VEOLIA

# SAFETY DATA SHEET

# GENGARD GN8165

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** GENGARD GN8165

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

**Identified uses** Corrosion inhibitor

**Uses advised against** None known.

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

AECI Water
1 Wharhirst Road
Umbogintwini
Durban.4126
Kwa Zulu Natal South Africa
Tel: +27 11 971 0400
Website: www.improchem.co.za - www.aeciworld.com
E-mail: aeciwater@aeciworld.com

Postal address
AECI Water
P.O.Box 2954,
Kempton Park, 1620
Gauteng.

### 1.4. Emergency telephone number

+27 800 SPILLS or +27 0800 774557 or +27 31 904 1400 (Office Hrs)

Multilingual emergency number (24/7)

Europe, Middle East, Africa, Israel (Europe and English language speaking countries):
+44(0)1235 239670
Middle East & Africa (speaking Arabic):
+44(0)1235 239671 VEOLIAWATERTECH29003-NCEC

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

**Classification according to Regulation (EC) No 1272/2008 as amended**

| | | |
|---|---|---|
| **Physical hazards** | | |
| Corrosive to metals | Category 1 | H290 - May be corrosive to metals. |
| **Health hazards** | | |
| Skin corrosion/irritation | Category 1 | H314 - Causes severe skin burns and eye damage. |
| Serious eye damage/eye irritation | Category 1 | H318 - Causes serious eye damage. |

### 2.2. Label elements

**Label according to Regulation (EC) No. 1272/2008 as amended**

**Contains:** Reaction mass of sodium 4-chloro-5-alkylbenzotriazolide and sodium 5-chloro-4-alkylbenzotriazolide and sodium 4-chloro-7-alkylbenzotriazolide and sodium 5-chloro-6-alkylbenzotriazolide, Sodium diethylenetriamine penta(methylenephosphonate), Sodium hydroxide

**Hazard pictograms**

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| | |
|---|---|
| **Signal word** | Danger |
| **Hazard statements** | |
| H290 | May be corrosive to metals. |
| H314 | Causes severe skin burns and eye damage. |
| **Precautionary statements** | |
| **Prevention** | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| **Response** | |
| P301 + P330 + P331 | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P305 + P351 + 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 CENTRE/doctor. |
| **Storage** | |
| | Product contains trace levels of ammonia which can accumulate in the container headspace or impart an odor. |
| P403 | Store in a well-ventilated place. |
| **Disposal** | Not available. |
| **Supplemental label information** | None. |
| **2.3. Other hazards** | This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight. |

## SECTION 3: Composition/information on ingredients

**Mixtures**

**Chemical description** Aqueous alkaline solution of organic salts

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|---|---|---|---|---|---|
| Polymaleic acid (2-butenedioc acid(z-), homopolymer), sodium salt | 5 - < 10 | 30915-61-8<br>- | - | - | |
| **Classification:** Skin Irrit. 2;H315, Eye Irrit. 2;H319 | | | | | |
| Sodium diethylenetriamine penta(methylenephosphonate) | 5 - < 10 | 22042-96-2<br>244-751-4 | - | - | |
| **Classification:** Skin Corr. 1C;H314, Eye Dam. 1;H318 | | | | | |
| Sodium hydroxide | 0,5 - < 2 | 1310-73-2<br>215-185-5 | 01-2119457892-27 | 011-002-00-6 | |
| **Classification:** Met. Corr. 1;H290, Skin Corr. 1A;H314 | | | | | |

**Multi-constituent substance(**

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|---|---|---|---|---|---|
| Reaction mass of sodium 4-chloro-5-alkylbenzotriazolide and sodium 5-chloro-4-alkylbenzotriazolide and sodium 4-chloro-7-alkylbenzotriazolide and sodium 5-chloro-6-alkylbenzotriazolide | <= 3 | N/A<br>- | 01-2119949569-17 | - | |
| **Classification:** Skin Corr. 1B;H314, Aquatic Chronic 3;H412 | | | | | |

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**List of abbreviations and symbols that may be used above**

ATE: Acute toxicity estimate.
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
#: This substance has been assigned Union workplace exposure limit(s).
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**4.1. Description of first aid measures**

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

**Ingestion** Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**4.2. Most important symptoms and effects, both acute and delayed** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.

