

Chemical Product and Company Identification**MSDS Name:** DOWFAX ® 2A1 Solution Surfactant**Product Code:** 23255**Synonyms:** None**Company Identification:**

Dow Chemical USA

Midland, MI 48674

Emergency Number: 517-636-4400**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887**Section 1 - Composition, Information on Ingredients**

CAS#	Chemical Name	Percent
119345-04-9	Benzene, 1,1-oxybis, tetrapropylene derivatives, sulfonated, sodium salts	47 Max.
7757-82-6	Sodium sulfate	1 Max.
7647-14-5	Sodium Chloride	3 Max.
7732-18-5	Water	Balance

Section 2 - Physical and Chemical Properties**Boiling Point:** 100°C, 212°F**Vapor Pressure:** 17.8 mmHg @20C**Vapor Density:** Not determ.**Solubility in water:** Completely miscible.**Specific Gravity/Density:** 1.12 - 1.16 @ 25°C**Appearance:** Light yellow to light brown liquid (aqueous solution).**Odor:** Disinfectant-type odor.**Section 3 - Fire and Explosion Hazard Data****Flash Point:** Flame extinguished; none to boiling.**Method used:** Closed cup; open cup.**Flammable Limits:****LEL:** not applicable**UEL:** not applicable**Extinguishing Media:** The organic portion may burn once the water is evaporated. In such case, use water for extinguishing media.**Fire & Explosion Hazards:** none known.**Fire-Fighting Equipment:** Wear positive-pressure, self-contained breathing apparatus.**Section 4 - Reactivity Data****Chemical Stability:** (Conditions to avoid) Stable at ambient temperatures.**Incompatibilities:** (Specific materials to avoid) Acids.**Hazardous Decomposition Products:** Sulfur dioxide.**Hazardous Polymerization:** Will not occur.

Section 5 - Environmental AND Disposal Information

Action to take for Spills/Leaks: Soak up with suitable absorbent. Avoid release into natural waters or public water supply.

Disposal Method: Dispose of according to federal, state, and local regulations. Incineration is preferred.

Section 6 - Hazards Identification

Eye: May cause mild eye irritation. May cause moderate corneal injury. May cause permanent impairment of vision, even blindness.

Skin Contact: Prolonged or repeated exposure not likely to cause significant skin irritation.

Skin Absorption: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. The LD50 for skin absorption in Rabbits is >2000 mg/kg.

Ingestion: Single dose oral toxicity is low. The oral LD50 for female rats is >2000 mg/kg. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

Inhalation: Excessive exposure may cause irritation to upper respiratory tract.

Systemic (other target organ) effects: Repeated excessive exposures to high amounts may cause liver effects.

Cancer Information: Active ingredient did not cause cancer in long-term animal studies.

Section 7 - First Aid

Eyes: Immediate and continuous irrigation with flowing water for at least 30 minutes is imperative. Prompt medical consultation is essential.

Skin: Wash off in flowing water or shower.

Ingestion: Induce vomiting if large amounts are ingested. Consult a physician.

Inhalation: Remove from exposure to fresh air immediately. Consult a physician.

Notes to Physician: If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

Section 8 - Handling Precautions

Exposure Guideline (s): Dowfax 2A1: Dow IHG is 5 mg/m³, as the active ingredient. Sodium chloride: Dow IHG is 10mg/m³. Sodium sulfate: Dow IHG is 10mg/m³.

Ventilation: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator.

Skin: No precautions other than clean body-covering clothing should be needed.

Eye Protection: Use chemical safety goggles. Eye wash fountain should be located in immediate work area.

Section 9 - Additional Information

Special precautions to be taken in handling and storage:

MSDS STATUS: Revised sections 2, 6, 7, 8, and 9.

Regulatory Information: (Not meant to be all inclusive -- selected regulations represented.)

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws.