

SAFETY DATA SHEET

DYNA CLEAN BIO 90

Version 1

1. IDENTIFICATION

Revision Date: 14-September-2015

Product Identifier

Product Name DYNA CLEAN BIO 90

Other means of identification

Issue Date: 16-July-2014

 SDS #
 DYNA-001

 Product Code
 1169

Recommended use of the chemical and restrictions on use

Recommended use General purpose deaner Restrictions on use Industrial use only

Details of the supplier of the safety data sheet

Manufacturer Address

Company Name: DYNA TECH Chemical Specialties, Inc.

Address: P. O. Box 34

Colgate, WI 53017

Telephone: 262-646-7600 Fax: 262-820-9176

Emergency Telephone Number (24 hours/day): INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Green liquid Physical State Liquid Odor Citrus

Classification

| Acute toxicity - Oral | Category 4 |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |

Signal Word

Danger

Hazard Statements

Harmful if swallowed Causes skin irritation Causes serious eye damage



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

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: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation persists, get medical advice/attention.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| CHEMICAL NAME | CAS No | WEIGHT-% |
|-----------------------------------|-----------|----------|
| Tetrasodium EDTA | 64-02-8 | <40 |
| Sodium Tripolyphosphate | 7758-29-4 | <10 |
| Diethylene Glycol Monobutyl Ether | 112-34-5 | <10 |
| Sodium xylenesulfonate | 1300-72-7 | <5 |
| Trisodium Nitrilotriacetate | 5064-31-3 | <2 |
| Sodium hydroxide | 1310-73-2 | <2 |

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact 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.

Skin Contact IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash

it before reuse. If irritation persists, seek medical attention. Do not apply oils or ointments

unless ordered to by a physician.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention.

Ingestion IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Drink large quantities of

water without delay. Drink milk or milk of magnesia. Never give anything by mouth to an

unconscious person. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

Symptoms Causes severe eye damage. Causes skin irritation. Irritating to mouth, throat, and stomach

if ingested. May be irritating to respiratory tract.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Carbon dioxide (CO2). Drychemical.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

Contact with metals may evolve flammable hydrogen gas.

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. Do not release runoff from fire control methods to sewers or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protection recommended in Section 8.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

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

Methods for Clean-Up Contain and collect with an inert absorbent and place into an appropriate container for

disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal

protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. When making solutions, heat may be generated. Add slowly to surfaces of solution while stirring to avoid splattering. Never use pressure to empty containers. Empty containers may contain explosive vapors or dangerous residues. Do not cut, puncture, or weld on or near containers. All labelled hazardous precautions must be observed. Do not reuse empty container without commercial cleaning or reconditioning. When mixing, add product slowly to water, do NOT add water to

product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Protect from

direct sunlight. Store away from incompatible materials. Do not store open, unlabeled,

mislabeled, or empty containers.

Incompatible Materials Acids. Oxidizers.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| CHEMICAL NAME | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------------------|------------------------------|--|--|
| Sodium Tripolyphosphate 7758-29-4 | 15 mg/m ³ | 15 mg/m ³ | - |
| Sodium hydroxide 1310-73-2 | Ceiling: 2 mg/m ³ | TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³ | IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³ |

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

FN166.

Skin and Body Protection Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or

repeated skin contact.

Respiratory Protection Seek professional advice prior to respirator selection and use. Follow OSHA respirator

regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fittesting, periodic environmental monitoring, maintenance, inspection, cleaning, and

convenient, sanitary storage areas.

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 Green liquid **Appearance** Odor Citrus

Color Green **Odor Threshold** Not determined

Remarks • Method Property **Values**

Alkaline **Melting Point/Freezing Point** Not determined **Boiling Point/Boiling Range** 100 °C / 212

Flash Point None

Evaporation Rate Not determined Flammability (Solid, Gas) Liquid-Not applicable

Upper Flammability Limits None

Lower Flammability Limit None

Vapor Pressure Not determined Vapor Density Not determined

Specific Gravity 1.20 (Water = 1)

Water Solubility 100%

Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

This product is stable at room temperature in closed containers under normal storage and handling conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Extreme high heat/temperatures. Keep separated from incompatible substances. Keep out of reach of children.

Incompatible Materials

Acids. Oxidizers.

Hazardous Decomposition Products

Carbon monoxide. Hydrogen gas.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye damage.

Skin Contact Causes skin irritation.

Inhalation Avoid breathing vapors or mists.

Ingestion Harmful if swallowed.

Component Information

| CHEMICAL NAME | ORAL LD50 | DERMAL LD50 | INHALATION LC50 |
|-----------------------------|--------------------|-----------------------|--------------------|
| Tetrasodium | = 10 g/kg (Rat) | - | - |
| EDTA 64-02-8 | | | |
| Sodium | = 3100 mg/kg (Rat) | > 7940 mg/kg (Rabbit) | - |
| Tripolyphosphate | | | |
| Nonoxyn | = 1310 mg/kg (Rat) | = 2 mL/kg (Rabbit) | - |
| ol 9016- | | | |
| Diethylene Glycol Monobutyl | = 3384 mg/kg (Rat) | = 2700 mg/kg (Rabbit) | - |
| Ether 112-34-5 | | | |
| Sodium | = 7200 mg/kg (Rat) | - | - |
| xylenesulfonate | | | |
| Sodium | - | = 1350 mg/kg (Rabbit) | - |
| hydroxide | | | |
| Trisodium | = 920 mg/kg (Rat) | - | > 5 mg/L (Rat) 4 h |
| Nitrilotriacetate 5064- | | | |

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

| CHEMICAL NAME | ACGIH | IARC | NTP | OSHA |
|-----------------------------|-------|----------|-----|------|
| Trisodium Nitrilotriacetate | | Group 2B | | X |
| 5064-31-3 | | | | |

Legend

IARC (International Agency for Research on Cancer) Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Eco Toxicity

Toxic to aquatic life with long lasting effects.

