

# SAFETY DATA SHEET

## Float Lacquer

### 1 – IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

PRODUCT NAME: **Randolph Float Lacquer**  
 PRODUCT NUMBER: 20-FL  
 SUPPLIER: Consolidated Aircraft Coatings  
 P.O. Box 3129, Riverside, CA 92519, USA  
 4343 Fort Drive, Riverside, CA 92509, USA  
 (951) 684-4280  
 (951) 809-7144  
 (760) 782-1947  
 EMERGENCY TELEPHONE: (800) 424-9300 (Chemtrec- US)  
 (703) 527-3887 (International – Call Collect)

### 2 - HAZARDS IDENTIFICATION

Highly flammable. Irritating to eyes and skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed. Vapors may cause drowsiness and dizziness.

CLASSIFICATION (1999/45) XI, F, C, R11, R20, R36/37, R66, R67, R34

### 3 – COMPOSITION /INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content %	Classification (67/548/EEC)
Acetone	200-662-2	67-64-1	5-35%	XI, F, R11, R36, R66, R67, S16, S26, S9
Ethyl Acetate	205-500-4	141-78-6	1-30%	XI, F, R11, R36, R66, R67, S16, S26, S33
Methyl Ethyl Ketone	201-159-0	78-93-3	5-24%	XI, F, R11, R36/37, S9, S16, S25, S33
N-Butyl Acetate	204-658-1	123-86-4	3-33%	R10, R66, R67, S25
Isopropanol	200-661-7	67-63-0	8-38%	XI, F, R11, R36, R67, S16, S24/25, S26, S7
Toluene	203-625-9	108-88-3	15-45%	R11, R20, S16, S25, S29, S33
Phosphoric Acid	231-633-2	7664-38-2	0.1-1%	C, R34, S26, S45

The Full Text for all R-Phrases and S-Phrases is displayed in Section 15

#### COMPOSITION COMMENTS

The data shown are in accordance with the latest EC Directives.

### 4- FIRST AID MEASURES

#### NOTICE:

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

#### INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Breathing vapor may irritate the nose and throat. Central nervous system effects including excitation, euphoria, contracted eye pupil, dizziness, blurred vision, fatigue, nausea, headache, loss of consciousness, respiratory arrest and sudden death could occur on long term and/or high concentration of exposure to vapors.

#### SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Contact with the skin or eyes may cause irritation. Prolonged or repeated contact can cause moderate irritation, defatting and/or dermatitis. Skin and eyes should be flushed with water for at least 15 minutes.

#### INGESTION HEALTH RISK AND SYMPTOMS OF EXPOSURE:

Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

#### HEALTH HAZARDS (ACUTE AND CHRONIC):

Overexposure may cause anesthesia, headache, nausea or dizziness. Breathing the vapors may irritate the nose and throat. Detectable amounts of chemicals or substances known to the state of California to cause cancer, birth defects, or other reproductive harm may be found in this product. Use care when handling chemical and petroleum products even though they are water reducible.

CARCINOGENICITY: NTP CARCINOGEN: N/A IARC MONOGRAPHS: N/A OSHA REGULATED: N/A

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE TO THIS PRODUCT:**

Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

**EMERGENCY AND FIRST AID PROCEDURES:**

Remove victim to fresh air and restore breathing if required. Call a physician if required. If breathing stops, give artificial respiration. Keep person warm. Never give anything by mouth to an unconscious person. Do not induce vomiting. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of liquid into the lungs. Vapors may irritate the nose and throat.

**5- FIRE FIGHTING PROCEDURES**

**EXTINGUISHING MEDIA:**

CO<sub>2</sub>, Dry Chemical, Water Fog

**SPECIAL FIREFIGHTING PROCEDURES:**

Do not use a direct stream of water. Product may float and can be reignited on the surface of the water. Do not enter a confined area without full bunker gear including a positive-pressure NIOSH-approved self-contained breathing apparatus. Decomposition products may form toxic materials.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point. Flammable material

**6-ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS:**

Wear protective clothing as described in Section 8.

**ENVIRONMENTAL PRECAUTIONS:**

Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority.

**SPILL CLEANUP METHODS:**

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

**7-HANDLING AND STORAGE**

**USAGE PRECAUTIONS:**

Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level.

