

Material Safety Data Sheet
Reference Emulsion Fluid
Section 1 - Chemical Product and Company Identification
MSDS Name:

Reference Emulsion Fluid

Catalog Numbers:

100240, 250240, IL9756904

Synonyms:

None Known.

Company Identification:
 Fisher Diagnostics
 Fisher Scientific Company LLC
 8365 Valley Pike
 Middletown, VA 22645-0307
Company Phone Number:

(800) 528-0494

Emergency Phone Number:

(800) 528-0494

CHEMTREC Phone Number:

800-424-9300

CHEMTREC (International):

703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent	EINECS/ ELINCS		
7732-18-5	Water	Balance	231-791-2		
Not available	Stock Emulsion	0.263%	Not available		
26628-22-8	Sodium Azide	0.1%	247-852-1		
1310-73-2	Sodium hydroxide	0.1%	215-185-5	C	35
7647-14-5	Sodium chloride	0.08%	231-598-3		
Not available	Anti Foam	0.04%	Not available		

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Appearance: clear colorless liquid

Caution! May cause eye, skin, and respiratory tract irritation. Good laboratory procedures are recommended when handling this compound. This is expected to be a low hazard for usual industrial handling.

Target Organs: no data found.

Potential Health Effects**Eye:**

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract. Low hazard for usual industrial handling.

Inhalation:

May cause respiratory tract irritation. Low hazard for usual industrial handling.

Chronic:

No information found.

Section 4 - First Aid Measures**Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical aid if irritation or symptoms occur.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

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Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature:

No information found

Explosion Limits:

Lower: Upper:

Flash Point:

No information found

NFPA Rating:

(estimated) Health: 1; Flammability: 0; Reactivity: 0

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Sodium Azide	0.29 mg/m ³ Ceiling (as NaN ₃); 0.11 ppm Ceiling (vapor, as hydrazoic acid)	0.1 ppm Ceiling (as HN ₃); 0.3 mg/m ³ Ceiling (as NaN ₃)	None of the components are on this list.
Sodium hydroxide	2 mg/m ³ Ceiling	10 mg/m ³ IDLH 2 mg/m ³ Ceiling	2 mg/m ³ TWA
Sodium chloride	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.

OSHA Vacated PELs**Personal Protective Equipment**

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Wear chemical splash goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: clear colorless

Odor: No information found

pH: No information found

Vapor Pressure: No information found

Vapor Density: No information found

Evaporation Rate: No information found

Viscosity: No information found

Boiling Point: No information found

Freezing/Melting Point: No information found

Decomposition Temperature: No information found

Solubility in water:

Specific Gravity/Density: No information found

Molecular Formula: Mixture

Molecular Weight: No information found

Section 10 - Stability and Reactivity**Chemical Stability:**

Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

None reported.

Incompatibilities with Other Materials

oxidizing agents.

Hazardous Decomposition Products

Hydrogen chloride.

Hazardous Polymerization

May occur.

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CAS# 7732-18-5: ZC0110000.
CAS# 26628-22-8: VY8050000.
CAS# 1310-73-2: WB4900000.
CAS# 7647-14-5: VZ4725000.

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 26628-22-8:
Inhalation, mouse: LC50 = 32400 ug/m³
Inhalation, rat: LC50 = 37 mg/m³
Oral, mouse: LD50 = 27 mg/kg
Oral, rat: LD50 = 27 mg/kg
Skin, rabbit: LD50 = 20 mg/kg
Skin, rat: LD50 = 50 mg/kg.
CAS# 1310-73-2:
Draize test, rabbit, eye: 400 ug Mild
Draize test, rabbit, eye: 1% Severe
Draize test, rabbit, eye: 50 ug/24H Severe
Draize test, rabbit, eye: 1 mg/24H Severe
Draize test, rabbit, skin: 500 mg/24H Severe.
CAS# 7647-14-5:
Draize test, rabbit, eye: 100 mg Mild
Draize test, rabbit, eye: 100 mg/24H Moderate
Draize test, rabbit, eye: 10 mg Moderate
Draize test, rabbit, skin: 50 mg/24H Mild
Draize test, rabbit, skin: 500 mg/24H Mild
Inhalation, rat: LC50 = >42 gm/m³/1H
Oral, mouse: LD50 = 4 gm/kg
Oral, rat: LD50 = 3000 mg/kg
Skin, rabbit: LD50 = >10 gm/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 26628-22-8: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 1310-73-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7647-14-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:**Teratogenicity:**

No information found

Reproductive:

No information found

Mutagenicity:

No information found

Neurotoxicity:

No information found

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See actual entry in RTECS for complete information.

