

OCTEL AMERICA INC -- STADIS 450 CONDUCTIVITY IMPROVER

=====
MSDS Safety Information
=====

FSC: 6850
NIIN: 01-097-2060
MSDS Date: 03/11/1999
MSDS Num: CLNLH
Product ID: STADIS 450 CONDUCTIVITY IMPROVER
MFN: 03
Responsible Party
Cage: 02SG7
Name: OCTEL AMERICA INC
Address: 8375 S WILLOW STREET
City: LITTLETON
CO 80124
Info Phone Number: 800-441-9547
Emergency Phone Number: 800-441-9547
=====

=====
Item Description Information
=====

Item Manager: S9G
Item Name: ANTISTATIC ADDITIVE,AVIATION TURBINE FUEL
Specification Number: NONE
Type/Grade/Class: NONE
Unit of Issue: GL
UI Container Qty: 0
Type of Container: CAN
=====

=====
Ingredients
=====

=====
Name: *** PROPRIETARY ***

=====

=====
Health Hazards Data
=====

LD50 LC50 Mixture: LD50 (ORAL, RAT) >5,000 MG/KG
Route Of Entry Inds - Inhalation: YES
Skin: YES
Ingestion: YES
Carcinogenicity Inds - NTP: YES
IARC: YES
OSHA: YES
Effects of Exposure: SKIN CONTACT WITH THE PRODUCT INGREDIENT MAY CAUSE
DEFATTING OF THE SKIN RESULTING IN IRRITAT

ION. INHALATION OF PRODUCT

COMPONENTS MAY CAUSE IRRITATION OF THE UPPER RESPIRATORY PASSAGES. INGESTION MAY CAUSE GASTROINTESTINAL TRACT IRRITATION.EYE CONTACT WITH THE PRODUCT INGREDIENTS MAY CAUSE EYE IRRITATION WITH DISCOMFORT.

Explanation Of Carcinogenicity: THE COMPONENTS ARE LISTED BY IARC,NTP,OSHA,ACGIH AS CARCINOGENS. A"P" INDICATES A PROPOSED CARCINOGEN. OCTEL CONTROLS THE FOLLOWING MATERIALS AS POTENTIAL CARCINOGENS: BENZENEMATERIAL BENZENE ALSO LIS TER AS CARCINOGENS IARC , NTP, OSHA, ACGIH.

Signs And Symptoms Of Overexposure: SKIN-DISCOMFORT OR RASH. EYE-DISCOMFORT, TEARING OR BLURRING OF VISION. INHALATION-COUGHING AND DISCOMFORT: POSSIBLY LUNG IRRITATION FOLLOWED BY SEVERE SHORTNESS OF BREATH REQUIRING MEDICAL ATTENTION. MAY CAUSE NAUSEA, HEADACHE OR WEAKNESS OR TEMPORARY NERVOUS SYSTEM

DEPRESSION WITH DIZZINESS, HEADACHE, CONFUSION, INCOORDINATION AND LOSS OF CONSCIOUSNESS.INGESTION-MAY CAUSE ABDOMINAL PAIN, HEARTBUR N, NAUSEA, VOMITING AND DIARR

HEA.ASPIRATION INTO LUNGS MAY RESULT IN CHEMICAL PNEUMONIA.SYMPTOMS INCLUDE COUGHING,GASPING,CHOKING SHORTNESS OF BREATH.

Medical Cond Aggravated By Exposure: INDIVIDUALS WITH PRE-EXISTING DISEASES OF THE CENTRAL NERVOUS SYSTEM,CARDIOVASCULAR SYSTEM, BONE MARROW,LOVER OR KIDNEYS MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

First Aid: INHALATION-REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. SKIN

CONTACT-FLUSH SKIN WITH WATER AFTER CONTACT.WASH CONTAMIN ATED CLOTHING BEFORE REUSE. EYE CONTACT-IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN. INGESTION- IF SWALLOWED, DO NOT INDUCE VOMITING. IMMEDIATELY GIVE 2 GLAS SES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL A PHYSICIAN.