**STORAGE PRECAUTIONS:**

FLAMMABLE/Combustible. Keep away from oxidizers, open flames and other ignition sources. Keep unused contents in original container and tightly closed lids. Store in a cool, dry and well-ventilated place and at an ambient Temperature not to exceeding above 120° F.

**STORAGE CLASS:**

FLAMMABLE liquid storage.

**8-EXPOSURE CONTROL/PERSONAL PROTECTION**

Name	Workplace Exposure Limits	Remarks
Acetone	ACGIH: 500 ppm TWA, 750 ppm STEL NIOSH: 250 ppm TWA; 590 mg/m <sup>3</sup> TWA 2500 ppm IDLH (10% LEL) OSHA-Final PELs: 1000 ppm TWA; 2400 mg/m <sup>3</sup> TWA	Consult local authorities for acceptable exposure limits
Ethyl Acetate	ACGIH: 400 ppm TWA NIOSH: 400 ppm TWA; 1400 mg/m <sup>3</sup> TWA 2000 ppm IDLH OSHA-Final PELs: 400 ppm TWA; 1400 mg/m <sup>3</sup> TWA	Same As Above
Methyl Ethyl Ketone	ACGIH: 200 ppm TWA; 300 ppm STEL NIOSH: 200 ppm TWA; 590 mg/m <sup>3</sup> TWA 3000 ppm IDLH ; OSHA-Final PELs: 200 ppm TWA; 590 mg/m <sup>3</sup> TWA	Same As Above
N Butyl Acetate	ACGIH: 150 ppm TWA, 250 ppm STEL NIOSH: 150 ppm TWA; 710 mg/m <sup>3</sup> TWA 1700	Same As Above

	ppm IDLH OSHA-Final PELs: 150 ppm TWA; 710 mg/m3 TWA	
Isopropanol	ACGIH: 200 ppm TWA; 400 ppm STEL NIOSH: 400 ppm TWA; 980 mg/m3 TWA 2000 ppm IDLH (10% LEL) OSHA-Final PELs: 400 ppm TWA; 980 mg/m3 TWA	Same As Above
Toluene	ACGIH: 20 ppm TWA NIOSH: 100 ppm TWA; 375 mg/m3 TWA 500 ppm IDLH OSHA-Final PELs: 200 ppm TWA; 300 ppm Ceiling	Same As Above
Phosphoric Acid	ACGIH: 1mg/m3 TWA, 3 mg/m3 STEL NIOSH: 1 mg/m3 TWA, 1000 mg/m3 IDLH OSHA-Final PELs: 1 mg/m3 TWA	Same As Above

**PROTECTIVE EQUIPMENTS:****PROCESS CONDITIONS:****ENGINEERING MEASURES:****RESPIRATORY EQUIPMENT:****HANDPROTECTION:****EYE PROTECTION:****OTHER PROTECTION:****HYGIENE MEASURES:**

Provide eyewash station.

Provide adequate ventilation. Fully equipped spray booth is recommended to ensure the workers legal exposure limits are not exceeded.

Wear respirator with appropriate cartridge for organic solvents and chemicals.

Wear approved gloves such as Neoprene, Nitrile or Rubber types.

Wear splash-proof goggles.

Wear appropriate clothing to prevent any possible skin contact.

DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift and before eating, drinking or smoking. Promptly remove contaminated clothing.

**9- PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE:	Liquid
COLOR:	Silver
ODOR:	Ketone characteristics
BOILING POINT:	75-265° F
RELATIVE DENSITY:	0.92 g/mL
VAPOR DENSITY:	Heavier than air
FLASH POINT:	35°F (2° C) (Closed Cup)
FLAMMABILITY LIMITS:	LOWER: NA UPPER: NA
SOLUBILITY VALUE (g/100g H <sub>2</sub> O @ 20°C):	Insoluble
VOLATILE ORGANIC COMPOUND (VOC):	369 g/L

**10- STABILITY AND REACTIVITY****STABILITY:**

Stable

**CONDITIONS TO AVOID:**

Heat and fires. Ignition sources.

