in this 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**