=====

Handling and Disposal

=====

=====

Spill Release Procedures: USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEAN-UP. ELIMINATE SOURCES OF IGNITION HEAT,SPARKS,FLAME, ELECTRICITY, IMPACT & FRICTIION. DIKE SPILL. PREVENT MATERIAL FROM ENTERING SEWERS, WATER WAYS OR LOW AREAS. SOAK UP WITH SAWDUST, SAND, OIL DRY OR OTHER ABSORBENT MATERIAL.

Waste Disposal Methods: TREATMENT, STORAGE, TRANSPORTATION, & DISPOSAL MUST BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE/PROVINCIAL & LOCAL REGULATIONS. D

DO NOT FLUSH TO SURFACE WATER OR SANITARY SEWER SYSTEM. MATERIAL MAY BE A RCRA REGULATED HAZARDOUS WASTE UPON DISPOSAL DUE TO THE IGNITABILITY CHARACTERISTIC.

Handling And Storage Precautions: HANDLING (PERSONNEL)-AVOID BREATHING VAPORS OR MIST. AVOID CONTACT WITH EYES, SKIN, OR CLOTHING. WASH THOROUGHLY AFTER HANDLING. STORAGE-STORE IN A WELL VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED .

Other Precautions: HANDLING (PHYSICAL ASPECT)-GROUND CONTAINER WHEN POURING. KEEP AWAY FROM HEAT, SPARKS AND FLAMES. USE OF NON-SPARKING AND EXPLOSION-PROOF EQUIPMENT MAY BE NECESSARY DEPENDING ON TYPE OF OPERATION.

=====
Fire and Explosion Hazard Information
=====

Flash Point Method: PMCC

Flash Point: =6.C, 42.8F

Autoignition Temp: =440.C, 824.F

Lower Limits: UNKNOWN

Upper Limits: UNKNOWN

Extinguishing Media: WATER SPRAY, FOAM, DRY CHEMICAL, CO2. WATER MAY BE INEFFECTIVE FOR FIGHTI

NG FIRE, WATER SPRAY MAY BE USED TO ABSORB MUCH OF THE HEAT AND KEEP EXPOSED MATERIAL FROM BEING DAMAGED

Fire Fighting Procedures: EVACUATE PERSONNEL TO SAFE AREA. WEAR SELF-CONTAINED BREATHING APPARATUS. WEAR FULL PROTECTIVE EQUIPMENT. COOL TANK/CONTAINER WITH WATER SPRAY.

Unusual Fire/Explosion Hazard: FLAMMABLE LIQUID. VAPOR FORMS EXPLOSIVE MIXTURE WITH AIR.

=====
Control Measures
=====

=
Respiratory Protection: WHERE THERE IS POTENTIAL FOR AIRBORNE EXPOSURES, WEAR NIOSH/MSHA-APPROVED RESPIRATOR PROTECTION.

Ventilation: KEEP CONTAINER TIGHTLY CLOSED. USE SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW RECOMMENDED LIMITS.

Protective Gloves: IMPERVIOUS GLOVES WHEN POTENTIAL FOR SKIN CONTACT.

Eye Protection: SAFETY GLASSES OR COVERALL CHEMICAL SPLASH GOGGLES&FACE SHIELD WHERE SPLASHING

Other Protective Equipment: APRON, PANTS AND JACKET WHERE THERE IS POTENTIAL FOR

SKIN CONTACT.

Work Hygienic Practices: WASH CONTAMINATED CLOTHING BEFORE REUSE . FLUSH SKIN WITH WATER AFTER CONTACT.

Supplemental Safety and Health: NOTE TO PHYSICIAN: ACTIVATED CHARCOAL MIXTURE MAY BE ADMINSTERED. TO PREPARE MIXTURE, SUSPEND 50 GRAMS ACTIVATED CHARCOAL IN 400 ML WATER AND MIX THOROUGHLY. ADMINISTER 5 ML/KG OR 350 ML FOR AN AVERAG E ADULT.