**INCOMPATIBILITY (MATERIALS TO AVOID):**

Strong alkalis or strong oxidizers. This material may dissolve some plastics, rubber compounds or coatings. May react strongly with acids while in liquid form.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:**

Hydrogen chloride and very small amounts of phosgene and chlorine.

**HAZARDOUS POLYMERIZATION:**

N/A.

**11-TOXICOLOGICAL INFORMATION**

**Acetone (CAS#67-64-1)** : LD50/LC50: Dermal, guinea pig: LD50 = >9400 uL/kg; Draize test, rabbit, eye: 20 mg Severe; Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, eye: 10 uL Mild; Draize test, rabbit, skin: 500 mg/24H Mild; inhalation, mouse: LC50 = 44 gm/m3/4H; Inhalation, rat: LC50 = 50100 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340

mg/kg; Oral, rat: LD50 = 5800 mg/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: In a series of studies, no statistically significant differences in causes of death or clinical laboratory results were observed in 948 employees exposed to up to 1070 ppm acetone over 23 years. Teratogenicity: Animal studies have only shown harmful effects in the offspring of animals exposed to doses which also produced significant maternal toxicity. Reproductive Effects: During the Stewart et al. study; four adult female volunteers were exposed 7.5 hours to acetone vapor at a nominal concentration of 1000 ppm. Three of the four women experienced premature menstrual periods which were attributed to the acetone exposure. Mutagenicity: Sex chromosome loss and nondisjunction(Yeast - *Saccharomyces cerevisiae*) = 47600 ppm; Cytogenetic analysis(Rodent - hamster Fibroblast)= 40 gm/L. Neurotoxicity: No information found.

**Ethyl Acetate (CAS# 141-78-6): LD50/LC50:** Inhalation, mouse: LC50 = 45 gm/m<sup>3</sup>/2H; Inhalation, rat: LC50 = 200 gm/m<sup>3</sup>; Oral, mouse: LD50 = 4100 mg/kg; Oral, rabbit: LD50 = 4935 mg/kg; Oral, rat: LD50 = 5620 mg/kg; Skin, rabbit: LD50 = >20 mL/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: No information available. Mutagenicity: Cytogenetic Analysis: hamster fibroblast 9g/L Sex Chromosome Loss/Non-disjunction: *S. cerevisiae* 24400 ppm. Neurotoxicity: No information available.

**Methyl Ethyl Ketone (CAS# 78-93-3):**LD50/rabbit/skin/draize test = 500mg/24H moderate; LC50/mouse/inhalation = 32mg/m<sup>3</sup>/4H; Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.

**N-BUTYL ACETATE (CAS#123-86-4):** LD50/rabbit/oral = 7.4 g/kg. LD50/LC50: Draize test, rabbit, eye: 100 mg Moderate; Draize test, rabbit, skin: 500 mg/24H Moderate; Inhalation, mouse: LC50 = 6 gm/m<sup>3</sup>/2H; Inhalation, rat: LC50 = 390 ppm/4H; Oral, mouse: LD50 = 6 gm/kg; Oral, rabbit: LD50 = 3200 mg/kg; Oral, rat: LD50 = 10768 mg/kg; Skin, rabbit: LD50 = >17600 mg/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information found. Teratogenicity: Exposure to n-butyl acetate vapors throughout gestation did not cause significant teratogenicity in rabbits, rats, or mice. Reproductive Effects: No information found. Mutagenicity: No information found Neurotoxicity: No information found

**Isopropyl Alcohol (CAS#67-63-0): LD50/LC50:** Draize test, rabbit, eye: 100 mg Severe; Draize test, rabbit, eye: 10 mg Moderate; Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, skin: 500 mg Mild; Inhalation, mouse: LC50 = 53000 mg/m<sup>3</sup>; Inhalation, rat: LC50 = 16000 ppm/8H; Inhalation, rat: LC50 = 72600 mg/m<sup>3</sup>; Oral, mouse: LD50 = 3600 mg/kg; Oral, mouse: LD50 = 3600 mg/kg; Oral, rabbit: LD50 = 6410 mg/kg; Oral, rat: LD50 = 5045 mg/kg; Oral, rat: LD50 = 5000 mg/kg; Skin, rabbit: LD50 = 12800. Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information found. Teratogenicity: A rat & rabbit developmental toxicity study showed no teratogenic effects at doses that were clearly maternally toxic. In a separate rat study, no evidence of developmental neurotoxicity was associated with gestational exposures to IPA up to 1200 mg/kg/d. Reproductive Effects: See actual entry in RTECS for complete information. Mutagenicity: See actual entry in RTECS for complete information. Neurotoxicity: In rats exposed to isopropanol by inhalation, acute neurotoxicity was noted at 1 and 6 hours at 5000 ppm, but only minimal effects were seen at 1500 ppm and the animals recovered within 5 hours. No toxicity was noted at 500 ppm.

