Common Name: CONDENSER COIL BRIGHTENER & CLEANER
Manufacturer: COMSTAR INTERNATIONAL
SDS Revision Date: 1/25/2013
SDS Format: No Format Specified

Grainger Item Number(s): 4PDA3, 4PDA4
Manufacturer Model Number(s):

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COMSTAR(R*)

MATERIAL SAFETY DATA SHEET

COMPLIES WITH OSHA HAZARD COMMUNICATION AND WHIMS STANDARD 29 CFR 1910-1200

PRINT DATE: 1/25/13

PRODUCT NAME: CONDENSER COIL BRIGHTENER & CLEANER

PRODUCT NUMBER: 90-920/1

**I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

MANUFACTURER: COMSTAR INTERNATIONAL INC.

ADDRESS:
20-45 128TH STREET
COLLEGE POINT, NY 11356

TEL: 718-445-7900, 800-328-0142
FAX: 718-353-5998

CHEMICAL NAME: BLENDED FORMULA

SYNONYM(S): NONE

II - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>CAS NO.</th>
<th>%</th>
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<tbody>
<tr>
<td>HYDROFLUORIC ACID</td>
<td>1 MG/M3</td>
<td>1 MG/M3</td>
<td>7664-39-3</td>
<td>&gt;10</td>
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<tr>
<td>PHOSPHORIC ACID</td>
<td>1 MG/M3</td>
<td>1 MG/M3</td>
<td>7664-38-2</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

III - HAZARDS IDENTIFICATION

HMIS HAZARD RATINGS:
HEALTH 4
FLAMMABILITY 0
CHEMICAL REACTIVITY 0

NFPA HAZARD RATINGS:
HEALTH 4
FLAMMABILITY 0
CHEMICAL REACTIVITY 0

NOTE:
HMIS AND NFPA RATINGS INVOLVE DATA AND INTERPRETATIONS THAT MAY VARY FROM COMPANY TO COMPANY. THEY ARE INTENDED ONLY FOR RAPID, GENERAL IDENTIFICATION OF THE MAGNITUDE OF THE SPECIFIC HAZARD. TO DEAL ADEQUATELY WITH THE SAFE HANDLING OF THIS MATERIAL, ALL THE INFORMATION CONTAINED IN THIS MSDS MUST BE CONSIDERED.

IV - FIRST-AID MEASURES

INHALATION:
IF SYMPTOMATIC, MOVE TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST.

EYES:
IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.

SKIN:
REMOVE CONTAMINATED CLOTHING, WASH AFFECTED SKIN WITH SOAP AND WATER IMMEDIATELY. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR.

INGESTION: DRINK PLENTY OF WATER. GET IMMEDIATE MEDICAL ATTENTION.

V - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:
WATER FOG, DRY CHEMICAL, CARBON DIOXIDE (CO2), UNIVERSAL FOAM
SPECIAL FIRE FIGHTING PROCEDURES:
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

HAZARDOUS COMBUSTION PRODUCTS: UNKNOWN

UNUSUAL FIRE AND EXPOSURE HAZARDS: NONE KNOWN. KEEP PRODUCT COOL.

VI - ACCIDENTAL RELEASE MEASURES

ABSORB SPILL WITH VERMICULITE OR OTHER INERT MATERIAL, THEN PLACE IN A CONTAINER FOR CHEMICAL WASTE.

FOR LARGE SPILLS:
FLUSH SPILL AREA WITH WATER SPRAY. PREVENT RUN-OFF FROM ENTERING DRAINS, SEWERS, OR STREAMS, COLLECT RUN-OFF.

VII - HANDLING AND STORAGE

PERSONAL PRECAUTIONARY MEASURES:
AVOID CONTACT WITH EYES AND SKIN. WASH THOROUGHLY AFTER HANDLING. DO NOT BREATHE VAPORS OR FUMES.

PREVENTION OF FIRE AND EXPLOSION:
KEEP FROM CONTACT WITH OXIDIZING MATERIALS, ALKALIS AND ACIDS. STORE AWAY FROM HEAT, SUNLIGHT AND MOISTURE.

VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:
ACGIH THRESHOLD LIMIT VALUE (TLV): SEE SECTION II
OSHA (USA) PERMISSIBLE EXPOSURE LIMIT (PEL): SEE SECTION II

VENTILATION:
GOOD GENERAL VENTILATION (TYPICALLY 10 AIR CHANGES PER HOUR) SHOULD BE USED. VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS. SUPPLEMENTARY LOCAL EXHAUST VENTILATION, CLOSED SYSTEMS, OR RESPIRATORY PROTECTION MAY BE NEEDED IN SPECIAL CIRCUMSTANCES SUCH AS POORLY VENTILATED SPACES, EVAPORATION FROM LARGE SURFACES, SPRAYING, HEATING, ETC.

RESPIRATORY PROTECTION:
IF ENGINEERING CONTROLS DO NOT MAINTAIN AIRBORNE CONCENTRATIONS TO AN ACCEPTABLE LEVEL, A NIOSH APPROVED RESPIRATOR MUST BE WORN.

RESPIRATOR TYPE:
ORGANIC VAPOR. IF RESPIRATORS ARE USED, A PROGRAM SHOULD BE INSTITUTED TO ASSURE COMPLIANCE WITH OSHA STANDARD 29 CFR 1910.134.

EYE PROTECTION:
WEAR SAFETY GLASSES WITH SIDE SHIELDS (OR GOGGLES) AND A FACE SHIELD.

