

Safety Data Sheet

Acc. To OSHA HCS (29 CFR 1910.1200)

Trade Name: Total-Shield Plus™ HG

1. PRODUCT IDENTIFICATION

Product Identifier: 877587HG32

Trade Name: Total-Shield Plus™ HG (Ready to Use)

Recommended use and restriction of use

Recommended use: EPA sterilant

Restrictions on use: Use only as directed

Details of Supplier/Manufacturer of Safety Data Sheet:

ConSeal International, Inc.

90 Kerry Place, Suite 2

Norwood, MA 02062

(781) 278-0010

McGowan Industries, Inc.

12335 World Trade Drive, Suite 6

San Diego, CA 92128

(877) 910-4208

Emergency Telephone number: ChemTrec US (800) 424-9300, Canada 1+ (800) 424-9300

2. HAZARD IDENTIFICATION

GSH pictograms:



Signal word:

Warning

GHS Class:

Eye Irritant, Category 2

Hazard Statements:

Causes Eye Irritation

Precautionary Statements:

Wash Hands thoroughly after handling.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Seek medical attention.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Seek medical attention.

Wash contaminated clothing before reuse.

Emergency Overview:

WARNING! Mild irritant. Irritating to eyes, respiratory system and skin.

Route of Exposure:

Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eye: Eye contact may cause moderate to severe irritation.

Skin: Mild skin irritation is possible upon direct contact depending on degree and duration of contact.

Inhalation: May cause respiratory tract irritation.

Ingestion: Ingestion of this product is unlikely. This product may be harmful if swallowed.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

HMIS III Classification:

Health Hazards 2

Flammability 0

Physical Hazards 0

PPE B

NFPA Rating:

Health 2

Flammability 0

Reactivity 0

Special Hazards 0

HMIS III Ratings Note: 4=Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal, B=Safety Glasses and Gloves

Safety Data Sheet

Acc. To OSHA HCS (29 CFR 1910.1200)

Trade Name: Total-Shield Plus™ HG

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterizations: Proprietary

Description: Mixture of substances

Dangerous components:

| CAS No | Chemical Name | Range % |
|-----------|-------------------|---------|
| 79-21-0 | Peracetic Acid | <1% |
| 7722-84-1 | Hydrogen Peroxide | <7% |

***Additional information:** For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

4. FIRST AID MEASURES

Description of first-aid measures

General information:

After inhalation: Move to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.

After skin contact: Immediately flush with plenty of water while removing contaminated clothing and/or shoes, and thoroughly wash with soap and water. Seek immediate medical attention/advice. Wash contaminated clothing with plenty of water to prevent fire hazard

After eye contact: Rinse opened eye(s) for several minutes with running water. If irritation continues consult a doctor.

After swallowing: Rinse out mouth and then drink plenty of water. Vomiting may occur; immediately call for medical help.

Information for doctor: None known

Most important symptoms and effects, both acute and delayed: Can cause severe eye irritation and corrosion and dermatitis on contact with skin

Danger issues:

Severe eye and skin irritation can occur

Indication of an immediate medical attention and special treatment needed:

This product can be corrosive to skin, eyes, and mucous membranes. Consideration should be given to careful endoscopy as stomach or esophageal burns, perforations or strictures may occur. Careful gastric lavage with an endotracheal tube in place should be considered. Observations may be warranted. Treatment is controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons, unsuitable extinguishing agents: Chemical type extinguishers may not be effective

Special hazards arising from the substance or mixture: Decomposition under fire conditions may release oxygen that can intensify fire

Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information: No further relevant information available

6. ACCIDENTAL RELEASE MEASURE

Personal precautions, protective equipment and emergency procedures:

Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see Section 8.

Environmental precautions: Do not allow product to enter sewers, surface of ground water.

Methods and materials for containment and clean up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to Sec. 13

Reference to other section: Refer to Sec. 7, 8, and 13.

Safety Data Sheet

Acc. To OSHA HCS (29 CFR 1910.1200)

Trade Name: Total-Shield Plus™ HG

7. HANDLING AND STORAGE

Handling

Precautions for safe handling:

Use in well ventilated areas

Open and handle receptacles with care.

