SAFETY DATA SHEET

SECTION 1 MATERIAL AND MANUFACTURER IDENTIFICATION

Product Identifier: OxyForce
Product Use: Pre-Spray Spotter/Booster

COMPANY: TSI
821 West Broadway Road
Tempe, Arizona 85282
Phone: (480) 784-0400
Emergency Assistance Calls: Poison Control Center (800) 222-1222 (U.S.A.) 24hrs.

SECTION 2 HAZARD(S) IDENTIFICATION

GHS CLASSIFICATION

Flammable Liquid (Category 2)
Acute Toxicity, Oral (Category 4)
Acute Toxicity, Dermal (Category 5)
Acute Toxicity, Inhalation (Category 5)
Serious Eye Damage and Irritation (Category 1)
Routes of Exposure: Eye contact, skin contact, inhalation, and ingestion.
Inhalation: Unlikely to occur when used as directed. Excessive exposure may cause irritation of the respiratory tract
Eye Contact: May cause severe irritation with possible permanent eye damage.
Skin Contact: Repeated, prolonged exposure may cause skin irritation, drying, chapping.
Ingestion: A very small quantity is unlikely to cause injury. Larger quantities may cause injury; if swallowed can cause gastrointestinal irritation; including but limited to nausea, vomiting and diarrhea.
Carcinogenic Potential: Not established
Acute Effects: This product is considered to be a potential irritant. This product should not be used for any other purpose than the intended use in section 1.
Chronic Effects: Not established

Signal word: **WARNING**
Hazard statement(s):
H272 May intensify fire; oxidizer
H303: May be harmful if swallowed;
H313: May be harmful in contact with skin;
H335: Maybe harmful if inhaled;
H318 Causes serious eye damage;
H227: Combustible liquid.

Health hazard	2
Flammability hazard	1
Reactivity hazard	2
Other hazard	OX

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS #	CONCENTRATIONS
Sodium Carbonate	497-19-8	15-20%
Linear Alkyl Benzene Sulfonate	68081-81-2	15-20%
Sodium Metasilicate	6834-92-0	10-20%
Sodium Tripholyphosate	7758-29-4	10-70%
Ether Butyl	111-76-2	1-10%
Sodium Sulfate	7757-82-6	5-10%
Sodium Percarbonate	15630-89-4	10-40%

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SECTION 4 FIRST-AID MEASURES

Inhalation: Remove from further exposure to fresh air. If respiratory irritation, dizziness, or nausea occurs seek immediate medical attention.
Eye Contact: Flush eyes with a directed stream of water for 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes immediately after exposure is essential to achieve maximum effectiveness and minimize potential irritation. If irritation persists, seek immediate medical attention.
Skin Contact: Wash contact areas with soap and water. Launder exposed clothing before reuse.
Ingestion: If swallowed, do not induce vomiting. Seek immediate medical attention.

SECTION 5 FIRE-FIGHTING MEASURES

FLAMMABILITY PROPERTIES

Flashpoint: N/A
Flammable Limits: N/A
Auto ignition Temperature: N/A

FIREFIGHTING PROCEDURES

General Hazard: Smoke may contain original material, in addition to toxic and/or irritating compounds. Avoid heat or open flames
Firefighting Instructions: Evacuate all unnecessary personnel. Use dry chemicals, CO_2, water, foam or appropriate extinguishing media for fires where water is not appropriate. No special firefighting instructions.
Firefighting Equipment: Firefighters should wear NICSH/MSHA approved self-contained, positive pressure breathing apparatus and full protective clothing.
Hazardous Combustion Products: Combustion may release oxides of carbon and sulfur.
Unusual Fire and Explosion Hazards: This material will not burn until the water has evaporated. Residue can burn. Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Persons performing the cleanup should wear personal protective equipment sufficient to keep material away from skin. Avoid direct contact with material. See section 4 for First-Aid Advice. See section 5 for Firefighting Advice.

PROTECTIVE MEASURES
To minimize exposure to all chemicals, including this product, use good industrial hygiene and common sense. Use only in well ventilated areas. If necessary, use exhaust ventilation to ensure adequate ventilation. Ensure that water is readily available and that you are prepared to properly wash out your eyes should the need arise. (See section 4 for more advice). Wear NIOSH/MSHA approved organic respirator when ventilation is not adequate or when the Sufficiency of ventilation to maintain concentrations below exposure limits is in question. Wear chemical safety goggles to protect against splashes or contact with eyes. See OSHA 29 CFR 1910.33

CLEAN-UP PROCEDURES
Small Spills: Sweep up to dispose of spill in DOT approved waste container.
Large Spills: Sweep up or Scoop up and dispose into DOT approved waste containers. If possible, complete the clean up on a dry basis. Comply with all applicable governmental regulations on spill reporting, handling and disposal of waste. Contain all spills or leaks to prevent discharge into the environment. Responsibility of all spills or releases reported to the appropriate local, state and federal agencies falls upon the user.

