

DONG YUE

# REFRIGERANT 134A

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MSDS Safety Information  
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FSC: 6830

MSDS Date: 08/16/2004

MSDS Num: BVBWY

LIIN: 00N047805

Product ID: REFRIGERANT 134A

MFN: 01

Responsible Party

Cage: 25827

Name:

Address: Tangshan Town ,Huantai County

City:Zibo City, Shandong Province, China

Info Phone Number: 0086-533-8220546

Emergency Phone Number: 0086-533-8220545

Preparer's Name: Mr Jason Chen

Published: Y

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Contractor Summary  
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Cage: 25827

Name: DONGYUE

Address: Tangshan Town ,Huantai County

City:Zibo City, Shandong Province, China

Phone Number: 0086-533-8220546

Cage: 18873

Name: Shandong Dongyue Chemical CO.,LTD

Address: Tangshan Town ,Huantai County

City:Zibo City, Shandong Province, China

Phone Number:0086-533-8220546

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Ingredients  
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Name: ING 7:CIRCULATION. CONT W/LIQ MAY CAUSE FROSTBITE. POLYALKYLENE GLYCOL  
OILS MAY CAUSE EYE & SKIN IRRITATION.

Name: FIRST AID PROC:MD. NOTES TO MD:BECAUSE OF POSS DISTURBS OF CARDIAC  
RHYTHM, CATECHOLAMINE DRUGS, SUCH AS

Name: ING 9:EPINEPHRINE, SHOULD BE CONSIDERED ONLY AS A LAST RESORT IN  
LIFE-THREATENING EMERGENCIES.

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Name: OTHER PREC:CAUSE FORMATION OF CHLORIDES, FLUORIDES OR PHOSGENE (FP N).  
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Name: VENT:SHOULD BE USED IN LOW PLACES.  
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Cas: 811-97-2

Name: ETHANE, 1,1,1,2-TETRAFLUORO-

% Wt: 100

OSHA PEL: N/K (FP N)

ACGIH TLV: N/K (FP N)  
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Name: MAY CONTAIN ONE OF INGREDIENTS 3 - 5.

OSHA PEL: N/K (FP N)

ACGIH TLV: N/K (FP N)  
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Cas: 9038-95-3

RTECS #: RR0550000

Name: OXIRANE METHYL-, POLYMER W/OXIRANE, MONOBUTYL ESTER; (POLYALKYLENE GLYCOL OIL)

% Wt: 0-5

OSHA PEL: N/K (FP N)

ACGIH TLV: N/K (FP N)  
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Name: POLYOL ESTER PLUS PHOSPHATE ESTER OIL

% Wt: 0-5

OSHA PEL: N/K (FP N)

ACGIH TLV: N/K (FP N)  
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Cas: 9003-13-8

RTECS #: LL3130000

Name: FLUID-AP; (POLYALKYLENE GLYCOL OIL)

% Wt: 0-5

OSHA PEL: N/K (FP N)

ACGIH TLV: N/K (FP N)  
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Name: SUPDAT:PRODUCE CARBON MONOXIDE & CARBON DIOXIDE UPON COMBUSTION.  
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Name: EFTS OF OVEREXP:CAUSE TEMPORARY ALTERATION OF HEART'S ELEC ACTIVITY  
W/IRREG PULSE, PALPITATIONS/INADEQ  
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Health Hazards Data  
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LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation: YES

Skin: NO

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: INHAL OF HIGH CONCS OF VAP IS HARMFUL & MAY CAUSE HEART IRREGS, UNCON/DEATH. INTENTIONAL MISUSE/DELIB INHAL MAY CAUSE DEATH W/OUT WARNING. VAP REDUCES OXYGEN AVAIL FOR BRTHG & IS HVR/AIR. LIQ CONT CAN CAUSE FROSTBITE. ANIMAL DATA:LETHARGY & RAPID RESP WERE OBSERVED AT VAP CONC OF 205,000 PPM & PULM (EFTS OF OVEREXP)

