

# SAFETY DATA SHEET

Randolph Mark II for Metal Thinner

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

PRODUCT NAME: **Randolph Mark II for Metal Thinner**  
PRODUCT NUMBER: 28-THINNER  
RECOMMENDED USE: Aircraft coatings and cleaners  
RESTRICTIONS ON USE: Not applicable  
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

### GHS Hazard Category

Flammable liquid- Category 2  
Eye Irritation - Category 2A  
Skin Irritation- Category 2  
Respiratory Irritation- Category 3  
Specific target organ toxicity (single exposure) – Category 3, Central Nervous System H336

### Label Elements

#### Pictograms



#### Signal Word

**DANGER**

#### Hazard Statements

Highly flammable. Irritating to eyes and skin  
May cause drowsiness or dizziness  
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

#### Precautionary Statements

#### Prevention

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area. Vapors may cause drowsiness and dizziness.

#### Response

INHALATION:  
Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.  
INGESTION:

Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.

**SKIN CONTACT:**

Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

**EYES CONTACT:**

Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

**Storage**

Store in a well-ventilated Place. Keep container tightly closed. Keep cool. Store in a locked cabinet, cage or room.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

CLASSIFICATION (1999/45) XI, XN, F, R11, R36, R22, R66, R67

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**3 – COMPOSITION /INFORMATION ON INGREDIENTS**

Name	EC No.	CAS No.	Content %	Classification (67/548/EEC)
Methyl Ethyl Ketone	201-159-0	78-93-3	40-70%	XI, F, R11, R36, R66, R67
Methyl Amyl Ketone	203-767-1	110-43-0	30-60%	R10, R22, S23

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

Two Opti-color colorants contain lead pigments: CY Medium Chrome Yellow and MO Molybdate Orange. One colorant, TW Titanium White, contains silica. When any of these three colorants are used: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**4- FIRST AID MEASURES****INHALATION:**

Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.

**INGESTION:**

Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.

**SKIN CONTACT:**

Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

**EYES CONTACT:**

Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

**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
Methyl Ethyl Ketone	ACGIH: 200ppm TWA; 300ppm STEL NIOSH: 200ppm TWA; 590 mg/m <sup>3</sup> TWA; 3000ppm IDLH OSHA –Final PELs: 200ppm TWA; 590 mg/m <sup>3</sup> TWA	Consult local authorities for acceptable exposure limits.
Methyl Amyl Ketone	ACGIH: 50 ppm TWA NIOSH: Not Listed OSHA-Final PELs: 100 ppm TWA	Same As Above

**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 exposures to vapors. Supply fresh air. Keep patient warm.

**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



PROTECTIVE EQUIPMENTS:  
PROCESS CONDITIONS:  
ENGINEERING MEASURES:

Provide eyewash station.

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

RESPIRATORY EQUIPMENT:  
HANDPROTECTION:  
EYE PROTECTION:  
OTHER PROTECTION:  
HYGIENE MEASURES:

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:	Clear
ODOR:	Aromatic
BOILING POINT:	172-309 °F
RELATIVE DENSITY:	0.91 g/mL
VAPOR DENSITY:	Heavier than air
FLASH POINT:	45 °F (Closed Cup)
FLAMMABILITY LIMITS:	NA (Lower%)
SOLUBILITY VALUE (g/100g H <sub>2</sub> O @ 20°C):	Insoluble
VOLATILE ORGANIC COMPOUND (VOC):	808 g/L

## 10- STABILITY AND REACTIVITY

STABILITY:

Stable at ambient temperature

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:

Formation of toxic gases is possible during heating or in case of fire.

HAZARDOUS POLYMERIZATION:

N/A

## 11-TOXICOLOGICAL INFORMATION

**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.

**Methyl Amyl Ketone (CAS# 110-43-0)** LD50/rabbit/dermal = 12.6mL/kg; LD50/rat/oral = 1600mg/kg; Carcinogenicity: Not listed by IARC, NTP or OSHA.

## 12-ECOLOGICAL INFORMATION

**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 photodegrades in air with T1/2=2.3 days.

**Methyl Amyl Ketone (CAS# 110-43-0)** Ecotoxicity: No data available

## 13 – DISPOSAL CONSIDERATIONS

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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 / ADR / RID Classification:**

**DOT PROPER SHIPPING NAME:** PAINT RELATED MATERIAL  
**PRIMARY HAZARD CLASS/DIVISION:** 3  
**UN/UA NUMBER:** UN1263  
**PACKING GROUP:** II

**IMDG and ADN Classification:**

**IMDG PROPER SHIPPING NAME:** PAINT RELATED MATERIAL  
**IMDG UN CLASS:** 3  
**IMDG UN NUMBER:** UN1263  
**IMDG PACKING GROUP:** II  
**IMDG LABEL:** FLAMMABLE LIQUID  
**IMDG VESSEL STOWAGE:** B

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

**GHS LABEL:****DANGER**

**HIGHLY FLAMMABLE LIQUID AND VAPOR. VAPOR HARMFUL. CAUSES SERIOUS EYE IRRITATION. CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL OR FATAL IF SWALLOWED AND ENTERS AIRWAYS.**

Refer to MSDS for additional information on safe handling / use. - Keep out of reach of children.  
For Industrial Use Only.

**Contains:** Methyl Ethyl Ketone, and Methyl n-Amyl Ketone. This product contains one or more chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

**Hazards:** H225: Highly flammable liquid and vapor. H301+H331+H331: Toxic if swallowed, in contact with skin or if inhaled. H370: Causes damage to organs. H302+H332: Harmful if swallowed or if inhaled.

**Precautionary Statement(s):** P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P280: Wear protective gloves/protective clothing/eye protection/face protection. P260: Do not breathe mist/vapors/spray. P271: Use only outdoors or in a well-ventilated area.

**First Aid:** **Inhalation** - Move person to fresh air. If symptoms occur obtain medical attention. **Skin Contact** - Wash affected skin with soap and water. If symptoms occur obtain medical attention. **Eye Contact** - If substance has got into the eyes, immediately wash out with plenty of water for

at least 15 minutes. If symptoms occur obtain medical attention. **Ingestion** - Do not induce vomiting. Drink one glass of water. If symptoms occur obtain medical attention.

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**15-REGULATORY INFORMATION**

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XI



F

**CODES:**

XI=Irritant  
F=Highly Flammable

**R-Phrases:**

R10: Flammable  
R11: Highly Flammable  
R22: Harmful if swallowed  
R36: Irritating to eyes  
R66: Repeated exposure may cause skin dryness or cracking  
R67: Vapors may cause drowsiness and dizziness

**S-Phrases:**

S23: Do not breathe gas/fumes/vapor/spray

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**16- DISCLAIMER**

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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.