

MATERIAL SAFETY DATA SHEET

APPROVED BY U & LABOR DEPT, ESSENTIALLY SIMILAR TO FORM OSHA20

OLD WORLD TRADING CO
 AGRANDI DIV
 NORTH AMERICAN ENTERPRISES DIV
 ONE NORTH BROADWAY
 DES PLAINES, IL 60014
 EMERGENCY PHONE: 1-312-699-2000

CHEMICAL NAME & SYNONYMS: Solvent TRADE NAME: Full Force Antifreeze
 CHEMICAL FAMILY: Not Applicable
 FORMULA: Not Applicable

I. PHYSICAL DATA

| | |
|--|---|
| BOILING RANGE : | 195 196 194°C / 383 385 385°F (*=End Point) |
| API GRAVITY : | Not Applicable |
| SPECIFIC GRAVITY (Water=1) : | 1.120 |
| POUNDS/GALLON : | 9.330 |
| VAPOR PRESSURE (mm of Hg)@20°C : | 0.1 |
| VAPOR DENSITY (air=1) : | 2.1 |
| SOLUBILITY IN WATER : | Complete |
| SOLUBILITY IN ACID (85% H ₂ SO ₄) : | Complete |
| DRY TIME (Ether=1) : | Long |
| % VOLATILE BY VOL : | 95.0 |
| APPEARANCE : | Clear, Bluegreen |
| ODOR : | Oxygenated |
| REFRACTIVE INDEX : | 1.425 |

II. HAZARDOUS INGREDIENTS

| MATERIAL | CAS # | VOL(%) | TLV(ppm) |
|--------------------------|----------|----------------------|----------|
| Ethylene Glycol | 107-21-1 | 9 | 50 |
| LOWEST KNOWN LD50 (ORAL) | 107-21-1 | 5840 mg/kg(Rats) | |
| LOWEST KNOWN LD50 (SKIN) | 107-21-1 | 9530 mg/kg (Rabbits) | |
| DOT SHIPPING NAME: None | | | |

HAZARD RATING
 HEALTH: 3 FLAMMABILITY: 1 REACTIVITY: 0

III. FIRE & EXPLOSION HAZARD DATA

LOWER FLAMMABLE LIMIT IN AIR (% by vol): 1.0
 FLASH POINT (TEST METHOD): 118°C / 245°F (TCC)
 FLAMMABILITY CLASSIFICATION: Class III B

EXTINGUISHING MEDIA : NFPA Class B extinguishers (CO₂ or foam)
 for class III-B liquid fires.

SPECIAL FIRE FIGHTING PROCEDURES : Water spray may be ineffective on fire but can protect
 fighters & cool closed containers. Use fog nozzles if water
 is used Use air-supplied breathing masks.

UNUSUAL EXPLOSION AND FIRE PROCEDURES : SLIGHTLY COMBUSTIBLE! Keep container tightly closed.
 Isolate from oxidizers, heat, & open flame.
 Closed containers may explode if exposed
 to extreme heat. Applying to hot surfaces
 requires special precautions.

Legal responsibility is assumed only for the fact that all studies reported here & all opinions are those of
 qualified experts. Buyer assumes all risk & liability. He accepts & uses this material on these conditions.
 He must have a copy of this MSDS where material is handled.

IV. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: 50 ppm (Freshly Prepared)

EFFECTS OF ACUTE OVER-EXPOSURE : INHALING: Anesthetic. Irritates respiratory tract.
: May cause serious nervous system depression.
: May cause damage to kidney, blood, nerves, liver & lungs.

EFFECTS OF SWALLOWING AND CHRONIC OVER-EXPOSURE : SKIN CONTACT: Primary irritation, defatting, dermatitis.
: EYE CONTACT: Primary irritation, redness, tearing, blurred vision.
: Liquid may cause skin irritation.
: Harmful or fatal if swallowed
: Swallowing can cause abdominal irritation, nausea, vomiting and diarrhea.