=====
Physical/Chemical Properties
=====

=====
HCC: F2
NRC/State LIC No: NOT RELEVANT
Boiling Point: =90.C, 194.F
B.P. Text: @760 MM HG
M.P/F.P Text: UNKNOWN
Decomp Text: UNKNOWN
Vapor Pres: UNKNOWN
Vapor Density: UNKNOWN
Spec Gravity: 0.92 60/60F
Viscosity: UNKNOWN
Evaporation Rate & Reference: >1 (BUTYL ACETATE=1)
Solubility in Water: SLIGHT
Appearance and Odor: CLEAR DARK AMBER LIQUID - TOLUENE ODOR
Corrosion Rate: UNKNOWN

=====
Reactivity Data
=====

=====
Stability Indicator: YES
Stability Condition To Avoid: DECOMPOSES WITH HEAT.
Hazardous Decomposition Products: DECOMPOSITION PRODUCTS FORMED: S02
Hazardous Polymerization Indicator: NO

=====
Toxicological Information
=====

Toxicological Information: ANIMAL DATA "STANDIS" 450. TOLUENE: INHALATION 4 HR. ALC: 4,000 PPM IN RATS. SKIN ABSORPTION LD50: 12,124 MG/KG RABBITS . ORAL LD50: 5,580 MG/KG RATS. ISOPROPYL ALCOHOL: ORAL LD50: 4,700 MG/KG IN RATS. INHALATION 4 HR. LC50: 16,000 PPM IN RATS. SKIN ABSORPTION LD50: 12,900 MG/KG. AROMATIC 150: INHALATION 6 HR. LC50: >11.67 MG/L IN RATS. SKIN ABSORPTION LD50: >3,160 MG/KG IN RABBITS. THE PRODUCT IS A SLIGHT SKIN IRRITANT IN ANIMALS. TOLUENE IS A SLIGHT SKIN IRRITANT, IS A MILD EYE IRRITANT, AND IS NOT A SKIN SENSITIZER IN ANIMALS.

=====
Ecologica

I Information

Ecological: 96 HOUR LC50, FATHEAD MINNOWS: 12 MG/L.

MSDS Transport Information

Transport Information: DOT- PROPER SHIPPING NAME: FLAMMABLE LIQUID, N.O.S. (CONTAINS TOLUENE & ISOPROPANOL). HAZARD CLASS: 3. I.D. NO (UN/NA): UN 1993. PACKAGING GROUP: II. DOT LABEL: FLAMMABLE LIQUID. IMO- PROPER SHIPPING NAM

E: FLAMMABLE LIQUID, N.O.S. (CONTAINS TOLUENE & ISOPROPANOL). HAZARD CLASS: 3.2. I.D. NO (UN/NA): UN 1993. PACKAGING GROUP: II. DOT/IMO LABEL: FLAMMABLE LIQUID. SPECIAL INFORMATION: FLASH POINT: 6 C (42 F). SHIPPING CONTAINERS: STEEL DRUMS: UN1A1/Y/100 (PHENOLIC LINED). REPORTABLE QUANTITY: 1000 LB TOLUENE.

Regulatory Information

Sara Title III Information: TOLUENE AND NA PHTHALENE*-DISCLOSURE AS A TOXIC CHEMICAL IS REQUIRED UNDER SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372. TITLE III HAZARD CLA SSIFICATION SECTIONS 311, 312. ACUTE: YES. CHRONIC: NO. FIRE: YES. REACTIVITY: NO. PRESSURE: NO.

Federal Regulatory Information: TSCA INVENTORY STATUS: REPORTED//INCLUDED. State Regulatory Information: THIS PRODUCT CONTAINS TRACE QUANTITIES (<600 PPM) OF BENZENE, A CHEMICAL KNOWN TO THE STATE OF CAL IFORNIA TO CAUSE CANCER.