Explanation Of Carcinogenicity: NOT RELEVANT

Signs And Symptoms Of Overexposure: HLTH HAZ:CONGESTION, EDEMA & CNS EFTS OCCURRED AT VAP CONC OF 750,000 PPM. CARDIAC SENSIT OCCURRED IN DOGS AT 75,000 PPM FROM ACTION OF EXOGENOUS EPINEPHRINE. EMBRYOTOX ACTIVITY HAS BEEN OBSERVED IN S OME ANIMAL TESTS BUT ONLY AT MATERNALLYTOX DOSE LEVELS. HUMAN HLTH EFTS:OVEREXP BY INHAL TO VERY HIGH CONCS MAY

Medical Cond Aggravated By Exposure: INDIVIDUALS W/PREEXISTING DISEASES OF THE CENTRAL NERVOUS OR CARDIOVASCULAR SYSTEM MAY HAVE INCREASED SUSCEPTIBILITY TO TOXICITY OF EXCESSIVE EXPOSURE.

First Aid: INGEST:CALL MD IMMED (FP N). INHAL:IMMED REMOVE TO FRESH AIR. KEEP PERS CALM. IF NOT BRTHG, GIVE ARTF RESP. IF BRTHG IS DFCLT, GIVE OXYGEN. CALL MD. SKIN:IMMED FLUSH W/PLENTY OF WATER FOR AT LST 15 MI NS. REMOVE CONTAM CLTHG & SHOES. CALL MD. TREAT FOR FROSTBITE IF NEC BY GENTLY WARMING AFFECTED AREA. WASH CONTAM CLTHG BEFORE REUSE. EYE:IMMED FLUSH W/PLENTY OF WATER FOR AT LST 15 MINS. CALL

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Handling and Disposal  
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Spill Release Procedures: REVIEW FIRE & EXPLO HAZS & SFTY PRECS BEFORE PROCEEDING W/CLEAN UP. USE APPROP PERSONAL PROT EQUIP DURING CLEAN UP. VENTILATE AREA-ESP LOW PLACES WHERE HEAVY VAPS MIGHT COLLECT. REMOVE OPEN FLAMES. US E NIOSH/MSHA APPRVD SCBA IF LG SPILL/LEAK OCCURS.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: CONTAMINATED HFC-134A CAN BE RECOVERED BY DISTILLATION OR REMOVED TO A PERMITTED WASTE DISPOSAL FACILITY. COMPLY W/FEDERAL, STATE & LOCAL REGULATIONS.

Handling And Storage Precautions: STORE IN CLEAN, DRY AREA. DO NOT HEAT >125F. USE W/SUFFICIENT VENT TO KEEP EMPLOYEE EXPOS BELOW REC LIMS. SEE FIRE & EXPLOSION DATA SECTION.

Other Precautions: USED REFRIGERANT 134A SHOULD NOT BE MIXED W/AIR FOR LEAK TESTING/USED W/AIR FOR ANY OTHER PURPOSE ABOVE ATM PRESS. NO SMOKING IN AREA OF USE. DO NOT USE IN GEN VICIN OF ARC WELDING, OPEN FLAMES/HOT SU RFS. HEAT &/OR UV RADIA MAY

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Fire and Explosion Hazard Information

Flash Point Method: TOC

Flash Point Text: WILL NOT BURN

Extinguishing Media: AS APPROPRIATE FOR COMBUSTIBLES IN AREA.

Fire Fighting Procedures: USE NIOSH/MSHA APPROVED PRESSURE DEMAND SCBA & FULL PROTECTIVE EQUIPMENT (FP N). COOL CYLINDERS W/WATER SPRAY.

