Safety Data Sheet

NeoWaterFX

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: NeoWaterFX
CAS Number: Proprietary
Product Use: Aqueous phosphorous reduction media for waste water treatment

Manufacturer/Supplier Identification:
Neo Chemicals & Oxides, LLC
8101 E. Prentice Avenue, Suite 525
Greenwood Village, CO 80111
Telephone: +1 (303) 843-8040
Facsimile: +1 (303) 843-8082

PRODUCT INFORMATION
Safety Data Sheet Requests: +1 (303) 843-8040 (8am - 4pm, Mountain Time, Mon-Fri)

EMERGENCY INFORMATION
Transportation Emergency Response:
CHEMTREC: +1 (800) 424-9300 (within the US) or +1 (703) 527-3887 (outside the US)

Health Emergency:
American Association of Poison Control Center +1 (800) 222-1222 (within the US)

SECTION 2 HAZARD IDENTIFICATION

Global Harmonized System (GHS) Classification:

Health	Environmental	Physical
Acute Oral Toxicity – Category 5	Acute Toxicity – None*	None
Eye Irritation – Category 2B		
Skin Irritation – Category 3		
Target Organ Toxicity (Repeated) – Category 2		

*Note: This material is not expected to be harmful to fish or aquatic invertebrates. Inhibits algae growth by chelating free phosphate.

Label Pictogram: 

Signal Word: Warning

Hazard Statements	Precautionary Statements
H303: May be harmful if swallowed	P264: Wash hands thoroughly after handling
H315: Causes skin irritation	P280: Wear protective gloves/protective clothing/eye protection/face protection
H319: Causes serious eye irritation	P302+P352: IF ON SKIN: Wash with plenty of soap and water
H373: May cause damage to organs (liver and spleen) through prolonged repeated exposure	P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes, remove contact lenses, if present and easy to do. Continue rinsing
	P312: Call a POISON CENTER/doctor/physician if you feel unwell
	P332+P313: If skin irritation occurs: Get medical advice/attention
	P337+P313: If eye irritation persists: Get medical advice/attention
	P362 + P364: Take off contaminated clothing and wash before reuse
	P402/P404: Store in a dry place. Store in a closed container.
	P501: Place contaminated materials in disposal containers and dispose of in a manner consistent with applicable regulations

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

CAS NUMBER	EC NUMBER (EINECS/ ELINCS)	CHEMICAL NAME	PERCENT (% Weight)
7732-18-5	215-185-5	Water	37-71
Proprietary	Proprietary	Rare Earth Chloride	29-63

SECTION 4 FIRST AID MEASURES

Eye: Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek immediate medical attention if irritation persists.

Skin: Remove contaminated clothing and wash affected area(s) with soap and water. If irritation of the skin persists seek immediate medical attention.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Ingestion: No specific first aid measures are required. If swallowed do NOT induce vomiting. As a precaution, get medical advice.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point: Not applicable **Flammable Limits:** Not applicable

Suitable extinguishing media: If this material is involved in a fire, use water fog, foam, dry chemical or carbon dioxide to extinguish flames.

Unusual fire and explosion data/Specific hazards: None known.

Special protective actions for firefighters: None known. This material will not burn.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions: Prevent contact with skin or eyes. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater.

Containing environmental effects: Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Measures when handling spilled substance: Clean up spill as soon as possible, observing precautions in **Section 8.** Use appropriate techniques such as applying non-combustible absorbent materials or pumping.

Reporting: Report spills to local authorities and/or the U.S. Guard's National Response Center at (800) 424-8802 as appropriate or required

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling: Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water other than those being treated.

Conditions for safe storage: Store in a closed container. Store in a cool, well-ventilated area.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Note: This material is a liquid that is not expected to form dust or volatiles

Appropriate engineering controls

Work/Hygienic practices: Consider the potential hazards of this material, applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

Ventilation: Use in a well-ventilated area.