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P Series Wastes

CAS# 26628-22-8: waste number P105.

RCRA U Series Wastes

None of the components are on this list.

Section 14 - Transport Information**US DOT****Canadian TDG**

Proper Shipping Name: No information found

No information found

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information**US Federal****TSCA**

CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 26628-22-8 is listed on the TSCA Inventory.
CAS# 1310-73-2 is listed on the TSCA Inventory.
CAS# 7647-14-5 is listed on the TSCA Inventory.

Health and Safety Reporting List

None of the components are on this list.

Chemical Test Rules

None of the components are on this list.

TSCA Section 12b

None of the components are on this list.

TSCA Significant New Use Rule (SNUR)

None of the components are on this list.

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CAS# 26628-22-8: 1000 lb final RQ; 454 kg final RQ

CAS# 1310-73-2: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

CAS# 26628-22-8: 500 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solvent form)

SARA Hazard Categories

CAS# 26628-22-8: acute, chronic, reactive.

CAS# 1310-73-2: acute, reactive.

CAS# 7647-14-5: acute.

CERCLA/SARA Section 313

Sodium Azide is not at a high enough concentration to be reportable under Section 313.

Clean Air Act - Hazardous Air Pollutants (HAPs)

None of the components are on this list.

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

CAS# 1310-73-2 is listed as a Hazardous Substance under the CWA.

Clean Water Act - Priority Pollutants

None of the components are on this list.

Clean Water Act - Toxic Pollutants

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

US State**State Right to Know**

Sodium Azide can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

Sodium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Regulations

CAS# 7732-18-5: No information found

CAS# Not available: No information found

CAS# 26628-22-8: No information found

CAS# 1310-73-2: No information found

CAS# 7647-14-5: No information found

CAS# Not available: No information found

European/International Regulations**European Labelling in Accordance with EC Directives:**

Hazard Symbols:

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

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CAS# 7732-18-5: No information found
CAS# Not available: No information found
CAS# 26628-22-8: 2
CAS# 1310-73-2: 1
CAS# 7647-14-5: 0
CAS# Not available: No information found

United Kingdom Occupational Exposure Limits

No information found

Canadian DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 26628-22-8 is listed on Canada's DSL List.
CAS# 1310-73-2 is listed on Canada's DSL List.
CAS# 7647-14-5 is listed on Canada's DSL List.

Canadian WHMIS Classifications

This product does not have a WHMIS classification.

Canadian Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# Not available is not listed on Canada's Ingredient Disclosure List.
CAS# 26628-22-8 is listed on Canada's Ingredient Disclosure List.
CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.
CAS# 7647-14-5 is not listed on Canada's Ingredient Disclosure List.
CAS# Not available is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 26628-22-8: OEL-AUSTRALIA:TWA 0.1 ppm (0.3 mg/m3)
OEL-BELGIUM:STEL 0.11 ppm (0.3 mg/m3)
OEL-DENMARK:TWA 0.3 mg/m3
OEL-FINLAND:TWA 0.1 ppm (0.3 mg/m3);STEL 0.3 ppm (0.9 mg/m3)
OEL-FRANCE:STEL 0.1 ppm (0.3 mg/m3)
OEL-GERMANY:TWA 0.07 ppm (0.2 mg/m3)
OEL-THE NETHERLANDS:TWA 0.1 ppm (0.3 mg/m3)
OEL-SWITZERLAND:TWA 0.07 ppm (0.2 mg/m3)
OEL-UNITED KINGDOM:TWA 0.1 ppm (0.3 mg/m3);STEL
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

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CAS# 1310-73-2: OEL-AUSTRALIA:TWA 2 mg/m³
OEL-BELGIUM:STEL 2 mg/m³
OEL-DENMARK:TWA 2 mg/m³
OEL-FINLAND:TWA 2 mg/m³
OEL-FRANCE:TWA 2 mg/m³
OEL-GERMANY:TWA 2 mg/m³
OEL-JAPAN:STEL 2 mg/m³
OEL-THE NETHERLANDS:TWA 2 mg/m³
OEL-THE PHILIPPINES:TWA 2 mg/m³
OEL-SWEDEN:TWA 2 mg/m³
OEL-SWITZERLAND:TWA 2 mg/m³;STEL 4 mg/m³
OEL-THAILAND:TWA 2 mg/m³
OEL-TURKEY:TWA 2 mg/m³
OEL-UNITED KINGDOM:TWA 2 mg/m³;STEL 2 mg/m³
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Other Information

No information found
MSDS Creation Date: February 1, 2002
Revision Date: October 5, 2004

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