



SAFETY DATA SHEET

NexGuard® 22358

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NexGuard® 22358

Other means of identification : Not applicable.

Recommended use : BOILER WATER MULTIFUNCTIONAL TREATMENT

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 07/29/2014

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Precautionary Statements : **Prevention:**
Wash hands thoroughly after handling.
Response:
Specific measures: consult MSDS Section 4.
Storage:
Store in accordance with local regulations.

Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

In case of eye contact : Rinse with plenty of water. Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and plenty of water. Get medical attention if symptoms occur.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

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Notes to physician : Treat symptomatically.

See toxicological information (Section 11)

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.
- Hazardous combustion products : Carbon oxides
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect 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). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8. Wash hands after handling.
- Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Buna-N, HDPE (high density polyethylene), Polyethylene, Polypropylene, Stainless Steel 304, Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.
- Unsuitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Copper, and their alloys, Brass, EPDM, Mild steel, Neoprene, Nickel, Polyurethane, Chlorosulfonated polyethylene rubber, Fluoroelastomer

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Eye protection : Safety glasses

Hand protection : Wear protective gloves.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Wear suitable protective clothing.

Respiratory protection : No personal respiratory protective equipment normally required.

Hygiene measures : Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Colour : Clear
Orange

Odour : None

Flash point : does not flash

pH : 11.0, 100 %

Odour Threshold : no data available

Melting point/freezing point : no data available

Initial boiling point and boiling range : no data available

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : no data available

Relative vapour density : no data available

Relative density : 1.172 (15.6 °C)

Density : no data available

Water solubility : completely soluble

Solubility in other solvents : no data available

Partition coefficient: n- : no data available

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octanol/water

Auto-ignition temperature : no data available

Thermal decomposition : Carbon oxides

Viscosity, dynamic : no data available

Viscosity, kinematic : no data available

VOC : 0 %

SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : Freezing temperatures.

Incompatible materials : SO₂ may react with vapors from neutralizing amines and may produce a visible cloud of amine salt particles.
Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors.

Hazardous decomposition products : Oxides of sulfur

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes : Health injuries are not known or expected under normal use.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product

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Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg
Acute inhalation toxicity	: no data available
Acute dermal toxicity	: no data available
Skin corrosion/irritation	: no data available
Serious eye damage/eye irritation	: no data available
Respiratory or skin sensitization	: no data available
Carcinogenicity	: no data available
Reproductive effects	: no data available
Germ cell mutagenicity	: no data available
Teratogenicity	: no data available
STOT - single exposure	: no data available
STOT - repeated exposure	: no data available
Aspiration toxicity	: No aspiration toxicity classification

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish	: LC50 Fathead Minnow: 3,600 mg/l Exposure time: 96 hrs Test substance: Product
Toxicity to daphnia and other aquatic invertebrates	: LC50 Ceriodaphnia dubia: 1,806 mg/l Exposure time: 48 hrs Test substance: Product
Toxicity to algae	: no data available

Persistence and degradability

The organic portion of this preparation is expected to be poorly biodegradable.

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the

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defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air : <5%
Water : 30 - 50%
Soil : 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

SECTION 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Air transport (IATA)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Sea Transport (IMDG/IMO)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

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CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

TOXIC SUBSTANCES CONTROL ACT (TSCA)

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

EUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

KOREA

This product contains substance(s) which are not in compliance with the Toxic Chemical Control Law (TCCL) and may require additional review.

NEW ZEALAND

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

PHILIPPINES

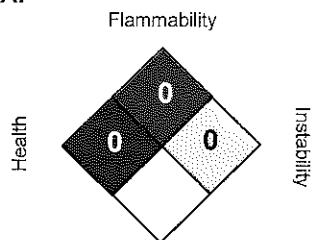
All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

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SECTION 16. OTHER INFORMATION

NFPA:



Special hazard.

HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 07/29/2014
Version Number : 1.0
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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.

For additional copies of an MSDS visit www.nalco.com and request access.

