

# MATERIAL SAFETY DATA SHEET

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

OLD WORLD TRADING CO  
ACRANDI DIV  
NORTH AMERICAN ENTERPRISES DIV  
ONE NORTH BROADWAY  
DES PLAINES, IL 60016  
EMERGENCY PHONE: 1-312-699-2000

TRADE NAME: Full Force Antifreeze

CHEMICAL NAME & SYNONYMS: Solvent  
CHEMICAL FAMILY: Not Applicable  
FORMULA: Not Applicable

## I. PHYSICAL DATA

BILING RANGE: 195 194 194°C / 383 385 385°F (2-End Point)  
SPECIFIC 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<sub>2</sub>SO<sub>4</sub>): Complete  
BOILING TIME (Ether=1): Long  
VOLATILE BY VOL: 95.0  
APPEARANCE: Clear, Bluegreen  
OR: Oxygenated  
REFRACTIVE INDEX: 1.425

## II. HAZARDOUS INGREDIENTS

| INGREDIENT             | CAS #    | VOL(%)               | TLV(ppm) |
|------------------------|----------|----------------------|----------|
| Ethylene Glycol        | 107-21-1 | 50                   | 50       |
| WEST KNOWN LD50 (ORAL) | 107-21-1 | 5840 mg/kg (Rats)    |          |
| WEST KNOWN LD50 (SKIN) | 107-21-1 | 9530 mg/kg (Rabbits) |          |
| 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 (CO<sub>2</sub> or foam) for class III B liquid fires.  
SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective on fire but can protect firefighters & cool closed containers. Use fog nozzles if water is used. Use air-supplied breathing masks.  
USUAL 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.

Liability 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. 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**

# EFFECTS OF SWALLOW- ING AND CHRONIC OVER- EXPOSURE

# EMERGENCY & FIRST AID PROCEDURES

VALUE: 50 ppm (Freshly Prepared)

**INHALING:** Anesthetic. Irritates respiratory tract.  
May cause serious nervous system depression.  
May cause damage to kidneys.

SKIN CONTACT: Primary irritation, dizziness, May cause damage to kidneys, blood, nerves, liver & lungs.

SKIN CONTACT: Primary irritation, defatting, dermatitis.  
EYE CONTACT: Primary irritation, redness.

**EYE CONTACT:** Primary irritation, defatting, dermatitis.  
Liquid may cause skin irritation.

Liquid may cause skin irritation.  
Harmful or fatal if swallowed

Harmful or fatal if swallowed.  
Swallowing can cause abdominal  
nausea, vomiting.

Swallowing can cause abdominal irritation,  
nausea, vomiting and diarrhea.

nausea, vomiting and diarrhea.

In case of contact with skin, flush with plenty of water. For  
flush with plenty of water for 15 minutes & get medical aid.  
After high vapor exposure, remove to fresh air. If breathing  
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.

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 instructions.**

Induce vomiting promptly according to physician's instructions or by having patient eat salt.

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.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Monoxide from burning

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## VI. ENVIRONMENTAL PROTECTION

## SPILL OR LEAK PROCEDURES

- : Small: Mop up with absorbent material & transfer to hood.
- : Large: Isolate from oxidizers, heat & burn.

: Large: Isolate from oxidizers, heat, & open flame.  
: Persons without proper protection should not

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 & stored in small evaporator.

Small: Evaporate until all vapors are gone.

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Dispose of remainder by legally applicable methods.  
Large: Recycle or Incinerate according to applicable laws.

Large: Recycle or incinerate observing local, state & Federal health, safety & pollution laws.

**safety & pollution laws.**

## VII. EMPLOYEE PROTECTION

RESPIRATORY PROTECTION  
(SPECIFY TYPE)

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.

VENTILATION : LOCAL EXHAUST : Use explosion-proof equipment.

## VENTILATION

LOCAL EXHAUST : Preferable  
SPECIAL : None

SPECIAL : None

**MECHANICAL(GENERAL) : Acceptable**

OTHER : None

**PROTECTIVE**

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

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## VIII. SPECIAL PROTECTIONS

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

DATE: 8 / 85

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**FULL FORCE ANTIFREEZE**  
**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!!**  
**IS CONTAINER HAZARDOUS WHEN EMPTIED**  
**CE EMPTIED CONTAINERS RETAIN PRODUCT**  
**RESIDUES (VAPOR OR LIQUID), ALL HAZARD**  
**CAUTIONS MUST BE OBSERVED.**

**LTH: 3** **HAZARD RATING**  
**FLAMMABILITY: 1** **REACTIVITY: 0**