

HPS Technologies Global

2185 Hwy 292 - Inman, SC 29349
Office: (864) 472-6604

Safety Data Sheet

Material Identity: HPS-FW Additive, Part 2
Version 1.0 (03/2017)

SECTION 1 • COMPANY AND PRODUCT IDENTIFICATION

Manufacturer:

HPS Technologies
5448 Kingsbridge Rd.
Winston-Salem, NC 27103

Emergency Phone: (800) 424-9300

Information Phone: (336) 293-8667

Synonyms: HPS-FW, Part 2

SECTION 2 • HAZARDS IDENTIFICATION

Classification of the chemical in accordance with paragraph (d) of 29 CFR 1910.1200:

Hazard Class	Hazard Category	Route of exposure
Flammable liquid	Category 4	---
Acute toxicity	Category 4	Oral
Acute toxicity	Category 4	Inhalation
Skin irritation	Category 2	---
Eye irritation	Category 2A	---
Specific target organ toxicity- single exposure	Respiratory tract irritation	
Acute aquatic toxicity	Category 1	---

GHS Label elements, including precautionary statements

Contains: 1-Hexanol, 2-ethyl- (104-76-7)

Pictograms



Signal Word: Warning

Hazard Statements: Combustible liquid, May be fatal if swallowed and enters airways, Causes skin irritation, Causes serious eye irritation, May cause respiratory irritation, Toxic to aquatic life.

Precautionary Statements: Keep away from flames and hot surfaces – No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when

using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response: In case of fire, use water/water spray/water jet/carbon dioxides and foam/alcohol resistant foam/chemical powder for extinction. 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: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see supplemental first aid instructions on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container in accordance with local regulation.

HIMS III Hazard Ratings: Health-2, Flammability-2, Physical Hazard-0

NFPA Hazard Ratings: Health-2, Flammability-2, Instability-0

SECTION 3 • COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %
1-Hexanol, 2-ethyl-	104-76-7	100

SECTION 4 • FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air and seek medical attention. If breathing is difficult, give oxygen. Get medical attention.

Eyes: Thoroughly flush eyes with water for at least 15 minutes with eyelids forced open. If easy to do, remove contact lenses. Seek medical attention if symptoms persist.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Destroy or thoroughly clean contaminated shoes. Wash contaminated clothing before re-use.

Ingestion: If swallowed, DO NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Rinse mouth. Get medical attention.

Most important symptoms and effects, both acute and delayed: No information available

Indication of any immediate medical attention and special treatment needed:

Treatment: No information available

SECTION 5 • FIRE FIGHTING PROCEDURES

Extinguishing Media: Water spray, Carbon dioxide (CO₂), Alcohol-resistant foam, Dry chemical, Foam. Use water spray to cool unopened containers.

Special hazards arising from the substance or mixture

Hazardous Combustion Products: Carbon oxides

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion Hazards: Classified as combustible. Vapors are heavier than air and may spread along floor.

SECTION 6 • ACCIDENTAL RELEASE AND DISPOSAL MEASURES

Personal precautions, protective equipment and emergency procedures: Refer to protective measures listed in sections 7 and 8.

Methods and materials for containment and cleaning up: Remove all sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Prevent runoff from entering drains, sewers, or streams.

Environmental precautions: No information available.

SECTION 7 • HANDLING AND STORAGE

Precautions To Be Taken For Safe Handling

Personal precautions: Do not breathe mist or vapor at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Prevention of Fire and Explosion: Keep away from heat and sources of ignition. No smoking. Use only with adequate ventilation. Keep from contact with oxidizing materials.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section).