NexGuard™ 22358

Multifunctional Boiler Treatment



Product Bulletin

PRODUCT DESCRIPTION AND APPLICATION

NexGuard 22358 is an innovative multifunctional program that combines the most advanced boiler internal treatment chemistry, oxygen scavenger along with new TRASAR™ Technology plus state-of-the-art diagnostic, monitoring, feed, and control equipment.

NexGuard 22358 is formulated for maximum scale inhibition and minimizes corrosion for boilers operating at or below 600 psig (41 barg) with moderate feedwater hardness and moderate feedwater oxygen.

PHYSICAL & CHEMICAL PROPERTIES

These properties are typical. Refer to the Safety Data Sheet (SDS) for the most current data.

Physical State:	Liquid
Appearance:	Clear Orange
Odor:	Slight
Specific Gravity @ 77°F (25°C):	1.172
Density:	9.78 lb/gal (1.17 g/cm ³)
Solubility in Water:	Complete
pH (100 %):	11
Freeze-Thaw Recovery:	Incomplete, Keep Above Storage Temperature
Viscosity @ 77°F(25°C):	5 - 20 cp
Flash Point (PMCC):	>200° F (93°C)

ACTIVE CONSTITUENTS

The active constituents are considered to be proprietary information for this product.

REGULATORY APPROVALS

NexGuard 22358 has been certified as KOSHER/PAREVE for year-round use INCLUDING THE PASSOVER SEASON by the CHICAGO RABBINICAL COUNCIL.

NexGuard 22358 is in full compliance with the applicable Federal laws (FDA) and regulations pertaining to food additives and may be used for applications covered under 21 CFR 173.310, Boiler Water Additives.

NexGuard 22358 has been approved by both the National Sanitation Foundation (NSF International) and Canadian Food Inspection Agency (CFIA) W1 for use in boiler applications where the steam produced

may contact edible products. Refer to the Regulatory Certifications (RCR) document for the most recent information on approvals.

MATERIALS OF COMPATIBILITY

Compatible	Not Compatible
Buna-N	Brass
CPVC	Copper
HDPE	Copper Alloys
Plasite 4300	EPDM
Plasite 7122	Hypalon® elastomer
Polyethylene	Mild Steel
Polypropylene	Neoprene
304 Stainless Steel	Nickel
	Polyurethane
	Viton® synthetic rubber

DOSAGE AND FEEDING

The feedwater dosage of **NexGuard 22358** will vary depending on average feedwater total acid hardness, feedwater oxygen and feedwater alkalinity. For your specific application, your local Nalco sales engineer will make the appropriate feedrate recommendations.

Overfeed of **NexGuard 22358** will result in excessive treatment costs and may result in boiler carryover.

Underfeed of **NexGuard 22358** will result in higher maintenance costs and potential failures.

ENVIRONMENTAL AND TOXICITY DATA

Refer to the Safety Data Sheet (SDS) for all aquatic and mammalian information.

SAFETY AND HANDLING

The product label and Safety Data Sheet should be read prior to using **NexGuard 22358** for complete safety and handling information. Please refer to the SDS for proper personal protective equipment (PPE) and for health effects.

STORAGE

NexGuard 22358 must be protected from exposure to sunlight and any sources of UV/VIS radiation. Use of storage containers (including bulk storage tanks) allowing transmission of light will result in reduced product integrity. These containers should be protected from sunlight or not be used.

NexGuard 22358 should be stored in a location where the product temperature can be kept in a range between **50°F [10°C] and 130°F [54°C]**.

For **NexGuard 22358**, the recommended in-plant storage limit is 1 year. Refer to the Safety Data Sheet (SDS) for the most current data.

REMARKS

If you need assistance or more information on this product, please call your nearest Nalco Representative.

For more news about Nalco Company, visit our website www.nalco.com

For **Medical and Transportation Emergencies** involving Nalco products, please see the Material Safety Data Sheet for the phone number.

ADDITIONAL INFORMATION

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Nalco An Ecolab Company

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