EMERGENCY & FIRST AID PROCEDURES : In case of contact with skin, flush with plenty of water. For eyes, flush with plenty of water for 15 minutes & get medical attention.
: After high vapor exposure, remove to fresh air. If breathing is difficult give oxygen. If breathing has stopped give artificial respiration.
: If swallowed, CALL A PHYSICIAN IMMEDIATELY!
: Induce vomiting promptly according to physician's instructions or by having patient stick finger down throat.
: Never give anything by mouth to an unconscious person.

V. REACTIVITY DATA

STABILITY: Stable
CONDITIONS TO AVOID: Isolate from heat, & open flame.
MATERIALS TO AVOID : Isolate from strong oxidizers such as permanganate.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide from burning

VI. ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES : Small: Mop up with absorbent material & transfer to hood.
: Large: Isolate from oxidizers, heat, & open flame.
: Persons without proper protection should be kept from area until cleaned up.
: Stop spill at source. Dike area to prevent spread. Pump liquid to salvage tank.
: Remainder may be taken up on absorbent material & shoveled into containers.

WASTE DISPOSAL METHOD : Small: Evaporate until all vapors are gone.
: Dispose of remainder by legally applicable methods.
: Large: Recycle or Incinerate observing local, state & Federal health, safety & pollution laws.

VII. EMPLOYEE PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE) : Ventilate to keep air below 25 ppm. If over TLV, use self-contained air pack approved by NIOSH/OSHA. Consult Safety Equipment Supplier.
: Use explosion-proof equipment.

VENTILATION : LOCAL EXHAUST: Preferable
: SPECIAL : None
MECHANICAL (GENERAL) : Acceptable
OTHER : None

PROTECTIVE CLOTHING: Wear OSHA Standard chemical splash goggles. Consult Safety Equipment Supplier.
: Wear gloves & footwear impervious to solvents. Wash clothing before reuse.

VIII. SPECIAL PROTECTIONS

Do not store above 49°C/120°F. Store large amounts in structures made for OSHA Class III B liquids. Avoid free fall of liquid. Ground containers when pouring. Do not flame cut, braze or weld. Empty container hazardous! Continue all label precautions!

DATE : 8 / 85

FULL FORCE ANTIFREEZE
CONTAINS: ETHYLENE GLYCOL

DANGER!

SLIGHTLY COMBUSTIBLE
LIQUID MAY CAUSE SKIN IRRITATION
HARMFUL OR FATAL IF SWALLOWED
SWALLOWING CAN CAUSE ABDOMINAL IRRITATION,
NAUSEA, VOMITING AND DIARRHEA

Isolate from oxidizers, heat, & open flame.

Use only with adequate ventilation.

Avoid breathing of vapor or spray mist.

Do not get in eyes, on skin or on clothing. Do not take internally.

Wear OSHA Standard chemical splash goggles. Consult Safety Equipment Supplier.

Wear gloves & footwear impervious to solvents. Wash clothing before reuse.

Keep closure tight & upright to prevent leakage. Keep closed when not in use.

Ground containers when pouring. Do not flame out, braze or weld.

DISPOSAL: Recycle or dispose of observing local, state & Federal health, safety & pollution laws. If spilled, mop up & dispose of.

FIRST AID: In case of contact with skin, flush with plenty of water. For eyes, flush with plenty of water for 15 minutes & get medical attention.

After high vapor exposure, remove to fresh air. If breathing is difficult

give oxygen. If breathing has stopped give artificial respiration.

If swallowed, **CALL A PHYSICIAN IMMEDIATELY!**

Induce vomiting promptly according to physician's

instructions or by having patient stick finger down throat.

Never give anything by mouth to an unconscious person.

Consult MSDS for further information.

FOR INDUSTRY USE ONLY

KEEP OUT OF THE REACH OF CHILDREN

OLD WORLD TRADING CO

ONE NORTH BROADWAY

DES PLAINES, IL 60016

DOT SHIPPING NAME: None

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ATTENTION!!

THIS CONTAINER HAZARDOUS WHEN EMPTIED
SINCE EMPTIED CONTAINERS RETAIN PRODUCT
RESIDUES (VAPOR OR LIQUID). ALL HAZARD
PRECAUTIONS MUST BE OBSERVED.