Component Information

| | | | Toxicity to | |
|-----------------------------|----------------------------|------------------------------|----------------|--------------------------|
| CHEMICAL NAME | ALGAE/AQUATIC PLANTS | FISH | MICROORGANISMS | CRUSTACEA |
| Tetrasodium EDTA | 1.01: 72 h Desmodesmus | 41: 96 h Lepomis | | 610: 24 h Daphnia magna |
| 64-02-8 | subspicatus mg/L EC50 | macrochirus mg/L LC50 | | mg/L EC50 |
| | | static 59.8: 96 h Pimephales | | |
| | | promelas mg/L LC50 static | | |
| Sodium Tripolyphosphate | | 1650: 48 h Leuciscus idus | | |
| 7758-29-4 | | mg/L LC50 | | |
| Diethylene Glycol Monobutyl | 100: 96 h Desmodesmus | 1300: 96 h Lepomis | | 2850: 24 h Daphnia magna |
| Ether | subspicatus mg/L EC50 | macrochirus mg/L LC50 | | mg/L EC50 100: 48 h |
| 112-34-5 | | static | | Daphnia magna mg/L EC50 |
| Sodium hydroxide | | 45.4: 96 h Oncorhynchus | | |
| 1310-73-2 | | mykiss mg/L LC50 static | | |
| Trisodium Nitrilotriacetate | 560 - 1000: 96 h Chlorella | 93 - 170: 96 h Pimephales | | 560 - 1000: 48 h Daphnia |
| 5064-31-3 | vulgaris mg/L EC50 | promelas mg/L LC50 | | magna mg/L LC50 |
| | | flow-through 175 - 225: 96 h | | |
| | | Lepomis macrochirus mg/L | | |
| | | LC50 static 252: 96 h | | |
| | | Lepomis macrochirus mg/L | | |
| | | LC50 470: 96 h Pimephales | | |
| | | promelas mg/L LC50 static | | |
| | | 560 - 1000: 96 h Oryzias | | |
| | | latipes mg/L LC50 560 - | | |
| | | 1000: 96 h Oryzias latipes | | |
| | | mg/L LC50 semi-static 72 - | | |
| | | 133: 96 h Oncorhynchus | | |
| | | mykiss mg/L LC50 static 560 | | |
| | | - 1000: 96 h Poecilia | | |
| | | reticulata mg/L LC50 | | |
| | | semi-static 560 - 1000: 96 h | | |
| | | Poecilia reticulata mg/L | | |
| | | LC50 114: 96 h Pimephales | | |
| | | promelas mg/L LC50 | | |

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

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 Disposal should be in accordance with applicable regional, national and local laws and

regulations.

California Hazardous Waste Status

| CHEMICAL NAME | California Hazardous Waste Status |
|------------------|-----------------------------------|
| Sodium hydroxide | Toxic |
| 1310-73-2 | Corrosive |

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG

Marine Pollutant This material may meet the definition of a marine pollutant.

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

CERCLA

| CHEMICAL NAME | HAZARDOUS SUBSTANCES RQS | CERCLA/SARA | REPORTABLE QUANTITY (RQ) |
|------------------|--------------------------|-------------|--------------------------|
| Sodium hydroxide | 1000 lb | | RQ 1000 lb final RQ |
| 1310-73-2 | | | RQ 454 kg final RQ |

SARA 313

| | | | SARA 313 - THRESHOLD |
|--|----------|----------|----------------------|
| CHEMICAL NAME | CAS No | WEIGHT-% | Values % |
| Diethylene Glycol Monobutyl Ether - 112-34-5 | 112-34-5 | <10 | 1.0 |

CWA (Clean Water Act)

| | CWA - REPORTABLE | | CWA - PRIORITY | CWA - HAZARDOUS |
|------------------|------------------|------------------------|----------------|-----------------|
| CHEMICAL NAME | QUANTITIES | CWA - TOXIC POLLUTANTS | POLLUTANTS | SUBSTANCES |
| Sodium hydroxide | 1000 lb | | | X |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| CHEMICAL NAME | New Jersey | MASSACHUSETTS | PENNSYLVANIA |
|-----------------------------------|------------|---------------|--------------|
| Sodium Tripolyphosphate | | X | X |
| 7758-29-4 | | | |
| Diethylene Glycol Monobutyl Ether | X | | X |
| 112-34-5 | | | |
| Sodium hydroxide | X | X | X |
| 1310-73-2 | | | |
| Trisodium Nitrilotriacetate | | X | |
| 5064-31-3 | | | |

16. OTHER INFORMATION

| <u>NFPA</u> | Health Hazards Not determined | Flammability Not determined | Instability Not determined | Special Hazards Not determined |
|-------------|-------------------------------|-----------------------------|----------------------------|--------------------------------|
| <u>HMIS</u> | Health Hazards | Flammability 0 | Physical Hazards | Personal Protection |

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Revision Note: New format

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. This information should be used to make an independent determination of the methods to safeguard workers and the environment. 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 OF SAFETY DATA SHEET