SECTION 7 HANDLING AND STORAGE

HANDLING
This product is a professional strength product to be used by professionals only. Avoid breathing vapors/mist of this product. Always keep the container tightly closed and properly labeled. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Impervious boots/shoes covering should be used if material is anticipated to contact feet. As with all chemicals, practice good industrial hygiene when handling this product. In other words, always work in a well-ventilated area and avoid inhalation of product dust, do not ingest or have contact with your eyes or skin.

The manufacturer and seller warrant that this product conforms to its standard specifications when used according to directions. As the conditions of the method of its use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true but all statements and suggestions are made without any warranty,expressed or implied, regarding accuracy of the information. The hazards connected with the use of this material and the results to be obtained from the use thereof.

STORAGE
Avoid excessive heat. Avoid storage with oxidizing or reducing agents and acids. Employees should be trained to handle this product safely. Store the product in a cool dry area away from ignition sources. Loosen closures cautiously. Products may become a solid at temperatures below 0°C (32°F).
Storage temperature: Store in cool dry place
Storage pressure: Atmospheric

SECTION 8 EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS
Exposure limits have not been established for this mixture. Avoid, as far as reasonably practicable, inhalation of vapor, mists or fumes generated. However, limits for components listed below:

COMPONENT	OSHA PEL TWA STEL	ACGIH TLV TWA STEL	NIOSH TWA STEL
Sodium Carbonate	Not Established	Not Established	Not Established
Linear Alkyl Benzene Sulfonate	Not Established	Not Established	Not Established
Sodium Metasilicate	2mg/m3	2mg/m3	Not Established
Sodium Tripholyphosate	Not Established	Not Established	Not Established
Glycol Ether EB	25ppm	25ppm	50ppm
Sodium Sulfate	Not Established	Not Established	Not Established
Sodium Percarbonate	Not Established	Not Established	Not Established

ENGINEERING CONTROLS
The level of protection and types of control will vary depending upon potential exposure conditions. If user operations generate dust, fume or mist, use adequate ventilation to keep exposure below exposure limit.

PERSONAL PROTECTION
Ventilation and engineering controls: Use only in well ventilated areas. If necessary, use exhaust ventilation to ensure adequate ventilation. Ensure that water is readily available and that you are prepared to properly wash out your eyes should the need arise. (Refer to section 4).
Respiratory: Wear NIOSH/MSHA approved respirator when ventilation is not adequate. A NIOSH /MSHA –approved air purifying respirator with an organic vapor cartridge or canister may be advisable under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure, air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection. *Eye Protection*: Wear safety goggles to protect against eye contact. See OSHA 29 CFR 1910.33 *Skin:* Wear chemical impervious gloves. Wear protective clothing to minimize skin contact. Wash skin after use. Wash contaminated clothing and dry before reuse.
Other: One should always use chemicals with an awareness of the potential hazard of the effect on the human system. To minimize employee exposure to all chemicals, including this product, use good industrial hygiene practices.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State and Appearance: Powder
Color: White
Odor: Mint
pH: 12
Vapor density: N/A
Boiling point: >212 F
Freezing point: N/A
Melting point: N/A
Solubility in water: soluble
Density: N/A
Flammability: N/A
Particle size: N/A
Evaporation rate: N/A
Viscosity: N/A

Upper/lower flammability or explosive limits: N/A
Vapor pressure: N/A
Odor threshold: N/A
Vapor density: N/A
Flash point: N/A
Relative density: N/A
Evaporation rate: N/A
Flammability (solid, gas): N/A
Upper/lower flammability or explosive limits: N/A
Decomposition temperature: N/A
Vapor pressure: N/A
Vapor density: N/A
Auto-ignition temperature: N/A
Partition coefficient: n-octanol/water: N/A

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Stable under ambient temperature and atmospheric pressure. Stable under recommended storage and handling conditions.

Conditions to avoid: Keep away from heat or excessive pressure. Active ingredients decompose at elevated temperatures.

Incompatibility with other materials: Although the mixture has no known incompatibilities, some components of this mixture are not compatible with acids, metals, oxidizing or reducing materials.

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Sulfur oxides and Carbon oxides.

Hazardous polymerization: Major components of this mixture show no hazardous polymerization. *Conditions to Avoid*: Strong Acids, Lead, Tin/Tin Oxides, Zinc and Aluminum.