Other equipment: The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Environmental protection: Take measures to prevent material from being released to soil, water, or air. Where feasible and appropriate, remove contaminated soil if released to ground. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Individual protection measures - Personal protective equipment (PPE)

Eye/Face Protection: The use of a face shield and/or chemical goggles to safe guard against potential eye contact, irritation, or injury is recommended.

Hands/Skin Protection: The use of gloves impermeable to the specific material handled is advised to prevent skin contact, possible irritation, absorption, and skin damage (i.e. Nitrile gloves) – see glove manufacturer literature for permeability information. Depending on use conditions, apron, arm covers, or other impervious clothing may be necessary.

Respiratory Protection: None required where adequate ventilation conditions exist.

Thermal Hazards: None known.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Note: The data below are typical values and do not constitute a specification.

Appearance Physical state:	Liquid	Vapor density (Air = 1):	Not applicable
Color:	Colorless to Amber	Specific gravity (Water = 1):	1.28-1.63 solution @ 20°C
Odor/Odor threshold:	Mild	Partition Coefficient: n-octanol/water	Not applicable
pH:	3.0-4.0	Water solubility:	High
Freezing point:	-40°C (-40°F)	Autoignition Temperature:	Not applicable
Boiling point/range:	Not available	Decomposition Temperature:	Not applicable
Flash point:	Not applicable	Viscosity:	Not applicable
Evaporation rate:	Not available	Other Properties	
Flammability:	Non-flammable	Oxidizing properties:	Not applicable
Upper/lower flammability Limits	Non-flammable	Molecular Weight	Proprietary
Vapor pressure:	Not applicable	Bulk density:	Not available

SECTION 10 STABILITY AND REACTIVITY

Reactivity: This material is considered stable under normal storage and handling conditions

Chemical stability: This material is considered stable under normal storage and handling conditions

Possibility of hazardous reactions: See below

Incompatibility: Incompatible with oxidizing reagents, can generate hazardous chlorine gas

Hazardous decomposition products: See above

SECTION 11 TOXICOLOGICAL INFORMATION

Likely routes of exposure: Eye and skin contact
Signs and symptoms of overexposure: Eye and skin irritation

Acute Effects

Acute oral toxicity:	Slightly toxic by this route (Category 5) – see below
Acute inhalation toxicity:	Not likely route of exposure - No information found
Acute dermal toxicity:	No information found
Skin irritation:	Can cause skin irritation
Eye irritation:	Can cause eye irritation
Skin sensitization:	No information found

Other Health Effects

Specific target organ toxicity (repeated exposure): Chronic oral exposure to rare earth chlorides may cause toxic effects to the liver and spleen based on experimental animal data

Mutagenicity: Rare earth chlorides were negative in the Ames bacterial mutagenic test using bacterial strains TA135, TA1537, TA98, TA100, TA102, and WP2uvrA.

Carcinogenicity: Not assessed by IARC, NTP or USEPA for carcinogenicity
Medical conditions aggravated by exposure: Preexisting diseases of the liver or spleen

Acute toxicity values:	Oral LD50 (Rat) = 2800 mg/kg
Additional Information:	None - Proprietary information.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

Toxicity to fish	Fathead Minnow 96–hour LC50: 191 mg/L NOEC(96 hr): 125 mg/L 7-day IC25: 2.1 mg/L NOEC(7 day): 1.3 mg/L LOEC(7 day): 2.5 mg/L Rainbow Trout 96–hour LC50: 10.4 mg/L NOEC(96 hr): 5.0 mg/L
Toxicity to daphnia	Ceriodaphnia dubia 48–hour LC50: 16.4 mg/L NOEC(48 hr): 7.8 mg/L 7-day IC25: 2.0 mg/L NOEC(7 day): 1.6 mg/L LOEC(7 day): 3.1 mg/L

Persistence and biodegradability: This inert mineral product is not expected to be readily biodegradable.

Bioaccumulation: No data available

Mobility in soil: No data available

Other ecological data: No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal methods: Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste federal law requires disposal at a licensed hazardous waste disposal facility. Chemical additions, processing or otherwise altering this material may make waste management information presented in the SDS incomplete.