SECTION 8 • EXPOSURE CONTROLS, PERSONAL PROTECTION

Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
1-Hexanol, 2-ethyl-	ACGIH	time weighted avg	50 ppm
		<i>Skin</i> -potential significant contribution to overall exposure by the cutaneous route	
1-Hexanol, 2-ethyl-	NIOSH	time weighted avg	50 ppm 270 mg/m ³

Appropriate Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

Individual Protection Measures, such as personal protective equipment

Eye Protection: Wear appropriate protective chemical safety glasses, goggles, or face shield as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Hand Protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

Respirators: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

SECTION 9 • PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless
Physical State:	Liquid
Specific Gravity:	0.83
pH:	Not available
Vapor Pressure (@ 20.0°C (86.0°F):	0.16 mbar (0.1 mm Hg)
Vapor Density:	4.5
Boiling Point:	184°C (363.2°F)
Flashpoint:	73.33°C (164°F) (Tag closed cup)
Solubility in water:	negligible
Autoignition:	231.0°C (447.8°F)
Evaporation Rate:	Not available
Flammability(solid: gas):	Not available
Upper Explosion limit:	Not available
Lower Explosion limit:	Not available
Viscosity:	Not available
Oxidizing properties:	Not available

SECTION 10 • STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal use and temperature conditions 282°C by HPDTA
Conditions to Avoid:	No data available
Materials to Avoid:	No data available
Reactivity:	No data available
Possibility of hazardous reactions:	Hazardous polymerization does not occur
Incompatible materials:	Strong oxidizing agents, Acids, alkalis, aluminum, Lead.
Hazardous decomposition products:	None under normal conditions of use.

SECTION 11 • TOXICOLOGICAL INFORMATION

Effects of Exposure

Skin: Causes skin irritation.

Eyes: Causes eye irritation.

Inhalation: Harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed. May be harmful if swallowed and enters airways.

Acute Toxicity Data:

Oral LD50 (mouse): 3,200 – 6,400 mg/kg

- Oral LD50 (Rat): 1,600 – 6,400 mg/kg
- Inhalation GHS LC50 (vapor): 0.89 mg/l / 4 hr (No mortality observed at this dose)
- Inhalation GHS LC50 (dust & mist): 4.3 – 5.3 mg/l / 4 hr (aerosol)
- Dermal LD50 (Rat): >3000 mg/kg (Highest dose tested – no evidence of absorption at this dose level.)
- Dermal LD50 (rabbit): 1980 mg/kg
- Skin sensitization (human): none
- Skin irritation: irritating
- Eye irritation: eye irritation

Definitions for the following section(s): LOEL=lowest observed effect level, LOAEL=lowest observed adverse effect level, NOAEL=no observed adverse effect level, NOEL=no observed effect level

Repeated dose toxicity:

- Inhalation (90 days, male and female rat): NOAEL; >120 ppm
- Oral (90 days, male and female rat): NOAEL; 125 mg/kg/day
- Oral (90 days, male and female rat): Lowest observable effect level; 250 mg/kg/day

Developmental Toxicity Data:

- Oral (female rat): NOEL for maternal toxicity; 130 mg/kg/day
- Oral (female rat): NOAEL for developmental toxicity; 650 mg/kg/day
- Oral (female rat): LOAEL for developmental toxicity; 1300 mg/kg/day
- Dermal (female rat): NOAEL for developmental toxicity; > 2520 mg/kg/day
- Dermal (female rat): maternal NOAEL; 252 mg/kg/day

Carcinogenicity:

- Oral study (male and female rat, 24 months): NOEL; 500 mg/kg/day
- Oral study (male and female mouse, 18 months): NOEL; 750 mg/kg/day

Carcinogenicity

American Conference of Governmental Industrial Hygienists: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

International Agency for Research on Cancer: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

US National Toxicology Program: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

US Occupational Safety and Health Administration: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

California Prop. 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 12 • ECOLOGICAL INFORMATION

Data for this material were used to estimate its environmental impact.

Potential Toxicity:

Toxicity to fish (LC50):	Oncorhynchus mykiss (rainbow trout): 32-37 mg/l (exposure time: 96 hr)
Toxicity to fish (LC50):	Oncorhynchus mykiss (rainbow trout): >7.5 mg/l (exposure time: 96 hr)
Toxicity to fish (LC50):	Pimephales promelas (fathead minnow): 27-29.5 mg/l (exposure time: 96 hr)
Toxicity to fish (LC50):	Pimephales promelas (fathead minnow): 29.7 mg/l (exposure time: 96 hr)
Toxicity to fish (LC50):	Lepomis macrochirus (Bluegill sunfish): 10.0-33.0 mg/l (exposure time: 96 hr)
Toxicity to daphnia (EC50):	Daphnia: > 100 mg/l
Toxicity to algae (EC50):	Desmodesmus subspicatus: 11.5 mg/l (exposure time: 72 hr)

Persistence and degradability: Readily biodegradable

Bioaccumulative potential: Partition coefficient: n-octano/water log Pow=3.1

Mobility in soil: No information available

SECTION 13 • DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied

SECTION 14 • TRANSPORT INFORMATION

The information below is provided to assist in documentation. It represents the dangerous goods classification before any regulatory exceptions are taken (e.g. “limited quantity”) and therefore may not represent the final classification.

IATA: Not regulated

IMDG: Not regulated

US DOT:	UN number:	NA 1993
	Proper shipping name:	Combustible Liquid, N.O.S. (1-Hexanol, 2-ethyl-)
	Class:	CBL
	Packaging group:	III

SECTION 15 • REGULATORY INFORMATION

Notification Status:

Regulatory List	Notification Status
TSCA	All listed
DSL	All listed
NDSL	None listed
EINECS	All listed
ELINCS	None listed
NLP	None listed
AICS	All listed
IECS	All listed
ENCS	All listed
ECI	All listed
NZIoC	All listed
PICCS	All listed

“Not all listed” indicated one or more component is either not on the public inventory or is subject to exemption requirements.

Other regulations

U.S. – CERCLA/SARA (40 CFR § 302.4 Designation of hazardous substances):

No components of this product are subject to the SARA Section 302 (40 CFR 302.4) reporting requirements.

U.S. - CERCLA/SARA-Section 302 (40 CFR § 355 Appendices A and B – The List of Extremely Hazardous Substances and Their Threshold Planning Quantities):

No components of this product are subject to the SARA Section 302(40 CFR 302.4) reporting

requirements.

U.S. - CERCLA/SARA - Section 313 (40 CFR § 372.65 Toxic Chemical Release Reporting):

No components of this product are subject to the SARA Section 313 (40 CFR 372.65) reporting requirements.

U.S. – California – 8 CCR Section 339 - Director's List of Hazardous Substances:

1-Hexanol, 2-ethyl-

U.S. – California – 8 CCR Section 5200-5220 – Specifically Regulated Carcinogens:

No components found on the California Specifically Regulated Carcinogens List.

U.S. – California – 8 CCR Section 5203 Carcinogens:

No components found on the California Section 5209 Carcinogens List

U.S. - California - 8 CCR Section 5209 Carcinogens: No components found on the California Section 5209 Carcinogens List.

U.S. - Massachusetts - General Law Chapter 111F (MGL c111F) - Hazardous Substances Disclosure by Employers (a.k.a. Right to Know Law):

1-Hexanol, 2-ethyl-

U.S. - Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):

1-Hexanol, 2-ethyl-

U.S. - New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):

1-Hexanol, 2-ethyl-

U.S. - Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):

1-Hexanol, 2-ethyl-

SECTION 16: OTHER INFORMATION

MSDS Revision Date: March 2017

NOTICE: The information contained on this Safety Data Sheet is considered accurate as of the date of publication. It is not necessarily all inclusive or fully adequate in every circumstance. The suggestions should not be confused with, nor followed violation of applicable laws, regulations, rules or insurance requirements. No warranty, express or implied, or merchantability, fitness, accuracy of data, or results to be obtained from the use thereof is made. The vendor assumes no responsibility for injury or damages resulting from the inappropriate use of this product.