Unusual Fire/Explosion Hazard: CYLS MAY RUPTURE UNDER FIRE CNDTNS. DECOMP MAY OCCUR. ING 1 IS NOT FLAMM AT AMBIENT TEMPS & ATM PRESS, BUT HAS BEEN SHOWN IN TESTS TO BE COMBUST AT (SUPP DATA)

Control Measures

Respiratory Protection: UNDER NORMAL MANUFACTURING CONDITIONS, NO RESPIRATORY PROTECTION IS REQUIRED WHEN USING THIS PRODUCT. NIOSH/MSHA APPROVED SCBA IS REQUIRED IF A LARGE RELEASE OCCURS.

Ventilation: NORMAL VENT FOR STD MFG PROCS IS GENERALLY ADEQ. LOC EXHST SHOULD BE USED WHEN LG AMTS ARE RELS. MECH VENT

Protective Gloves: IMPERVIOUS GLOVES.

Eye Protection: ANSI APPRVD CHEM WORKER GOGGLES (FP N).

Other Protective Equipment: NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health: EXPLD HAZ:PRESS AS LOW AS 5.5 PSIG (@ 177C) WHEN MIXED W/AIR AT CONCS OF GENERALLY >60 VOL % AIR. AT LOWER TEMPS, HIGHER PRESS ARE REQD FOR COMBUSTIBILITY. THERMAL DECOMP PRODS MAY INCL FLUORIDES, CHL ORIDES & PHOSGENE (FP N). HAZ DECOMP PROD:HYDROFLUORIC ACID-POSSIBLY CARBONYL FLUORIDE. OILS, IF PRESENT, MAY

Physical/Chemical Properties

PH: NEUT

Appearance and Odor: COLORLESS TO SLIGHTLY YELLOW LIQUEFIED GAS; SLIGHT ETHEREAL ODOR.

Reactivity Data

Stability Indicator: YES

Stability Condition To Avoid: AVOID OPEN FLAMES & HIGH TEMPERATURES.

Materials To Avoid: INCOMPATIBLE W/ALKALI OR ALKALINE EARTH METALS - POWDERED AL, ZN, BE, ETC.

Hazardous Decomposition Products: DECOMP PRODS ARE HAZ. HFC-134A CAN BE DECOMPOSED BY HIGH TEMPS (OPEN FLAMES, GLOWING METALS SURFS, ETC) FORMING (SUPDAT)

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: NOT RELEVANT

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Toxicological Information  
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Ecological Information  
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MSDS Transport Information  
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Regulatory Information  
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Other Information  
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=====  
HAZCOM Label  
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Product ID: REFRIGERANT 134A

Cage: 25827

Company Name: Shandong Dongyue Chemical CO.,LTD

Street: Tangshan Town

City: Zibo City, Shandong Province, China

Zipcode: 256400

Health Emergency Phone: 0086-533-8220546

Origination Code: G

Eye Protection IND: YES

Skin Protection IND: YES

Signal Word: WARNING

Respiratory Protection IND: YES

Health Hazard: Moderate

Contact Hazard: Slight

Fire Hazard: None

Reactivity Hazard: None

Hazard And Precautions: ACUTE: INHALATION OF HIGH CONCENTRATIONS OF VAPOR IS HARMFUL & MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS OR DEATH.

INTENTIONAL MISUSE OR DELIBERATE INHALATION MAY CAUSE DEATH W/OUT WARNING.

VAPOR REDUCES OXYGEN AVAILABLE FOR BREATHING& IS HEAVIER THAN AIR.

LIQUID CONTACT CAN CAUSE FROSTBITE. OVEREXPOSURE BY INHALATION TO VERY HIGH CONCENTRATIONS MAY CAUSE TEMPORARY ALTERATION OF HEART'S ELECTRIC ACTIVITY

W/IRREGULAR PULSE, PALPITATIONS OR INADEQUATE CIRCULATION. POLYALKYLENE

GLYCOL OILS MAY CAUSE EYE & SKIN IRRITATION. CHRONIC:NONE LISTED BY

MANUFACTURER.

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