**5.3. Advice for firefighters**

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** Move containers from fire area if you can do so without risk. Prevent spillage and fire-fighting water from entering in public sewers or the immediate environment.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** Do not breathe mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**For emergency responders** Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

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

Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

**6.4. Reference to other sections**

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Do not breathe mist/vapours. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Adequate ventilation required especially during initial opening. Alkaline. Do not mix with acidic material.

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

Store locked up. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Keep only in the original container. Store away from incompatible materials (see Section 10 of the SDS). Do not freeze. If frozen, thaw completely and mix thoroughly prior to use.

**7.3. Specific end use(s)**

Only for industrial users

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

**Occupational exposure limits**

**US. ACGIH Threshold Limit Values**

| Components | Type | Value |
|---|---|---|
| Sodium hydroxide (CAS 1310-73-2) | Ceiling | 2 mg/m3 |

**South Africa. Recommended Exposure Limits (RELs) Regulations for Hazardous Chemical Substances, Table 2**

| Components | Type | Value |
|---|---|---|
| Sodium hydroxide (CAS 1310-73-2) | STEL | 4 mg/m3 |

**Egypt. OELs. Threshold limits of air pollutants in the workplace (Decree No. 388, Annex 8), as amended**

| Components | Type | Value |
|---|---|---|
| Sodium hydroxide (CAS 1310-73-2) | Ceiling | 2 mg/m3 |

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures**

Follow standard monitoring procedures.

**Derived no effect levels (DNELs)**

**Workers**

| Components | Value | Assessment factor | Notes |
|---|---|---|---|
| Sodium hydroxide (CAS 1310-73-2) | | | |
| Long-term, Local, Inhalation | 1 mg/m3 | 1 | irritation respiratory tract |
| **Multi-constituent substance(s)** | **Value** | **Assessment factor** | **Notes** |
| Reaction mass of sodium 4-chloro-5-alkylbenzotriazolide and sodium 5-chloro-4-alkylbenzotriazolide and sodium 4-chloro-7-alkylbenzotriazolide and sodium 5-chloro-6-alkylbenzotriazolide (CAS N/A) | | | |
| Long-term, Systemic, Dermal | 2 mg/kg/day | 150 | |
| Long-term, Systemic, Inhalation | 7 mg/m3 | 150 | |

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**Predicted no effect concentrations (PNECs)**

| Multi-constituent substance(s) | Value | Assessment factor | Notes |
|---|---|---|---|
| Reaction mass of sodium 4-chloro-5-alkylbenzotriazolide and sodium 5-chloro-4-alkylbenzotriazolide and sodium 4-chloro-7-alkylbenzotriazolide and sodium 5-chloro-6-alkylbenzotriazolide (CAS N/A) | | | |
| Freshwater | 12,8 µg/l | 50 | |
| Marine water | 1,28 µg/l | 500 | |
| Secondary poisoning | 33,3 mg/kg | | |
| Sediment (freshwater) | 132,94 µg/kg | 1 | |
| Sediment (marine water) | 13,294 µg/kg | 10 | |
| Soil | 19,097 µg/kg | 1 | |
| STP | 1,82 mg/l | 100 | |

**8.2. Exposure controls**

**Appropriate engineering controls**
Adequate ventilation to maintain air contaminants below exposure limits especially during initial opening. Bulk tanks should be vented externally. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

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

**General information**
Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection**
Wear safety glasses with side shields (or goggles) and a face shield.
SANS1404 - EN166

**Skin protection**

**- Hand protection**
For prolonged or repeated skin contact use suitable protective gloves. Suitable gloves can be recommended by the glove supplier.
Gauntlet type neoprene gloves (Protection against unintentional short-term contact)
Gauntlet type nitrile gloves (Protection against unintentional short-term contact)
Gauntlet type rubber gloves (Protection against unintentional short-term contact)
Coating thickness: 0.5 mm
Penetration time: > 480 min
SANS1228
Wear appropriate chemical resistant gloves.