**Toluene (CAS# 108-88-3):** ACGIH: A4-Not Classifiable as a Human Carcinogen; IARC: Group 3 carcinogen; No other toxicological information available.

**Phosphoric Acid (CAS#7664-38-2): RTECS#:** TB6300000  
**LD50/LC50:**

Draize test, rabbit, eye: 119 mg Severe;  
Draize test, rabbit, skin: 595 mg/24H Severe;  
Inhalation, mouse: LC50 = 25.5 mg/m<sup>3</sup>;  
Inhalation, rat: LC50 = >850 mg/m<sup>3</sup>/1H;  
Inhalation, rat: LC50 = 25.5 mg/m<sup>3</sup>;  
Oral, mouse: LD50 = 1.25 gm/kg;  
Oral, rat: LD50 = 1530 mg/kg;  
Oral, rat: LD50 = 1.25 gm/kg;  
Skin, rabbit: LD50 = 2740 mg/kg;

**Carcinogenicity:** Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found.

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## 12- ECOLOGICAL INFORMATION

**Acetone (CAS#67-64-1):** Ecotoxicity: Fish: Rainbow trout: 5540 mg/l; 96-hr; LC50Fish: Bluegill/Sunfish: 8300 mg/l; 96-hr; LC50 No data available. Environmental: Volatilizes, leeches, and biodegrades when released to soil. TERRESTRIAL FATE: If released on soil, acetone will both volatilize and leach into the ground. Acetone readily biodegrades and there is evidence suggesting that it biodegrades fairly rapidly in soils. AQUATIC FATE: If released into water, acetone will probably biodegrade. It is readily biodegradable in screening tests, although data from natural water are lacking. It will also be lost due to volatilization (estimated half-life 20 hr from a model river). Adsorption to sediment should not be significant. Physical: ATMOSPHERIC FATE: In the atmosphere, acetone will be lost by photolysis and reaction with photochemically produced hydroxyl radicals. Half-life estimates from these combined processes are 79 and 13 days in January and June, respectively, for an overall annual average of 22 days. Therefore considerable dispersion should occur. Being miscible in water, wash out by rain should be an important removal process. This process has been confirmed around Lake Shinsei-ko in Japan. There acetone was found in the air and rain as well as the lake.

**Ethyl Acetate (CAS# 141-78-6):** Ecotoxicity: Fish: Fathead Minnow: 230mg/L; 96H; Daphnid LC50=2500 mg/L/96H Golden orfe LC50=270 mg/L/48H. Environmental: Terrestrial: Expected to have high mobility in soil. Volatilization of ethyl acetate from moist soil surfaces is expected to be important. Aquatic: Not expected to adsorb to suspended solids and sediment in water. Atmospheric: Expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase ethyl acetate is degraded in the atmosphere by reaction with photo chemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 10 days. Physical: Substance biodegrades at a high rate with little bioconcentration

**Methyl Ethyl Ketone (CAS#78-93-3):** Ecotoxicity : Fish/Fathead Minnow/LC50 = 3220mg/l; Environmental : Substance evaporates in water with T1/2=3D (rivers) to 12D (lakes); Physical : Substance photo degrades in air with T1/2=2.3 days