Avoid splashes or sprays in enclosed areas

Avoid contact with eyes and skin.

Wash hands before breaks and at the end of work.

Use personal protective equipment as required

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including and incompatibilities:

Oxidizing agents; Strong reducing agents; Combustible materials; Heavy metals such as iron, copper, chromium, nickel, aluminum and cobalt

Storage

Requirements to be met by storerooms and receptacles:

Do not stored near reducing agents, fuels or other non-compatible materials. Keep in a dry, cool and well-ventilated place. Keep at temperatures below 30°C. Higher temperatures will accelerate decomposition resulting in loss of assay. Keep away from direct sunlight. Keep away from heat and sources of ignition i.e., steam pipes, radiant heaters, hot air vents or welding sparks. Use first in, first out storage system. Do not double-stack. Containers must be vented.

Information about storage in one common storage facility:

Further information about storage conditions: Store in cool, dry conditions in well-sealed receptacles.

Specific end uses: No further relevant information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7

Control parameters

Components with limit values that require monitoring at the workplace:

Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by using local exhaust ventilation and good general extraction. Ensure that eyewash stations and safety showers are close to the workstation location.

Additional information: The lists that were valid during the creation were used as the basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed

Keep away from foodstuff, beverages and feed

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work

Avoid contact with the eye and skin

Use only in well ventilated areas.

Engineering controls:



Breathing equipment: Not normally needed when used in well ventilated area. Avoid mist and vapor.

Protection of hands: Rubber/latex/neoprene or other suitable chemical resistant gloves. Wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

Material of gloves: Rubber/latex/neoprene

Penetration time of glove material: Not available

Eye protection: Safety glasses recommended

Body protection: Standard work cloths recommended

Limitation and supervision of exposure into the environment: No further relevant information available

Safety Data Sheet

Acc. To OSHA HCS (29 CFR 1910.1200)

Trade Name: Total-Shield Plus™ HG

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General information

Appearance:

Form: Liquid

Color: Clear

Odor: Mild

Odor threshold: Not determined

pH value: 1.5 – 2.5

Melt point/ range: Not determined

Boiling point/ range: Not determined

Flash point: Not applicable

Flammability (solid, gaseous): Not applicable

Auto-ignition temp: Not determined

Decomposition temperature: Not determined

Auto igniting: Product is not self-igniting

Danger of explosion: Product does not present an explosion hazard

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor pressure at 20 C (F): Not determined

Density at 20 C (F):

Specific Gravity: 0.979 (8.14 lbs./gal.)

Vapor density: Not determined

Evaporation rate: Not determined

Solubility/miscibility with water: soluble

Partition coefficient (n-octanol/water): Not determined

Viscosity: Not determined

Solvent content:

VOC (California): < 20%

Other information: No further relevant information available

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Thermal decomposition/conditions to be avoided: Store in cool, dry place. Avoid freezing

Possibility of hazardous reactions: Will not occur

Conditions to avoid: Heat, flames and sparks; Temperatures above 30°C. Higher temperatures will accelerate decomposition resulting in loss of assay

Incompatible materials: Oxidizing agents; Strong reducing agents; Combustible materials.

Hazardous decomposition components: Possible oxides of carbon (CO, CO2)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

LD/LC 50 values that are relevant for classification: Not determined

Primary irritant effect

On skin: Can cause irritation

On eyes: Can cause irritation

Sensitization: No sensitizing effects known

Sub-acute to chronic toxicity: No further relevant information available

Additional toxicological information:

Carcinogenic categories

Safety Data Sheet

Acc. To OSHA HCS (29 CFR 1910.1200)

Trade Name: Total-Shield Plus™ HG

NTP (National Toxicology Program): None of the ingredients is listed

OSHA-Ca (Occupational Safety and Health Administration): No further relevant information available

Probable routes of exposure

Acute effects (acute toxicity, irritation, and corrosivity): Severe skin and eye irritation can occur

Repeated Dose Toxicity: No further relevant information available

12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity:

Persistence and degradability: Product is biodegradable

Bio-accumulative potential: Product will not bio-accumulate

Mobility in soil: None known

Additional ecological information:

General notes: Do not allow undiluted product or large quantities of product to reach ground water, water course or sewage systems.