**- Other**
Wear appropriate chemical resistant clothing.
SANS 1068; SANS 434; EN 471, EN 469 or EN 533

**Respiratory protection**
In case of insufficient ventilation, wear suitable respiratory equipment. In case of insufficient ventilation, use a breathing mask with filter type: A2-P2
SANS 50140; SANS 50143; SANS 50149

**Thermal hazards**
Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures**
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls**
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

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

**Physical state** Liquid.

**Form** Liquid

**Colour** Amber to dark brown

**Odour** Slight ammonia

**Melting point/freezing point** -6 °C

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| | |
|---|---|
| **Boiling point or initial boiling point and boiling range** | 104 °C |
| **Flammability** | Not applicable. |
| **Upper/lower flammability or explosive limits** | |
| **Explosive limit - lower ( %)** | Not available. |
| **Explosive limit – upper (%)** | Not available. |
| **Flash point** | > 101 °C P-M(CC) |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **pH (concentrated product)** | 13,1 |
| **Kinematic viscosity** | Not available. |
| **Solubility** | |
| **Solubility (water)** | 100 % |
| **Partition coefficient (n-octanol/water) (log value)** | Not available. |
| **Vapour pressure** | 18 mmHg |
| **Vapour pressure temp.** | 21 °C |
| **Density and/or relative density** | |
| **Relative density** | 1,21 |
| **Relative density temperature** | 21 °C |
| **Vapour density** | < 1 |
| **Particle characteristics** | Not available. |
| **9.2. Other information** | |
| **9.2.1. Information with regard to physical hazard classes** | No relevant additional information available. |
| **9.2.2. Other safety characteristics** | |
| **Evaporation rate** | Slower than Ether |
| **pH in aqueous solution** | 12,1 (5% Solution) |
| **Pour point** | -3 °C |
| **Shelf life** | 720 Days |
| **Viscosity** | 16 mPa.s |
| **Viscosity temperature** | 21 °C |
| **VOC** | 0 % Estimated |

## SECTION 10: Stability and reactivity

| | |
|---|---|
| **10.1. Reactivity** | May be corrosive to metals. |
| **10.2. Chemical stability** | Material is stable under normal conditions. |
| **10.3. Possibility of hazardous reactions** | No dangerous reaction known under conditions of normal use. |
| **10.4. Conditions to avoid** | Protect from freezing. |
| **10.5. Incompatible materials** | Strong acids. Strong oxidising agents. Metals. |
| **10.6. Hazardous decomposition products** | Carbon oxides. Nitrogen oxides (NOx). Sulphur oxides. Phosphorus compounds. |

## SECTION 11: Toxicological information

| | |
|---|---|
| **General information** | Occupational exposure to the substance or mixture may cause adverse effects. |
| **Information on likely routes of exposure** | |
| **Inhalation** | May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |

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| | |
|---|---|
| **Skin contact** | Causes severe skin burns. |
| **Eye contact** | Causes serious eye damage. |
| **Ingestion** | Causes digestive tract burns. |
| **Symptoms** | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

| Product | Species | Test Results |
|---|---|---|
| GENGARD GN8165 | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | > 5000 mg/kg (Calculated according to GHS additivity formula) |
| **Oral** | | |
| LD50 | Rat | > 5000 mg/kg (Calculated according to GHS additivity formula) |

| Components | Species | Test Results |
|---|---|---|
| Sodium hydroxide (CAS 1310-73-2) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | 1350 mg/kg |
| **Oral** | | |
| LD50 | Rabbit | > 500 mg/kg |

| Multi-constituent substance(s) | Species | Test Results |
|---|---|---|
| Reaction mass of sodium 4-chloro-5-alkylbenzotriazolide and sodium 5-chloro-4-alkylbenzotriazolide and sodium 4-chloro-7-alkylbenzotriazolide and sodium 5-chloro-6-alkylbenzotriazolide | | |
| **Acute** | | |
| **Dermal** | | |
| | Rabbit | > 2000 mg/kg |
| **Oral** | | |
| | Rat | > 2000 mg/kg |

