HUNTSMAN

MATERIAL SAFETY DATA SHEET

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

PRODUCT CODE AND NAME : N98 SURFONIC N-95

DATE ISSUED : 2/12/97
DATE PRINTED : 1/21/99

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

PRODUCT CODE AND NAME

N95 SURFONIC® N-95

Chemical Name and/or Family or Description:

Nonionic surfactant - alkylphenol ethoxylate

COMPANY INFORMATION

Huntsman Petrochemical Corporation P.O. Box 27707 Houston, TX 77227-7707

TELEPHONE NUMBERS . Transportation Emergency

Company: (409) 727-0831 CHEMTREC: (800) 424-9300

Medical Emergency: (409) 722-9673 (24 Hour) General MSDS Assistance: (713) 235-6432 Technical Information: (512) 459-6543

2. COMPOSITION AND INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION. Product and/or Component(s) Carcinogenic According to:

OSHA IARC NTP OTHER NONE X

Composition:

Chemical Name CAS Number Exposure Limits Range in %

Poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl 9016-45-9 100

-omega-hydroxy-

THIS PRODUCT IS CONSIDERED HAZARDOUS ACCORDING TO OSHA (1910,1200).

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3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Арренгансе:

Pale liquid

Odor:

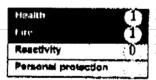
Slight odor

WARNING STATEMENT

CAUTION !

MAY CAUSE EYE IRRITATION

Hazardous Material Information System (United States)



National Fire
Protection Association
NFPA (United States)
Health



POTENTIAL HEALTH EFFECTS

Primary Route of Exposure

Eye X Skin X Inhalation X Ingestion

Effects of Overexposure

Acute:

Eves:

May cause irritation, experienced as mild discomfort and seen as slight, excess

redness of the eye.

Skin:

Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seen as local redness and swelling. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects,

below, and Section 11 for information regarding potential long term effects

Inhalation:

Vapors or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and

throat, headache, nausea, and drowsiness,

Ingestion:

May cause abdominal discomfort, nausea, and diarrhea.

Sensitization Properties: Unknown

Chronic:

No adverse effects have been documented in humans as a result of chronic exposure. Section 11 may contain applicable animal data

Medical Conditions Aggravated by Exposure:

There is no evidence that this product aggravates an existing medical condition.

Other Remarks:

None

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4. FIRST AID MEASURES

Eyes:

immediately flush eyes with planty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention.

Skin:

Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

Ingestion:

If patient is conscious and can swallow, give two glasses of water (16 oz.) Induce vomiting as directed by medical personnet. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person.

Inhalation:

If irritation, headache, nausca, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

Other Instructions:

None

5. FIRE-FIGHTING MEASURES

Ignition Temperature - AIT (degrees C):

Not applicable.

Flush Point (dugrees C):

237.8 (460 F) (PMCC)

Fisammable Limits % (Lower-Upper):

Lower: Not Determined Upper: Not Determined

Recommended Fire Extinguishing Agents And Special Procedures:

Use water spray, dry chemical, foam, or carbon dioxide to extinguish, flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:

None

Special Protective Equipment for Firefighters:

Wear full protective clothing and positive pressure breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills: CHEMTREC (800)424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:

Contain spill if possible, contain with absorbent materials such as clay or soil, and shovel up. Avoid skin and eye contact,

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7. HANDLING AND STORAGE

Precautions to be Taken in

Handling:

Minimum feasible handling temperatures should be maintained.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be svoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

Skin Protection:

Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be laundared or dry-cleaned.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate.

Exposure Limit for the Total Product:

None established for product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Pale Ilquid

Odor:

Slight odor

Boiling Point (degrees C):

Not determined.

Melting/Freezing Point (degrees C):

5 (41 F)

Specific Gravity (water=1):

1.06

pH:

7

Vapor Pressure:

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< 1 mmHg at 20 C (58 F)

Viscosity:

110 cSt at 37.7 C (100 F)

VOC Contents

<1% by ASTM D 2369

Vapor Density (Air-1):

>1

Solubility in Water (%):

>10

Other:

None

10. STABILITY AND REACTIVITY

This Material Reacts Violently With:

Air Water Heat Strong Oxidizers Others None of these X

Comments:

None

Products Evolved When Subjected to Heat or Combustion;

Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning. Heating in air may produce irritating aldehydes, acids, and ketones.

Hazardous Polymerizations:

DO NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

Oral:

LD50 3.31 g/kg (rat) slightly toxic

inhalation:

Believed to be practically non-toxic

Dermai

LD50 > 2.00 g/kg (rabbit) practically non-toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

Skin:

(Draize) 1.04 /8.0 (rabbit) slightly imitating

Eyes:

(Draize) 14.40 /110 (rabbit) slightly irritating

Sensitization: Not determined

Other:

This product may contain residual (less than 100 ppm) concentrations of ethylene oxide. Ethylene oxide causes tumors in laboratory animals.

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12. DISPOSAL CONSIDERATIONS:

Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet, the criteria of a hazardous wasta if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous

Remarks:

None

13. TRANSPORT INFORMATION

Transportation

DOT:

Proper Shipping Name:

Not regulated

Hazard Class:

Not regulated

Identification Number:

Not regulated

Packing Group:

Not regulated

Label Required:

Not regulated

Depending on container size, spills of this product may require reporting under SARA 304 and/or CERCLA 102(A) regulations. Please refer to Sections 2 and 14 of MSDS for composition and component RQ information.

IMDG

Proper Shipping Name:

Not evaluated

ICAO

Proper Shipping Name:

Not evaluated

TDG

Proper Shipping Name:

Not regulated

Hazard Class:

Not requiated

Identification Number:

Not regulated

Label Required:

Not regulated

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14. REGULATORY INFORMATION

Federal Regulations:

SARA Title III;

Section 302/304 Extremely Hazardous Substances

RQ TFQ CAS Number Range in % Chemical Name

10 1000 0.001 75-21-8 Residual ethylene oxide (typical)

Section 311 Hazardous Categorization:

Acute X Chronic Fire Pressure Reactive N/A

Section 313 Toxic Chemical

CAS Number Concentration Chemical Name

1.00-2.99 Glycol ethers (fraction of product matching EPA definition)

CERCLA 102(a)/DOT Hazardous Substances:

RQ CAS Number Range in % Chemical Name 1.00-2.99 Glycot ethers (fraction of product matching EPA definition) 0.001 10 75-21-8

Residual ethylene oxide (typical)

States Right-to-Know Regulations: State Right-to-know Chemical Name

None.

State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

California Prop. 65:

The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

CAS Number Chemical Name

75-21-8 Residual ethylene oxide (typical)

INTERNATIONAL REGULATIONS:

This product, or its components, are listed on, or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance inventory.

WHMIS Classification:

TSCA Inventory Status:

Not regulated

Canadian Javentory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:

Not determined

Australian Inventory Status:

This product, or its components, are listed on or are exampt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status:

Not determined

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15. ENVIRONMENTAL INFORMATION

Aquatic Toxicity:

LC50-98hr Aquatic toxicity rating is believed to be > 1.00 - 10.00 ppm moderately toxic

Mobility:

Not determined.

Persistence and Blodegradability:

Not determined.

Potential to Bioaccumulate:

Not determined.

Remarks:

None

16. OTHER INFORMATION 2/12/97

Ethoxylated products may contain residual amounts of ethylene oxide (EO) which can accumulate in the container headspace and be released into the ambient environment. This process is enhanced when the product is agitated, as during tank car loading and unloading, and blending operations. Ethylene oxide causes tumors in laboratory animals. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Level (PEL) for EO is 1 ppm for an eight-hour time weighted average exposure. The standard regulates occupational exposure to EO from all sources, including products containing residual EO. It is the responsibility of the employer to comply with OSHA ethylene exide standard (29 CFR 1910.1047)

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT FOR PURPOSE OF HAZARD COMMUNICATION AS PART OF HUNTSMAN'S PRODUCT SAFETY PROGRAM. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR PITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN. DATA SHEETS ARE AVAILABLE FOR ALL HUNTSMAN PRODUCTS. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL HUNTSMAN PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE AND YOU ARE ENCOURAGED AND REQUESTED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE APPLICABILITY OR EFFECTS OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, USER SHOULD CONSULT HIS LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. HUNTSMAN DOES NOT UNDERTARE TO FURNISH ADVICE ON SUCH MATTERS.

Supercedes: 12/5/96

The following section has been revised: 9

Date Issued: 2/12/97.

Verified by Phillip B. Valkovich.

Inquiries regarding MSDS should be directed to:

HUNTSMAN

Coordinator, Product Safety

P.O. Box 27707

Houston, TX 77227-7707