

Restore 4™

1. Identification

Product Name: Restore 4™

Synonyms: Enzymatic Instrument Cleaner

Recommended Use: N/A

Manufacturer:

Cancer Diagnostics, Inc.
116 Page Point Circle
Durham, NC 27703
1-877-846-5393

Item #: RE1000, RE3800, RE1004, RE3804

Restrictions on Use: Not a Beverage

In Case of Emergency:

Chemtrec US 1-800-424-9300
Infotrac International 1-352-323-3500

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 1 |
| Serious eye damage/eye irritation | Category 1 |

Label elements

Signal word:

Danger

Hazard statements

Causes skin and eye irritation

Corrosive to skin.

Toxic to aquatic life with long lasting effects.

Causes serious eye damage



Appearance Colorless liquid

Physical state liquid

Odor sweet

Restore 4™

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
 Specific treatment (see Section 4)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician
 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
 Immediately call a POISON CENTER or doctor/physician
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant in accordance with all Federal, State, and Local regulations.

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Toxic to aquatic life with long lasting effects.

3. Composition and Information on Ingredients

Substance

| Chemical Name | CAS No | Weight-% | Trade Secret |
|--|-------------|----------|--------------|
| Nonylphenol, ethoxylated | 127087-87-0 | 1 - 5 | * |
| C6-12 Alkyl Alcohol Ethoxylate Phosphoric Acid | 68921-24-4 | 1 - 5 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

Description of first aid measures

| | |
|---------------------|--|
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| Inhalation | Remove victim to fresh air or supply oxygen. Administer artificial respiration if victim is unconscious. Seek medical attention if victim is unconscious. Seek medical attention if victim is overcome by vapors or breathing difficulty persists. |
| Ingestion | Seek medical attention immediately. If conscious, give victim two glasses of water to dilute ingested material. Do not induce vomiting. If victim begins to vomit involuntarily, keep head below hips to prevent aspiration. Monitor for breathing difficulty. |

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Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-Fighting Measures

Suitable extinguishing media

Use CO₂, dry chemical or foam fire fighting equipment. Water may be used to cool fire-exposed containers. Wear self-contained breathing apparatus with full face piece.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

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

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general purpose binder). Dispose of absorbed material in accordance with regulations. Large spills: Stop the flow of material if this is without risk. Dike the spilled material where this is possible. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for re-use.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and Storage

Precautions for safe handling

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Advice on safe handling Keep container closed when not in use. Store at room temperature in well ventilated areas. Prevent product from freezing. Follow SDS and label warnings even after package is empty. Do not cut, puncture, or weld empty container. Not for use in pressure washing equipment. Product applications which generate dust, mist, or fumes may require exposure limit modification. Use personal protection recommended in Section 8. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. Exposure Controls/Personal Protection

Control parameters

Exposure Guidelines

Appropriate engineering controls

Engineering Controls Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

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 Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

| | | | |
|-----------------------|------------------|-----------------------|--------------------------|
| Physical state | liquid | Odor | sweet |
| Appearance | Colorless liquid | Odor threshold | No information available |
| Color | Colorless | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---------------------------------------|--------------------------|-------------------------|
| pH | 2.0 | |
| Melting point / freezing point | No information available | |
| Boiling point / boiling range | 212 °F | |
| Flash point | > 140 °F / < 200 °F | |
| Evaporation rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | No information available | |
| Vapor density | No information available | |

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| | |
|-------------------------------------|--------------------------|
| Relative density | 1.0000 |
| Water solubility | No information available |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |

| | |
|-----------------------------|--------------------------|
| Kinematic viscosity | No information available |
| Dynamic viscosity | No information available |
| Explosive properties | No information available |
| Oxidizing properties | No information available |

Other Information

| | |
|-------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Density | No information available |
| Bulk density | No information available |

10. Stability and Reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides. Steam. Hydrocarbons.

11. Toxicological Information

Information on likely routes of exposure

| | |
|----------------------------|---|
| Product Information | No data available |
| Inhalation | No data available. |
| Eye contact | Risk of serious damage to eyes. Corrosive, prevent contact. Irritating to eyes. |
| Skin contact | Irritating to skin. Corrosive to skin. |
| Ingestion | No data available. |

Component Information

| Chemical Name | ATEmix (oral) | ATEmix (dermal) | Inhalation LC50 |
|---|----------------------|-----------------|-----------------|
| Nonylphenol, ethoxylated 127087-87-0 | = 1310 mg/kg (Rat) | - | - |

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Information on toxicological effects

Symptoms No information available.

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

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
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 .

12. Ecological Information

Ecotoxicity

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. Disposal Considerations

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging Do not reuse container.

Restore 4™
14. Transport Information

| | |
|---|--|
| 14.1 UN Number DOT, IATA,IMDG, ADR | DOT: Not Regulated for Transport by DOT. ADR/RID: Not Regulated for Transport by ADR/RID. IMDG: Not Regulated for Transport by IMDG. IATA: Not Regulated for Transport by IATA. |
| 14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR | ADR/RID: Not Regulated for Transport by ADR/RID. IMDG: Not Regulated for Transport by IMDG. IATA: Not Regulated for Transport by IATA. DOT: Not Regulated for Transport by DOT. |
| 14.3 Transport Hazard Class(es) | DOT: Not Regulated for Transport by DOT. IATA: Not Regulated for Transport by IATA. IMDG: Not Regulated for Transport by IMDG. ADR/RID: Not Regulated for Transport by ADR/RID. |
| 14.4 Packing Group DOT, IATA,IMDG, ADR | ADR/RID: Not Regulated for Transport by ADR/RID. IMDG: Not Regulated for Transport by IMDG. IATA: Not Regulated for Transport by IATA. DOT: Not Regulated for Transport by DOT. |
| 14.5 Environmental Hazards | Marine Pollutant: No |
| 14.6 Special Precautions for User | Not applicable. |

15. Regulatory Information
International Inventories

| | |
|----------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

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

US Federal Regulations
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



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| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Restore 4™

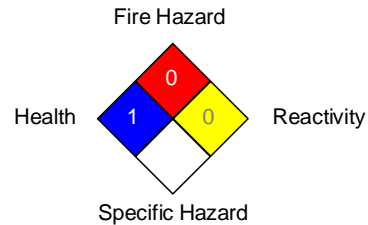
16. Other Information

Revision Date: 2019-01-11

NFPA

| | |
|-----------------|---|
| Health | 1 |
| Fire Hazard | 0 |
| Reactivity | 0 |
| Specific Hazard | |

National Fire Protection Association (USA) NFPA



HMIS

| | |
|---------------------|---|
| Health | 1 |
| Flammability | 0 |
| Physical Hazard | 0 |
| Personal Protection | |

Hazardous Material Information System HMIS

| | |
|---------------------|---|
| Health | 1 |
| Flammability | 0 |
| Physical Hazard | 0 |
| Personal Protection | |

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.