| | |
|---|---|
| **Skin corrosion/irritation** | Causes severe skin burns and eye damage. |
| **Serious eye damage/eye irritation** | Causes serious eye damage. |
| **Respiratory sensitisation** | Based on available data, the classification criteria are not met. |
| **Skin sensitisation** | Based on available data, the classification criteria are not met. |
| **Germ cell mutagenicity** | Based on available data, the classification criteria are not met. |
| **Carcinogenicity** | Based on available data, the classification criteria are not met. |
| **Reproductive toxicity** | Based on available data, the classification criteria are not met. |
| **Specific target organ toxicity - single exposure** | Based on available data, the classification criteria are not met. |
| **Specific target organ toxicity - repeated exposure** | Based on available data, the classification criteria are not met. |
| **Aspiration hazard** | Based on available data, the classification criteria are not met. |
| **Mixture versus substance information** | No information available. |

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**11.2. Information on other hazards**

| | |
|---|---|
| **Endocrine disrupting properties** | This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight. |
| **Other information** | Not available. |

## SECTION 12: Ecological information

**12.1. Toxicity** Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

| Product | | Species | Test Results |
|---|---|---|---|
| **Aquatic** | | | |
| Crustacea | LC50 | Daphnia magna | 2549 mg/l, 48 hour (pH adjusted) |
| | NOEL | Daphnia magna | 1000 mg/l, 48 hour (pH adjusted) |
| Fish | LC50 | Fathead minnow | 502 mg/l, 96 hour (pH adjusted) |
| | | Rainbow trout | 443 mg/l, 96 hour |
| | NOEL | Fathead minnow | 500 mg/l, 96 hour (pH adjusted) |
| | | Rainbow trout | 200 mg/l, 96 hour |

**12.2. Persistence and degradability**

| | |
|---|---|
| **- COD (mgO2/g)** | 235 (calculated data) |
| **- BOD 5 (mgO2/g)** | 11 (calculated data) |
| **- BOD 28 (mgO2/g)** | 25 (calculated data) |
| **- Closed Bottle Test (% Degradation in 28 days)** | 10 (calculated data) |
| **- TOC (mg C/g)** | 68 (calculated data) |

**12.3. Bioaccumulative potential**

**Partition coefficient n-octanol/water (log Kow)** Not available.

**Bioconcentration factor (BCF)**

| | |
|---|---|
| Sodium diethylenetriamine penta(methylenephosphonate) | < 10, OECD Guideline 305 (Bioconcentration: Flow-through Fish Te<br>Species: Carp (Cyprinus carpio carpio)<br>Test Duration: 28 days |

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

**12.6. Endocrine disrupting properties** This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

**12.7. Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Residual waste** Dispose of in accordance with local regulations.
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and national regulations.

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| | |
|---|---|
| **Disposal methods/information** | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.<br><br>Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and national regulations. |
| **Special precautions** | Dispose in accordance with all applicable regulations. |

## SECTION 14: Transport information

**ADR**

| | |
|---|---|
| **14.1. UN number or ID number** | UN1760 |
| **14.2. UN proper shipping name** | CORROSIVE LIQUID, N.O.S. (Sodium hydroxide, Sodium diethylenetriamine penta(methylenephosphonate, mixture) |
| **14.3. Transport hazard class(es)** | |
| **Class** | 8 |
| **Subsidiary risk** | - |
| **Tunnel restriction code** | (E) |
| **14.4. Packing group** | III |
| **14.5. Environmental hazards** | No. |
| **14.6. Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

**RID**

| | |
|---|---|
| **14.1. UN number or ID number** | UN1760 |
| **14.2. UN proper shipping name** | CORROSIVE LIQUID, N.O.S. (Sodium hydroxide, Sodium diethylenetriamine penta(methylenephosphonate, mixture) |
| **14.3. Transport hazard class(es)** | |
| **Class** | 8 |
| **Subsidiary risk** | - |
| **14.4. Packing group** | III |
| **14.5. Environmental hazards** | No. |
| **14.6. Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

