



SAFETY DATA SHEET

Issue Date 11-Nov-2025 Revision Number 1.04

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Ham's F-12 with L-Glutamine and Phenol Red

Other means of identification

Product Code(s) 087-08335

Recommended use of the chemical and restrictions on use
Recommended Use For research use only.

Uses advised against Seek expert judgment when using for purposes other than those recommended.

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

FUJIFILM Wako Pure Chemical Corporation FUJIFILM Irvine Scientific

1-2, Doshomachi 3-Chome, E. Warner Avenue, Santa Ana, CA 92705-5505, U.S.A.: +1 949 261 7800

Chuo-ku Osaka 540-8605, Japan Fax: +1 949 261 6522

Tel: +81-6-6203-3741 Fax: +81-6-6201-5964

2. HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Pictograms

Signal word None

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Precautionary statements-(Prevention)

Not applicable

Precautionary statements-(Response)

Not applicable

Precautionary statements-(Storage)

Not applicable

Precautionary statements-(Disposal)

Not applicable

Others

Other hazards Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Mixture

Molecular weight	CAS RN	Weight-%
18.02	7732-18-5	90 - 100
146.14	56-85-9	0.0146
354.38	143-74-8	0.000120
	18.02 146.14	18.02 7732-18-5 146.14 56-85-9

Impurities and/or Additives:

Not applicable

Substances Remarks:

This product does not contain hazardous chemicals at concentrations of 1% or greater. Additionally, this product is not known to contain carcinogens etc. at concentrations of

0.1% or greater.

4. FIRST AID MEASURES

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 skin with soap and water.

Inhalation Remove to fresh air.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician

or poison control center immediately. Do not induce vomiting without medical advice.

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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical

none.

Impact

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, protective

equipment and emergency

procedures

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 and material for containment and cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be

sealed.

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

7. HANDLING AND STORAGE

Precautions for safe handling

Protective measures Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage conditions Store away from sunlight in a cool (2-10 °C) well-ventilated dry place.

Packaging materials Polyethylene terephthalate.

Incompatible materials No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits Not applicable

Personal protective equipment

Respiratory protection Protective mask

Hand protection chemical protective gloves (JIS T 8116)

Eye protection protective eyeglasses or chemical safety goggles (JIS T 8147)

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Colorpale redTurbidityclearAppearanceliquid

Odor
pH
7.0 - 7.6
Melting point/freezing point
Boiling point, initial boiling point and boiling range
Flash point
no data available
no data available
po data available

Flash point no data available
Evaporation rate: no data available
Flammability (solid, gas): no data available

Upper/lower flammability or

explosive limits

no data available Upper: no data available Lower: Vapour pressure no data available no data available Vapour density Specific Gravity / Relative density no data available water · miscible **Solubilities** no data available n-Octanol/water partition coefficient:(log Pow) **Auto-ignition temperature:** no data available no data available **Decomposition temperature:** Viscosity (coefficient of viscosity) no data available Dynamic viscosity no data available **Particle characteristics** no data available

10. STABILITY AND REACTIVITY

Stability

Chemical stability Stable under recommended storage conditions.

Reactivity no data available

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

No information available

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Sulfur oxides (SOx)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

	Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ī	L(+)-Glutamine	7500 mg/kg (Rat)	N/A	N/A

Skin irritation/corrosionno data availableSerious eye damage/ irritationno data availableRespiratory or skin sensitizationno data availableReproductive cell mutagenicityno data availableCarcinogenicityno data available

Reproductive toxicityno data availableSTOT-single exposureno data availableSTOT-repeated exposureno data availableAspiration hazardno data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility

Chemical Name	Partition coefficient	
L(+)-Glutamine 56-85-9	-3.15	

Mobility in soilNo information availableOther DataNo information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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

regulations.

Precautionary including method of Disposal should be in accordance with applicable regional, national and local laws and **disposing contaminated packaging** regulations.

14. TRANSPORT INFORMATION

DOT Not regulated Not applicable

Proper shipping name: UN classfication

Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IATA Not regulated

UN/ID No -

Proper shipping name: UN classfication

Subsidiary hazard class

Packing group

Environmentally Hazardous Not applicable

Substance

IMDG Not regulated

UN/ID No -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Marine pollutant (Sea) Not applicable

15. REGULATORY INFORMATION

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

Chemical Name	CAS RN	Weight-%	SARA 313 - Threshold Values %
Water - 7732-18-5	7732-18-5	90 - 100	N/A
L(+)-Glutamine - 56-85-9	56-85-9	0.0146	N/A
Phenol Red - 143-74-8	143-74-8	0.000120	N/A

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
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 chemicals regulated by Proposition 65

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Water	N/A	N/A	X
7732-18-5			

U.S. EPA Label Information

EPA Pesticide Registration NumberNot applicable

16. OTHER INFORMATION

Issue Date 11-Nov-2025

Revision Note

No information available

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. 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