

Safety Data Sheet

ACETONE:XYLENE 1:3

Section 1 - Chemical Product and Company Identification

SDS Name: Acetone:Xylene 1:3

Catalog Numbers: SO-260, A-108-111

Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923

For information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications Category

H225-Flammable liquids: 2

H303-Acute toxicity, oral: 5

H304-Aspiration hazard: 1

H313-Acute toxicity, dermal: 5

H315-Skin corrosion/irritation: 2

H319-Serious eye damage/eye irritation: 2A

H333-Acute toxicity, inhalation: 5

H335-Specific target organ toxicity, single exposure; Respiratory tract irritation: 3

H336-Specific target organ toxicity, single exposure; Narcotic effects: 3

H351-Carcinogenicity: 2

H373-Specific target organ toxicity, repeated exposure: 2

H401-Hazardous to the aquatic environment, acute toxicity: 2

H412-Hazardous to the aquatic environment, chronic toxicity: 3

Pictogram or Hazard Symbols and Hazard Statement(s):



Signal Word: Danger

Hazard Statements:

H225-Highly flammable liquid and vapour
H303-May be harmful if swallowed
H304-May be fatal if swallowed and enters airways
H313-May be harmful in contact with skin
H315-Causes skin irritation
H319-Causes serious eye irritation
H333-May be harmful in inhaled
H335-May cause respiratory irritation
H336-May cause drowsiness or dizziness
H351-Suspected of causing cancer
H373-May cause damage to organs through prolonged or repeated exposure (target organs: kidney, liver, spleen, central nervous system, and blood.)
H401-Toxic to aquatic life
H412-Harmful to aquatic life with long lasting effects

Precautionary Statements:

P201-Obtain special instructions before use.
P202-Do not handle until all safety precautions have been read and understood.
P210-Keep away from heat/sparks/open flames/hot surfaces.-No smoking.
P233-Keep container tightly closed.
P240-Ground/Bond container and receiving equipment.
P241-Use explosion-proof electrical/ventilation/lighting/equipment.
P242-Use only non-sparking tools.
P243-Take precautionary measures against static discharge.
P260-Do not breathe dust/fume/gas/mist/vapours/spray.
P261-Avoid breathing dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P271-Use only outdoors or in a well-ventilated area.
P273-Avoid release to the environment.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310-If swallowed: Immediately call a Poison Center or doctor/physician.
P302+P352-If on skin: Wash with plenty of soap and water.
P303+P361+P353-If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P312-If inhaled: Call a Poison Center or doctor/physician if you feel unwell.
P304+P340-If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313-If exposed or concerned: Get medical advice/attention.
P312-Call a Poison Center or doctor/physician if you feel unwell.
P314-Get medical advice/attention if you feel unwell.
P331-Do NOT induce vomiting.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P337+P313-If eye irritation persists: Get medical advice/attention.
P362+P364-Take off contaminated clothing and wash before reuse.
P403+P233-Store in a well-ventilated place. Keep container tightly closed.
P403+P235-Store in a well-ventilated place. Keep cool.
P405-Store locked up.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

| CAS# | Chemical Name | Percent |
|-----------|------------------------------|-----------------|
| 1330-20-7 | Xylenes (o-, m-, p- isomers) | 56.25-62.5 v/v |
| 100-41-4 | Ethyl benzene | 11.25-18.75 v/v |
| 67-64-1 | Acetone | balance |

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Call a physician.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention.

Oral Exposure: If swallowed, seek immediate medical advice. Do NOT induce vomiting. Aspiration hazard.

Inhalation Exposure: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek immediate medical attention.

Section 5 - Fire Fighting Measures

General Information: Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, dry sand, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Hazardous Combustion Products: Carbon oxides, aldehydes, hydrocarbons, formaldehyde, methanol, irritating and toxic fumes and gases.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 2; Flammability: 3; Instability: 0

NOTE: Static discharge could act as an ignition source.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Keep away from heat. Eliminate all sources of ignition. Take precautionary measures against static discharge.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Use spark-proof tools and explosion-proof equipment. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Use with adequate ventilation. Use only under a chemical fume hood. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale vapors. Store in a tightly closed container in a cool, dry, and well-ventilated place. Protect from heat and light. Keep away from open flames, hot surfaces, and sources of ignition. Use only non-sparking tools and explosion-proof equipment. Take precautionary measures against static discharges. Keep away from incompatible materials.

NOTE: Static discharge could act as an ignition source.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

| Chemical Name | ACGIH - TLV | NIOSH - IDLH | OSHA - Final PELs |
|---|-----------------------------|--|--------------------------------|
| Xylenes (o-, m-, p- isomers) CAS#1330-20-7 | 100 ppm TWA 150 ppm STEL | Not listed | 100 ppm TWA 435 mg/m3 TWA |
| Ethyl benzene CAS#100-41-4 | 20 ppm TWA | 100 ppm TWA 435 mg/m3 TWA 125 ppm STEL 545 mg/m3 STEL 800 ppm IDLH | 100 ppm TWA 435 mg/m3 TWA |
| Acetone CAS#67-64-1 | 250 ppm TWA 500 ppm STEL | 250 ppm TWA 590 mg/m3 TWA 2500 ppm IDLH | 1000 ppm TWA 2400 mg/m3 TWA |

OSHA Vacated PELs: Xylenes (o-, m-, p- isomers): 100 ppm TWA; 435 mg/m3 TWA; 150 ppm STEL; 655 mg/m3 STEL