SECTION 11 TOXICOLOGICAL INFORMATION

Toxicological information has not been established on this mixture. Toxicological information on components within this mixture is given by:

COMPONENT	TOXICITY
Sodium Carbonate	Not Established
Linear Alkyl Benzene Sulfonate	Not Established
Sodium Metasilicate	LD50 Oral - rat – 1,153 mg/kg, Skin - rabbit – Severe skin irritation - 24 h
Sodium Tripholyphosate	LD50 Oral - rat - 3100 mg/kg LD50 Dermal - rabbit - 4640 mg/kg
Glycol Ether EB	LD50 Oral - rat - 470 mg/kg LD50 Dermal - rabbit - 220 mg/kg, LC50 Inhalation - rat - 4 h - 450 ppm, LD50 Dermal - rabbit - 220 mg/kg, Eyes - rabbit - Moderate eye irritation - 24 h
Sodium Sulfate	Not Established
Sodium Percarbonate	Oral LD50, LD50 Oral - rat - 1,034 mg/kg Inhalation LC50 no data available Dermal LD50 LD50 Dermal - rabbit - > 2,000 mg/kg

SECTION 12 ECOLOGICAL INFORMATION

Ecological information has not been established for this product. Ecological information on components within this mixture is given by:

COMPONENT	TOXICITY
Sodium Carbonate	Not Established
Linear Alkyl Benzene Sulfonate	Not Established
Sodium Metasilicate	Not Established
Sodium Tripholyphosate	Toxicity to fish LC50-freshwater fish-1650 mg/l-48 h
Glycol Ether EB	Toxicity to fish LC50-other fish-220 mg/l-96 h Toxicity to daphnia and other aquatic invertebrates EC50-Daphnia magna (Water flea)-1,815 mg/l-24 h
Sodium Sulfate	Not Established
Sodium Percarbonate	Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 70.7 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates EC0 - Daphnia magna (Water flea) - 2 mg/l - 48 h EC50 - Daphnia magna (Water flea) - 4.9 mg/l - 48 h

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of all waste, empty bottles and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations.

Do not dump into storm drains, sanitary sewers or any body of water. All disposal methods must be in compliance with all federal, State/ Provincial and local laws and regulations. Regulations may vary in different locations.

Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. The vendor has no control over the management practices or the processes by which the party who handles or uses this material. The information presented here pertains only to the product as shipped in its intended condition and recommended usage.

SECTION 14 TRANSPORT INFORMATION

Not a hazardous material as shipped per 49 CFR table 172.101
DOT (US)
Proper Shipping Name Consumer commodity
Hazard Class ORM-D
Description Consumer commodity, ORM-D

SECTION 15 REGULATORY INFORMATION

US Federal Regulations:
OSHA standards require that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheet (SDS) sheets, training and access to written records. We request that you, as per your legal duty to, make all information in this SDS available to your employees and those who handle or consume the product To aid our customers in complying with regulatory requirements regulatory information for components of this product are indicated below

COMPONENT	REGULATION
Sodium Carbonate	Not Established
Linear Alkyl Benzene Sulfonate	Not Established
Sodium Metasilicate	**OSHA Hazards**: Harmful by Ingestion; Corrosive **SARA 311/312 Hazards**: Acute Health Hazard **MA, PA, and NJ Right to Know**: Disodium metasilicate CAS-No.6834-92-0
Sodium Tripholyphosate	Not Established
Ether Butyl	OSHA Hazards : Combustible Liquid, Target Organ Effect, Harmful by ingestion., Harmful by skin absorption., Irritant, Carcinogen SARA 313 Components: 2-Butoxyethanol CAS-No.111-76-2 SARA 311/312 Hazards: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

	MA, PA, and NJ Right to Know: 2-Butoxyethanol CAS-No.111-76-2
Sodium Sulfate	Not Established
Sodium Percarbonate	Pennsylvania Right To Know Components Disodium carbonate, compound with hydrogen peroxide (2:3) CAS-No.15630-89-4 New Jersey Right To Know Components Disodium carbonate, compound with hydrogen peroxide (2:3) CAS-No. 15630-89-4

SECTION 16 OTHER INFORMATION

While the information is believed to be accurate, **TSI** makes no representations as to its accuracy or sufficiency. This SDS summarizes to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources of each individual component. Since **TSI** cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. The user assumes all risks incident to the use of this (these) product(s). Users are responsible to verify this data under their own operating conditions to determine whether this product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance on information contained herein. This information relates only to the product-designated herein, and does not relate to its use in combination with any other material or in any other process.