Container: Place contaminated materials in disposal containers and dispose of in a manner consistent with applicable regulations.

SECTION 14 TRANSPORT INFORMATION

Agency:	Shipping Description:
DOT	NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER DOT 49 CFR
IMO/IMDG	NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE
ICAO/IATA	NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

UN/NA number: Not classified
Proper shipping name: Not classified
Hazard class: Not classified
Packing group: Not classified
Environmental hazards: Not classified
Transport in bulk: Not classified
Special precautions for user: Not classified

SECTION 15 REGULATORY INFORMATION

Chemical safety report: None available

United States Federal Regulations:
Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):
This material is not listed under CERCLA and has no reportable quantity
Clean Water Act (CWA): Not listed
Clean Air Act (CAA): Not listed
Superfund Amendments and Reauthorization Act (SARA) Title III Information:
SARA 302 Components: No chemicals listed are subject to reporting requirements of S.302
SARA 313 Components: No chemicals listed exceed threshold reporting levels
SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard
Toxic Substances Control Act: This material is listed on the TSCA inventory

State and Other:
California: This material is not listed under Proposition 65 (CA Health & Safety Code Section 25249.5).
Massachusetts: Not listed
New Jersey: Not listed
IARC: Not listed
NTP: Not listed

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK

SECTION 16 OTHER INFORMATION

National Fire Protection Association (NFPA) Ratings: This information is provided solely for the use of individuals trained in the NFPA system.

Health: 1
Flammability: 0
Reactivity: 0

Acronyms and abbreviations that may have been used in this document:

ACGIH: American Conference of Government Industrial Hygienists	LLV: Level Limit Values
ADR: Accord Dangereux Routier	LOEC: Lowest Observed Effect Concentration
ADNR: Regulation for the carriage of dangerous substances on the Rhine	LV: Limit Values
ÁK: Average Concentration	MAC: Maximum Acceptable/Admissible Concentration
CAS: Chemical Abstract Service Number	MAK: Maximale Arbeitsplatzkonzentration
CAA: Clean Air Act	NOEC: No Observed Effect Concentration
CMP: Concentracíon Máxima Permisible	NRC: Nuclear Regulatory Commission
CWA: Clean Water Act	NTP: National Toxicology Program (US)
EC: European Community	OEL: Occupational Exposure Limit
EINECS: European Inventory of Existing Chemical Substances	ONU: United Nations number
ELINCS: European List of Notified Chemical Substances	OSHA: Occupational Safety and Health Administration
EPCRA: Emergency Planning and Community Right To Know Act	PPE: Personal Protective Equipment
GHS: Global Harmonized System	RID: International rule for transport of dangerous substances by Rail
IARC: International Agency for Research on Cancer	RTK: Right to Know
IATA: International Air Transport Association	SARA: Superfund Amendment and Reauthorization Act
GHS: Global Harmonized System	SDS: Safety Data Sheet
IARC: International Agency for Research on Cancer	TGG-8hr: Tijd Gewogen Gemiddelde-8 hour
IATA: International Air Transport Association	TWA: Time Weighted Average
IC25: Inhibiting Concentration 25%	TWA-8hr: Time Weighted Average-8 hour
ICAO: International Civil Aviation Organization (UN)	USEPA: United States Environmental Protection Agency
IMO: International Maritime Organization	VLA-ED: Valor límite ambiental de exposición diaria
IMDG: International Maritime Dangerous Goods	VLE: Valeur Limite d'Exposition
IPRV: Ilgalaikio poveikio ribine verte	VLEP: Valeurs Limites d'Exposition Professionnelle
LC50: Lethal Concentration 50%	VME: Valeur Limite de Moyenne d'Exposition Professionnelle
LD50: Lethal Dose 50%	WGK: Wassergefährdungsklasse (Water Hazard Classes)

Revision Indicator: Change in Manufacturer/Supplier corporate address

Creation Date: October 31, 2016

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.