SKIN PROTECTION:
IT IS A GOOD INDUSTRIAL HYGIENE PRACTICE TO MINIMIZE SKIN CONTACT.
RECOMMENDED DECONTAMINATION FACILITIES: EYE BATH, WASHING FACILITIES

IX - PHYSICAL AND CHEMICAL PROPERTIES
COLOR: PINK

ODOR: ACIDIC

ODOR THRESHOLD: NOT AVAILABLE

SPECIFIC GRAVITY (H₂O = 1): 1.6 - 1.6

PH: @ 1

VAPOR PRESSURE AT 70 DEG. F: <0.01

VAPOR DENSITY (AIR = 1): N/A

EVAPORATION RATE (N-BUTYL ACETATE = 1): N/A

VOLATILE FRACTION BY WEIGHT: N/A

BOILING POINT: 260 DEG. F

MELTING POINT: NONE

VISCOSITY AT 25 DEG. C (77 DEG. F): N/A

SOLUBILITY IN WATER: COMPLETE

OCTANOL/WATER PARTITION COEFFICIENT: NOT AVAILABLE

FLASH POINT: NONE

LOWER EXPLOSIVE LIMIT 135 DEG. C (275 DEG. F): N/A

UPPER EXPLOSIVE LIMIT 199 DEG. C (390 DEG. F): N/A

AUTO IGNITION TEMPERATURE (ASTM D 2155): N/A

**X - STABILITY AND REACTIVITY**

STABILITY: PRODUCT IS CONSIDERED STABLE.

INCOMPATIBILITY: STRONG OXIDIZING AGENTS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

**XI - TOXICOLOGICAL INFORMATION**

INHALATION:
LOW HAZARD FOR USUAL INDUSTRIAL HANDLING BY TRAINED PERSONNEL. AVOID FUMES.

EYES: CAUSES IRRITATION AND POSSIBLE CHEMICAL BURNS.

SKIN: CAUSES CHEMICAL BURNS.

INGESTION: DANGEROUS IF INGESTED.

ACUTE TOXICITY DATA:
ORAL LD-50 (RABBIT): NOT AVAILABLE
INHALATION LC-50: NOT AVAILABLE
XII - ECOLOGICAL INFORMATION

INTRODUCTION:
LEAKS SHOULD BE STOPPED. SPILLS SHOULD BE CONTAINED AND CLEANED UP IMMEDIATELY. LARGE LIQUID SPILLS SHOULD BE REMOVED BY USING A VACUUM TRUCK. SOLID SPILLS SHOULD BE SCOOPED UP AND PLACED IN APPROVED CONTAINERS FOR DISPOSAL. THE SPILL AREA SHOULD THEN BE FLUSHED WITH WATER FOLLOWED BY LIBERAL COVERING OF SODIUM BICARBONATE. ALL CLEAN-UP MATERIAL SHOULD BE REMOVED AND PLACED IN APPROVED CONTAINERS, LABELED AND STORED IN A SAFE PLACE TO AWAIT PROPER TREATMENT OR DISPOSAL. SPILLS ON AREAS OTHER THAN PAVEMENT, E.G., DIRT OR SAND, MAY BE HANDLED BY REMOVING THE AFFECTED SOILS AND PLACING IN APPROVED CONTAINERS. PERSONS PERFORMING CLEAN-UP WORK SHOULD WEAR ADEQUATE PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING. SPILLS OR RELEASES SHOULD BE REPORTED, IF REQUIRED, TO THE APPROPRIATE LOCAL, STATE AND FEDERAL REGULATORY AGENCIES.

XIII - DISPOSAL CONSIDERATIONS

DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO NATIONAL, STATE, OR LOCAL LAWS. CHECK WITH STATE AND LOCAL OFFICIALS BEFORE DISPOSAL.

XIV - TRANSPORT INFORMATION

DOT (USA) STATUS: HYDROFLUORIC ACID SOLUTION/8/UN 1790/II
TDG (CANADA) STATUS: HYDROFLUORIC ACID SOLUTION/8/UN 1790/II
AIR: INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)
ICAO STATUS: CHECK WITH AIR FREIGHT FORWARDER FOR RULING.
SEA: INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)
IMDG STATUS: NOT REGULATED

XV - REGULATORY INFORMATION


OSHA HAZARDOUS CHEMICAL(S): TRADE SECRET (BLENDED FORMULA).

MATERIAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: NONE

MATERIAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE ADVERSE REPRODUCTIVE EFFECTS: NONE

MASSACHUSETTS SUBSTANCE LIST: NONE.

NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST: NONE

PENNSYLVANIA HAZARDOUS SUBSTANCE LIST: NONE
THIS DOCUMENT HAS BEEN PREPARED IN ACCORDANCE WITH THE MSDS REQUIREMENTS OF THE WHMIS CONTROLLED PRODUCTS REGULATION.

WHMIS (CANADA) INGREDIENT DISCLOSURE LIST: TRADE SECRET (BLENDED FORMULA).

WHMIS (CANADA) STATUS: NOT LISTED.

WHMIS (CANADA) CONTROLLED MATERIAL(S): NOT LISTED.

WHMIS (CANADA) HAZARD CLASSIFICATION: NOT CLASSIFIED.

CARCINOGENICITY CLASSIFICATION (COMPONENTS PRESENT AT 0.1% OR MORE): NONE

INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC): NOT LISTED

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENIST (ACGIH): NOT LISTED

NATIONAL TOXICOLOGY PROGRAM (NTP): NOT LISTED

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): NOT LISTED

CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OR TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372: NONE.

SARA (U.S.A.) SECTIONS 311 AND 312 HAZARD CLASSIFICATION(S): NOT LISTED.

NOTE: