

8-30-05



SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 05/05/2005
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Version 1.80

Section 1 - Product and Company Information

Product Name	IWEEN® 20
Product Number	P1379
Brand	Sigma Chemical
Company	Sigma-Aldrich
Street Address	3050 Spruce Street
City, State, Zip, Country	SAINT LOUIS, MO 63103 US
Technical Phone:	314 771 5765
Fax:	800 325 5052
Emergency Phone:	414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
POLYOXYETHYLENE SORBITAN MONOLAURATE(TWEEN 20)	9005-64-5	No		

Formula C58H114O26
Synonyms Arnotan pml-20, Capmul, Dxewmulse poe-sml, Emsorb 6915, Glycosperse L-20, Glycosperse L-20X, Hodag psml-20, Liposorb L-20, Poe 20 sorbitan monolaurate, Polyoxyethylene (20) sorbitan monolaurate, Protasorb L-20, PSML, Sorbimacrogol laurate 300, Sorbitan, monododecanote, poly(oxy-1,2-ethanedilyl) derivatives, Tween 20

Section 3 - Hazards Identification

HMIS Rating
 Health: 0 Flammability: 1 Reactivity: 0

NFPA Rating
 Health: 0 Flammability: 1 Reactivity: 0

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

Section 4 - First Aid Measures

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 breathing becomes difficult, call a physician.

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

Eye Exposure
 In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Flash Point: 230 °F 110 °C

Autoignition Temp: 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.

Section 6 - Accidental Release Measures

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.

Section 7 - Handling and Storage

Handling
User Exposure
 Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable
 Keep tightly closed.

Section 8 - Exposure Controls / PPE

Engineering Controls
 Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Hand
 Protective gloves.
Eye
 Chemical safety goggles.

General Hygiene Measures
 Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance
Physical State
 Liquid

Molecular Weight: N/A

pH 7
BP/BP Range 100 °C
MP/MP Range N/A

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Freezing Point N/A
Vapor Pressure < 1.0 mmHg
Vapor Density N/A
Saturated Vapor Conc. N/A
SG/Density 1.105 g/cm³
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 250 - 450 Pas
Partition Coefficient N/A
Decomposition Temp. N/A
Flash Point °F 230 °F
Flash Point °C 110 °C
Explosion Limits N/A

Method: closed cup
Method: closed cup

Flammability N/A
Autoignition Temp N/A
Refractive Index 1.47

Solubility
Solubility in Water: Soluble.

N/A = not available

Section 10 - Stability and Reactivity

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.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

Signs and Symptoms of Exposure

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

RTECS Number: TR7400000

Toxicity Data

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Oral - Rat: 36700 UL/KG (LD50)

Intraperitoneal - Rat: 3850 MG/KG (LD50)

Intravenous - Rat: 770 MG/KG (LD50)

Oral - Mouse: > 33000 mg/kg (LD50)

Intraperitoneal - Mouse: 2640 MG/KG (LD50)

Intravenous - Mouse: 1420 MG/KG (LD50)

Oral - Hamster: 18 ML/KG (LD50)

Irritation Data

Skin - Human: 15 mg 3D I

Remarks: Mild irritation effect

Chronic Exposure - Teratogen

Species	Dose	Route of Application	Exposure Time
Mouse	1 GM/KG	Intraperitoneal	(9D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.			
Mouse	1 GM/KG	Intraperitoneal	(9D PREG)
Result: Specific Developmental Abnormalities: Other developmental abnormalities.			

Chronic Exposure - Reproductive Hazard

Species	Dose	Route of Application	Exposure Time
Mouse	2500 MG/KG	Intraperitoneal	(9D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).			

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

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.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

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

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 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.