Other Information

Other Information: DINNSA STABILIZER-STADIS IS A REGISTERED TRADEMARK OF OCTEL AMERICA, INC. NFPA, NPCA-: NPCA- RATING: HEALTH-2, FLAMMABILITY-4, REACTIVITY-1. PERSONAL PROTECTION RATING TO BE SUPPLIED BY USER D EPENDING ON USE CONDITIONS.

Transportation Information

Responsible Party Cage: 02SG7
Trans ID NO: 159298
Product ID: STADIS 450 CONDUCTIVITY IMPROVER
MSDS Prepared Date: 03/11/1999
Review Date: 10/15/2001
MFN: 3
Tech Entry NOS Shipping Nm: TOLUENE & ISOPROPANOL
Net Unit Weight: 7.7 LBS
Multiple KIT Number: 0
Review IND: Y
Unit Of Issue: GL
Container QTY: 0
Type Of Container: CAN

Detail DOT Information

=====

DOT PSN Code: GJJ
Symbols: G
DOT Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S.
Hazard Class: 3
UN ID Num: UN1993
DOT Packaging Group: II
Label: FLAMMABLE LIQUID
Special Provision: T8,T31
Non Bulk Pack: 202
Bulk Pack: 242
Max Qty Pass: 5L
Max Qty Cargo: 60 L
Vessel Stow Req: B

=====
Detail IMO Information
=====

IMO PSN Code: HIN
IMO Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. o
IMDG
Page Number: 3230
UN Number: 1993
UN Hazard Class: 3.2
IMO Packaging Group: I/II
Subsidiary Risk Label: -
EMS Number: 3-07
MED First Aid Guide NUM: T

=====
Detail IATA Information
=====

IATA PSN BV
IATA UN ID Num: 1993
IATA Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. *
IATA UN Class: 3
IATA Label: FLAMMABLE LIQUID
UN Packing Group: II
Packing Note Passenger: 305
Max Quant Pass: 5L
Max Quant Ca
rgo: 60L
Packaging Note Cargo: 307

=====
Detail AFI Information
=====

AFI PSN BV
AFI Symbols: *
AFI Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S.
AFI Hazard Class: 3
AFI UN ID NUM: UN1993
AFI Packing Group: II
Special Provisions: P5
Back Pack Reference: A7.3

=====
HAZCOM Label
=====

Product ID:

STADIS 450 CONDUCTIVITY IMPROVER

Cage: 02SG7

Company Name: OCTEL AMERICA INC

Street: 200 EXECUTIVE DR

City: NEWARK DE

Zipcode: 19702

Health Emergency Phone: 800-441-9547

Label Required IND: Y

Date Of Label Review: 10/15/2001

Status Code: A

Year Procured: 2001

Origination Code: F

Eye Protection IND: YES

Skin Protection IND: YES

Signal Word: DANGER

Respiratory Protection IND: YES

Health Hazard: Moderate

Contact Hazard: Moderate

Fire Hazard: Severe

Reactivity Hazard: Slight

Hazard And Precautions:

SKIN CONTACT WITH THE PRODUCT INGREDIENT MAY CAUSE
DEFATTING OF THE SKIN RESULTING IN IRRITATION. INHALATION OF PRODUCT
COMPONENTS MAY CAUSE IRRITATION OF THE UPPER RESPIRATORY PASSAGES. INGESTION
MAY CAUSE GASTROINTESTINAL TRACT IRRITATION.EYE CONTACT WITH THE PRODUCT
INGREDIENTS MAY CAUSE EYE IRRITATION WITH DISCOMFORT.

=====
Disclaimer (provided with this information by the compiling agencies): This
information is formulated for use
by elements of the Department of Defense.

The United States of America in no manner whatsoever expressly or implied
warrants, states, or intends said information to have any application, use or
viability by or to any person or persons outside the Department of Defense
nor any person or persons contracting with any instrumentality of the United
States of America and disclaims all liability for such use. Any person
utilizing this instruction who is not a military or civilian employee
of the

United States of America should seek competent professional advice to verify
and assume responsibility for the suitability of this information to their
particular situation regardless of similarity to a corresponding Department
of Defense or other government situation.