**N-BUTYL ACETATE (CAS#123-86-4):** Ecotoxicity: Fish: Fathead Minnow: LC50 = 18.0 mg/L; 96 Hr.; Unspecified Fish: Bluegill/Sunfish: LC50 = 100.0 mg/L; 96 Hr.; Static condition Water flea EC50 = 44.0 mg/L; 48 Hr.; 23 degrees CAlgae: LC50 =320.0 mg/L; 96 Hr.; Unspecified Bacteria: Phytobacterium phosphoreum: EC50 =3100.0-130 mg/L; 5, 15 minutes; Microtox test, 15 degrees CDaphnia: Daphnia: 44-205 mg/l; 96 H; LC50 No data available. Environmental: Based on estimated Koc values of 34 and 233, n-butyl acetate may be subject to moderate-to-high leaching. Volatilization from dry soil surfaces is likely to be rapid. N-Butyl acetate may be susceptible to significant biodegradation in natural water. Physical: n-Butyl acetate will exist almost entirely in the vapor-phase in the ambient atmosphere due to its relatively high vapor pressure. The half-life for the vapor-phase reaction of n-butyl acetate with photo chemically produced hydroxyl radicals has been estimated to be about 6 days in an average atmosphere indicating that this reaction will be the dominant removal mechanism. Other: ThOD: 2.207 g oxygen/gBOD-5: 1.020 g oxygen/gBOD-20: 1.45 g oxygen/g.

**Isopropanol (CAS#67-63-0):** Ecotoxicity: Fish: Fathead Minnow: >1000 ppm; 96h; LC50Daphnia: >1000 ppm; 96h; LC50Fish: Gold orfe: 8970-9280 ppm; 48h; LC50 IPA has a high biochemical oxygen demand and a potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a low potential to affect the germination of some plants, a high potential to biodegrade (low persistence) with unacclimated microorganisms from activated sludge. Environmental: No information available. Physical: THOD: 2.40 g oxygen/gCOD: 2.23 g oxygen/gBOD-5: 1.19-1.72 g oxygen/g other: No information available.

**Toluene (CAS#108-88-3):** Ecotoxicity: No data available; Environmental: From soil, substance evaporates and is microbially biodegraded. In water, substance volatilizes and biodegrades; Physical: Photo chemically produced hydroxyl radicals degrade substance.

**Phosphoric Acid (CAS#7664-38-2): Ecotoxicity:** Fish: Mosquito Fish: LC50 = 138 mg/L; 96 Hr; Unspecified No data available.  
**Environmental:** The acidity of phosphoric acid may be reduced readily by natural water hardness minerals, but the phosphate may persist indefinitely. During transport through the soil, phosphoric acid will dissolve some of the soil material, in particular, carbonate-based materials. The acid will be neutralized to some degree with adsorption of the proton and phosphate ions also possible. However, significant amounts of acid will remain for transport down toward the groundwater table.  
**Physical:** No information available.  
**Other:** Dangerous to aquatic life in high concentrations.

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### 13 – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

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### 14 – TRANSPORT INFORMATION

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**DOT PROPER SHIPPING NAME:** Float Lacquer  
**PRIMARY HAZARD CLASS/DIVISION:** 3  
**UN/UA NUMBER:** UN1263  
**PACKING GROUP:** II

**IMO PROPER SHIPPING NAME: PAINT**  
**IMO UN CLASS: 3**  
**IMO UN NUMBER: 1263**  
**IMO PACKING GROUP: II**  
**IMO LABEL: FLAMMABLE LIQUID**  
**IMO VESSEL STOWAGE: B**

**Air shipping this product is not advised and if done must be handled by a certified carrier according to IATA rules.**

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#### 15 – REGULATORY INFORMATION

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#### LABELLING



XI



F



C

- XI=harmful
- F=highly flammable
- C=corrosive

#### R-Phrases:

R10: Flammable  
 R11: Highly Flammable  
 R20: Harmful by inhalation  
 R34: Causes burns  
 R36: Irritating to eyes  
 R36/37: Irritating to eyes and respiratory system  
 R66: Repeated exposure may cause skin dryness or cracking  
 R67: Vapors may cause drowsiness and dizziness

#### S-Phrases:

S7: Keep container tightly closed  
 S9: Keep container in a well-ventilated place  
 S16: Keep away from sources of ignition - No smoking  
 S24/25: Avoid contact with skin and eyes  
 S25: Avoid contact with eyes  
 S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
 S29: Do not empty into drains  
 S33: Take precautionary measures against static discharges  
 S45: In case of accident or if you feel unwell seek medical advice immediately (show the MSDS where possible)

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#### 16- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.