

## MATERIAL SAFETY DATA SHEET

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Version 1.3

## Section 1 - Product and Company Information

Product Name	POLYOXYETHYLENE 23 LAURYL ETHER
Product Number	P1254
Brand	SIGMA
Company	Sigma-Aldrich
Street Address	3050 Spruce Street
City, State, Zip, Country	SAINT LOUIS MO 63103 US
Technical Phone:	314 771 5765
Emergency Phone:	414 273 3850 Ext. 5996
Fax:	800 325 5052

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
BRIJ	9002-92-0	No

Formula C20H42O5

Synonyms Aldisperse L 9 \* ASK-010 \* Atlas G-2133 \* Atlas G-3705 \* BASE LP 12 \* BL 9 \* BL 9EX \* Brij 23 \* Brij 30 \* Brij 35 \* Brij 30SP \* Chimipal AE 3 \* Cimigel \* Dehydol LS 4 \* Depeg \* DO 9 \* Dodecanol, ethoxylate \* Dodecanol-ethylene oxide (9.5 moles) condensate \* Dodecanol, polyethoxylated \* Dodecyl alcohol, ethoxylated \* alpha-Dodecyl-omega-hydroxy-polyoxyethylene \* Dodecyl-polyaethylenoxyd-aether (German) \* Dodecyl poly(oxyethylene)ether \* Du Pont WK \* EMAL 108 \* Emalex 715 \* Emulgen 100 \* Emulgen 105 \* Emulgen 108 \* Emulgen 109 \* Emulgen 120 \* Emulgen 147 \* Emulmin L 500 \* Ethal LA-X \* Ethospense LA-4 \* Ethospense LA 12 \* Ethospense LA 23 \* Ethoxylated lauryl alcohol \* G 3707 \* G 3711 \* G-2130A \* Hydroxypolyethoxydodecane \* LA 7 \* LA (Alcohol) \* Lanettes \* Laureth \* Laureth 9 \* Laureth 12 \* Laureth 23 \* Lauromacrogol \* Lauromacrogol 400 \* Lauryl alcohol, ethoxylated \* Lauryl polyethylene glycol ether \* Lauryl poly(oxyethylene) ether \* Lipal 4LA \* Lipocol L-4 \* Lipocol L 12 \* Lipocol L-23

RTECS Number: MD0875000

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Irritant.

Irritating to eyes, respiratory system and skin.

## HMIS RATING

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING  
HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

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#### Section 4 - First Aid Measures

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##### ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

##### INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

##### DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

##### EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

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#### Section 5 - Fire Fighting Measures

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##### FLASH POINT

235 °F 113 °C Method: closed cup

##### AUTOIGNITION TEMP

N/A

##### FLAMMABILITY

N/A

##### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

##### FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
Specific Hazard(s): Emits toxic fumes under fire conditions.

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#### Section 6 - Accidental Release Measures

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##### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

##### METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

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#### Section 7 - Handling and Storage

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##### HANDLING

User Exposure: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed.

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Section 8 - Exposure Controls / PPE

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ENGINEERING CONTROLS

Mechanical exhaust required. Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

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Section 9 - Physical/Chemical Properties

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Appearance	Physical State: Liquid	
Property	Value	At Temperature or Pressure
Molecular Weight	362.5 AMU	
pH	5.5 - 7.5	Concentration: 100 g/l
BP/BP Range	100 °C	760 mmHg
MP/MP Range	41 - 45 °C	
Freezing Point	N/A	
Vapor Pressure	< 1 mmHg	20 °C
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	235 °F 113 °C	Method: closed cup
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water:Soluble.	

N/A = not available

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Section 10 - Stability and Reactivity

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STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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Section 11 - Toxicological Information

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ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Eye Contact: Causes eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract.

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Oral

Rat

1000 mg/kg

LD50

Remarks: Gastrointestinal:Ulceration or bleeding from stomach.

Gastrointestinal:Other changes. Liver:Fatty liver degeneration.

Intraperitoneal

Rat

125 MG/KG

LD50

Remarks: Gastrointestinal:Other changes.

Subcutaneous

Rat

953 MG/KG

LD50

Intravenous

Rat

27 MG/KG

LD50

Oral

Mouse

1170 mg/kg

LD50

Remarks: Peripheral Nerve and Sensation:Flaccid paralysis without anesthesia (usually neuromuscular blockage).

Behavioral:Change in motor activity (specific assay). Lungs, Thorax, or Respiration:Other changes.

Intraperitoneal

Mouse

160 MG/KG

LD50

Subcutaneous

Mouse

792300 UG/KG

LD50

Intravenous

Mouse  
100 MG/KG  
LD50

Intravenous  
Rabbit  
36 MG/KG  
LD50

Remarks: Behavioral:Change in motor activity (specific assay).  
Lungs, Thorax, or Respiration:Other changes. Kidney, Ureter,  
Bladder:Hematuria.

Parenteral  
Rabbit  
>75 MG/KG  
LD50

Intratracheal  
Rabbit  
>15 MG/KG  
LD50

Oral  
Guinea pig  
384 mg/kg  
LD50

Remarks: Peripheral Nerve and Sensation:Flaccid paralysis  
without anesthesia (usually neuromuscular blockage).  
Behavioral:Change in motor activity (specific assay). Lungs,  
Thorax, or Respiration:Other changes.

Intravenous  
Guinea pig  
38 MG/KG  
LD50

Remarks: Behavioral:Change in motor activity (specific assay).  
Lungs, Thorax, or Respiration:Other changes. Kidney, Ureter,  
Bladder:Hematuria.

#### IRRITATION DATA

Skin  
Human  
6 mg  
3D  
I  
Remarks: Moderate irritation effect

Skin  
Rabbit  
500 mg  
24H  
Remarks: Mild irritation effect

Skin  
Rabbit  
75 mg  
24H  
Remarks: Mild irritation effect

Skin  
Rabbit

500 mg  
24H  
Remarks: Moderate irritation effect

Eyes  
Rabbit  
100 mg

Eyes  
Rabbit  
0.75 mg  
24H  
Remarks: Severe irritation effect

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## Section 12 - Ecological Information

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### ACUTE ECOTOXICITY TESTS

Test Type: EC50 Algae  
Species: Selenastrum capricornutum resp.  
Value: 2 - 4 mg/l

Test Type: EC50 Daphnia  
Species: Daphnia magna  
Time: 48 h  
Value: 4.78 - 7.580 mg/l

Test Type: LC50 Fish  
Species: Cyprinus carpio  
Time: 96 h  
Value: 1.4 mg/l

Test Type: LC50 Fish  
Species: other fish  
Time: 96 h  
Value: 1.5 mg/l

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## Section 13 - Disposal Considerations

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### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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## Section 14 - Transport Information

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### DOT

Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s.  
UN#: 3082  
Class: 9  
Packing Group: Packing Group III  
Hazard Label: Class 9  
PIH: Not PIH

### IATA

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.  
IATA UN Number: 3082  
Hazard Class: 9

Section 15 - Regulatory Information

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EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn

Indication of Danger: Harmful.

R: 22 36/38

Risk Statements: Harmful if swallowed. Irritating to eyes and skin.

S: 26

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Irritant.

Risk Statements: Irritating to eyes, respiratory system and skin.

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

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Section 16 - Other Information

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DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.