

SAFETY DATA SHEET

Randolph Acetone

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

PRODUCT NAME: **Randolph Acetone**
PRODUCT NUMBER: 25-ACE
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

 **WARNING:** This material contains no chemical known to the State of California to cause cancer or reproductive harm.
www.PROP65Warnings.com

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.

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, R11, R36, R66, R67

3 – COMPOSITION /INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content %	Classification (67/548/EEC)
Acetone	200-662-2	67-64-1	20-70%	XI, F, R11, R36, R66, R67, S16, S26, S9

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

EMERGENCY AND FIRST AID PROCEDURES:

Eyes:

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin:

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing:

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation:

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Note to Physicians:

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (i.e., asthma-like conditions), blood-forming system.

5- FIRE FIGHTING PROCEDURES

EXTINGUISHING MEDIA:

Alcohol foam, carbon dioxide, dry chemical.

SPECIAL FIREFIGHTING PROCEDURES:

Water may be ineffective. Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus with a full coverage face piece operated in the positive-pressure demand mode with appropriate turnout gear and chemical resistant personal protective equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. 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

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 of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, high blood sugar, coma.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

INGESTION HEALTH RISK AND SYMPTOMS OF EXPOSURE:

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

HEALTH HAZARDS (ACUTE AND CHRONIC):

This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities. This material (or a component) has been shown to cause harm to the fetus in laboratory

animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

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:

Eyes:

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin:

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing:

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation:

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Note to Physicians:

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (i.e., asthma-like conditions), blood-forming system.

Name	Workplace Exposure Limits	Remarks
Acetone	NIOSH: 250 ppm TWA; 590 mg/m ³ TWA 2500 ppm IDLH (10% LEL) ACGIH: 500 ppm TWA; 750 ppm STEL OSHA-Final PELs: 1000 ppm TWA; 2400 mg/m ³ TWA	Consult local authorities for acceptable exposure limits.



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:	colorless
ODOR:	Mild/Sweet characteristics
BOILING POINT:	133 °F
RELATIVE DENSITY:	0.785 g/mL
VAPOR DENSITY:	Heavier than air
FLASH POINT:	-4°F (Closed Cup)
FLAMMABILITY LIMITS:	2.6 (Lower %) 12.8 (Upper %)
SOLUBILITY VALUE (g/100g H ₂ O @ 20°C):	complete
VOLATILE ORGANIC COMPOUND (VOC):	0 g/L

10- STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITIONS TO AVOID:

Heat and fires. Ignition sources.

INCOMPATIBILITY (MATERIALS TO AVOID):

Avoid contact with acids, strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

May form carbon dioxide and carbon monoxide.

HAZARDOUS POLYMERIZATION:

Will not undergo hazardous polymerization.

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; nhalation, 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

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, acetones 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

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.

14 – TRANSPORT INFORMATION

DOT / ADR / RID Classification:**DOT PROPER SHIPPING NAME: ACETONE****PRIMARY HAZARD CLASS/DIVISION: 3****UN/UA NUMBER: UN1090****PACKING GROUP: II****IMDG and ADN Classification:****IMDG PROPER SHIPPING NAME: ACETONE****IMDG UN CLASS: 3****IMDG UN CLASS: 1090****IMDG PACKING GROUP: II****IMDG LABEL: FLAMMABLE LIQUID**

IMDG VESSEL STOWAGE: E

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 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: Acetone (90-100%). 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 vapour. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.

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. P240: Ground/bond container and receiving equipment. P271: Use only outdoors or in a well-ventilated area. P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+340+312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

15 – REGULATORY INFORMATION

WARNING: This material contains no chemical known to the State of California to cause cancer or reproductive harm. www.PROP65Warnings.com

Hazards: H225: Highly flammable liquid and vapor. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.

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. P240: Ground/bond container and receiving equipment. P271: Use only outdoors or in a well-ventilated area. P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+340+312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

CODES:



XI



F

- XI=irritant
- F=highly flammable

R-Phrases:

- R11: Highly Flammable
- R36: Irritating to eyes
- R66: Repeated exposure may cause skin dryness or cracking
- R67: Vapors may cause drowsiness and dizziness

S-Phrases:

- S9: Keep container in a well-ventilated place
- S16: Keep away from sources of ignition - No smoking
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

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.