**ADN**

| | |
|---|---|
| **14.1. UN number or ID number** | UN1760 |
| **14.2. UN proper shipping name** | CORROSIVE LIQUID, N.O.S. (Sodium hydroxide, Sodium diethylenetriamine penta(methylenephosphonate, mixture) |
| **14.3. Transport hazard class(es)** | |
| **Class** | 8 |
| **Subsidiary risk** | - |
| **14.4. Packing group** | III |
| **14.5. Environmental hazards** | No. |
| **14.6. Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

**IATA**

| | |
|---|---|
| **14.1. UN number or ID number** | UN1760 |
| **14.2. UN proper shipping name** | CORROSIVE LIQUID, N.O.S. (Sodium hydroxide, Sodium diethylenetriamine penta(methylenephosphonate, mixture) |
| **14.3. Transport hazard class(es)** | |
| **Class** | 8 |
| **Subsidiary risk** | - |
| **14.4. Packing group** | III |
| **14.5. Environmental hazards** | No. |
| **ERG Code** | Not available. |
| **14.6. Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

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**IMDG**

| | |
|---|---|
| **14.1. UN number or ID number** | UN1760 |
| **14.2. UN proper shipping name** | CORROSIVE LIQUID, N.O.S. (Sodium hydroxide, Sodium diethylenetriamine penta(methylenephosphonate, mixture) |
| **14.3. Transport hazard class(es)** | |
| **Class** | 8 |
| **Subsidiary risk** | - |
| **14.4. Packing group** | III |
| **14.5. Environmental hazards** | |
| **Marine pollutant** | No. |
| **EmS** | F-A, S-B |
| **14.6. Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |
| **14.7. Maritime transport in bulk according to IMO instruments** | Not established. |

**ADN; ADR; IATA; IMDG; RID**


## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulations**

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

**Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

**Restrictions on use**

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**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

**Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

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|---|---|
| **Other regulations** | The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. |
| **National regulations** | Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended. |
| **15.2. Chemical safety assessment** | No Chemical Safety Assessment has been carried out. |
| **NSF Registered and/or meets USDA (according to 1998 guidelines):** | Registration No. – 145834<br>Category Code(s):<br>G5 Cooling and retort water treatment products<br>G7 Boiler, steam line treatment products – nonfood contact |

**Inventory status**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## SECTION 16: Other information

**List of abbreviations**

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
EC50: Effective Concentration 50%.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
LC50: Lethal Concentration 50%.
LD50: Lethal Dose 50%.
MARPOL: International Convention for the Prevention of Pollution from Ships.
NOEL: No observed effect level.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TOC: Total Organic Carbon.
TWA: Time Weighted Average.
vPvB: Very persistent and very bioaccumulative.
COD: Chemical Oxygen Demand
EC-No: European Commission Number
BOD: Biochemical oxygen demand.

| | |
|---|---|
| **References** | Safety data sheets of raw materials. |
| **Information on evaluation method leading to the classification of mixture** | The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. |

VEOLIA

# SAFETY DATA SHEET

# GENGARD GN8165

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| **Full text of any statements, which are not written out in full under sections 2 to 15** | H290 May be corrosive to metals.<br>H314 Causes severe skin burns and eye damage.<br>H315 Causes skin irritation.<br>H318 Causes serious eye damage.<br>H319 Causes serious eye irritation. |
| **Revision information** | SECTION 3: Composition/information on ingredients: Composition comments<br>SECTION 9: Physical and chemical properties: Odour<br>SECTION 16: Other information: References<br>SECTION 16: Other information: Further information<br>GHS: Classification |
| **Training information** | Follow training instructions when handling this material. |
| **Disclaimer** | 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. |
| **Based on EC Directive / Regulations** | South African Standard : SABS ISO 11014-1:2009 - SANS 10234:2008 |
| **Further information** | Correction in Section: 1 |