Other adverse effects: No further relevant information available

13. DISPOSAL CONSIDERATIONS

Waste treatments methods

Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual material should be treated as hazardous.

Un-cleaned packaging:

Recommendations: Disposal must be made according to official regulations

Recommended cleansing agent: Water, if necessary, with cleansing agents

14. TRANSPORTATION INFORMATION

DOT Shipping Name: Not required as hazardous material for transportation.

DOT Hazard Class: Not applicable.

DOT Packing Group: Not applicable.

DOT Exemption: According to UN test 0.2 for oxidizing liquids and In vitro corrosivity testing specified in 49 CFR, this material does not meet the definition of a Class 5.1 oxidizer (49 CFR 173.127) or a Class 8 corrosive material (49 CFR 173.136), and therefore, is not regulated as a dangerous good.

IATA Shipping Name: Not regulated as hazardous material for transportation.

IATA Hazard Class: Not applicable.

IATA Packing Group: Not applicable.

IMDG Shipping Name: Not regulated as hazardous material for transportation.

IMDG Hazard Class: Not applicable.

IMDG Packing Group: Not applicable.

Marine Pollutant: No

Schedule B: 29.15.000000

HS Code: 29153990

15. REGULATORY INFORMATION

US Federal: This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: **WARNING.** Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear such as goggles, face shield or safety glasses.

Safety Data Sheet

Acc. To OSHA HCS (29 CFR 1910.1200)

Trade Name: Total-Shield Plus™ HG

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. PHYSICAL AND CHEMICAL HAZARDS: This product contains an oxidizing agent. Avoid contact with other sanitizers, cleaners or organic substances. ENVIRONMENTAL HAZARDS: This pesticide is toxic to birds, fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water unless in accordance with the requirements of a national Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without appropriate dilution.

TSCA Inventory Status: Listed

SARA: This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization act of 1986 (SARA) Title III (40 CFR, Part 372.)

Section 202 EHS: EPCRA (SARA Title III) Section 302 (40 CFR Part 355) Extremely Hazardous Substances (EHS) Threshold Planning.
Quantity (TPQ) in pounds.
Peracetic Acid: RQ = 500 lbs.
Hydrogen Peroxide: TPQ = 1,000 lbs., RQ = 1,000 lbs.
Hydrogen Peroxide (<52%): 10,000 lbs.

CERCLA Section 302: Listed (Acetic Acid = 5,000 lbs.), Category D

Section 311/312

Hazard Categories: Acute Health Hazard: Yes
Chronic Health Hazard: No
Risk of Ignition: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

Section 313: Listed

OSHA Process Safety: Irritant

RCRA 261.33 Code: Not Regulated:

Canada WHMIS: Controlled – Class: D2B Toxic

Canada IDL: Listed (Hydrogen Peroxide, Peracetic Acid, Acetic Acid)

Hydrogen peroxide:

TSCA Inventory Status: Listed
Canada DSL: Listed
EC Number: 231-765-0

Acetic Acid:

TSCA Inventory Status: Listed
Canada DSL: Listed
EC Number: 200-580-7

Peroxyacetic Acid:

EC Number: 201-186-8

Water:

TSCA Inventory Status: Listed
Canada DSL: Listed
EC Number: 231-791-2

Safety Data Sheet

Acc. To OSHA HCS (29 CFR 1910.1200)

Trade Name: Total-Shield Plus™ HG

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific products features and shall not establish a legally valid contractual relationship.

The health hazards given on the Safety Data Sheet apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of overexposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

Company warrants that the product or products described herein will conform to its published specifications. The products supplied by the company and information related to them are intended for use by buyers having necessary industrial skill and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Company's materials for their own particular purpose. Since buyer's conditions of use of product are beyond Company's control, Company does not warrant any recommendations and information for the use of such products. Company disclaims all other warranties including the implied warranty of merchantability and fitness for any particular purpose in connection with the use of its products.

Date of preparation/last revision: 3/7/2023