Ethyl benzene: 100 ppm TWA; 435 mg/m3 TWA; 125 ppm STEL; 545 mg/m3 STEL

Acetone: 750 ppm TWA; 1800 mg/m3 TWA; 2400 mg/m3 STEL; 1000 ppm STEL

| |
|--|
| Section 9 - Physical and Chemical Properties |
|--|

Physical State: Liquid

Appearance: Clear, colorless

Odor: Aromatic

Vapor Pressure: Not available

Odor Threshold: Not available

Vapor Density: Not available

pH: Approx. 5.0

Relative Density: Not available

Melting point/freezing point: Not available

Solubility: Not available

Boiling Point: Not available

Flash Point: Not available

Evaporation Rate: Not available

Flammability (solid, gas): Not available

Partition coefficient: n-octanol/water: Not available

Auto-ignition Temperature: Not available

Decomposition Temperature: Not available

Viscosity: Not available

Specific Gravity/Density: Not available

NOTE: Static discharge could act as an ignition source.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat. Open flame, sparks, and hot surfaces.

Incompatibilities with other materials: Strong reducing agents, strong oxidizing agents, strong acids, strong bases, ammonia, powdered metals, alkali metals, peroxides, halogenated compounds, rubber, various plastics, and amines.

Hazardous Decomposition Products: Carbon oxides, aldehydes, hydrocarbons, formaldehyde, methanol, irritating and toxic fumes and gases.

Section 11 - Toxicological Information

CAS# 1330-20-7: Xylenes (o-, m-, p- isomers):

LD50 Oral: 3500 mg/kg (rat)

LD50 Dermal: >1700 mg/kg (rabbit)

LC50 Inhalation: 29.08 mg/L

Investigated as a tumorigen, mutagen, reproductive effector.

Carcinogenicity: Xylenes (o-, m-, p- isomers) CAS#1330-20-7 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

CAS#100-41-4: Ethyl benzene:

LD50 Oral: 3500 mg/kg (rat)

LD50 Dermal: 15400 mg/kg (rabbit)

LC50 Inhalation: 17.2 mg/L 4h (rat)

Investigated as a tumorigen, mutagen, reproductive effector.

Carcinogenicity: Ethyl benzene CAS#100-41-4 is not listed by NTP. Ethyl benzene is listed by IARC (Group 2B, Possibly Carcinogenic to Humans), ACGIH (A3, Animal Carcinogen), OSHA and California Prop. 65 as a carcinogen.

CAS#67-64-1: Acetone: RTECS#: AL3150000

LD50 Oral: 5800 mg/kg (rat)

LD50 Dermal: >15800 mg/kg (rabbit)

LC50 Inhalation: 76 mg/L 4h (rat)

Carcinogenicity: Acetone CAS#67-64-1 is not listed by IARC, NTP, ACGIH, OSHA or California Prop 65.

Epidemiology: Not available.

Teratogenicity: Teratogenic effects have occurred in experimental animals.

Reproductive Effects: Experiments have shown reproductive toxicity effects on laboratory animals.

Developmental Effects: Developmental effects have occurred in experimental animals.

Neurotoxicity: Not available.

Mutagenicity: Not available.

Specific Target Organ Toxicity, Single Exposure: Central nervous system and respiratory system.

Specific Target Organ Toxicity, Repeated Exposure: Kidney, liver, spleen, central nervous system, and blood.

Special Remarks on other Toxic Effects on Humans: Material is irritating to mucous membranes, upper respiratory tract, nose, throat, eyes, and skin. It is harmful or fatal if swallowed. Aspiration hazard. Vapor is harmful. Minute amounts aspirated into the lungs can produce a severe hemorrhagic pneumonitis with severe pulmonary injury or death. Chronic exposure can cause adverse liver, kidney, central nervous system and blood effects. Repeated exposure of the eyes to high concentrations of vapor may cause eye damage. Repeated exposure can damage bone marrow, causing low blood cell count. Highly flammable liquid and vapor.

The toxicological properties of this material have not been thoroughly investigated.

| |
|-------------------------------------|
| Section 12 - Ecological Information |
|-------------------------------------|

Ecotoxicity: Do not release to the environment. Do not release to drains. Toxic to aquatic life. May cause long-term adverse effects in the aquatic environment.

CAS#1330-20-7 Xylenes (o-, m-, p- isomers):

LC50, freshwater fish: 30.26-40.75 mg/L 96h static (poecilia reticulata)
LC50, freshwater fish: >780 mg/L 96h (cyprinus carpio)
LC50, freshwater fish: 780 mg/L 96h semi-static (cyprinus carpio)
LC50, freshwater fish: 23.53-29.97 mg/L 96h static (Pimephales promelas)
LC50, freshwater fish: 13.4 mg/L 96h flow-through (Pimephales promelas)
LC50, freshwater fish: 13.5-17.3 mg/L 96h (oncorhynchus mykiss)
LC50, freshwater fish: 2.661-4.093 mg/L 96h static (oncorhynchus mykiss)
LC50, water flea: 0.6 mg/L 48h (gammarus lacustis)
EC50, microtox: 0.0084 mg/L 25h

CAS# 100-41-4 Ethyl benzene:

LC50, freshwater fish: 11.0-18.0 mg/L 96h static (oncorhynchus mykiss)
LC50, freshwater fish: 4.2 mg/L 96h semi-static (oncorhynchus mykiss)
LC50, freshwater fish: 7.55 – 11 mg/L 96h flow-through (pimephales promelas)
LC50, freshwater fish: 9.1-15.6 mg/L static (pimephales promelas)
EC50, freshwater algae: 1.7-7.6 mg/L 96h static (pseudokirchneriella subcapitata)
EC50, freshwater algae: 2.6-11.3 mg/L 72h static (pseudokirchneriella subcapitata)
EC50, water flea: 1.8-2.4 mg/L 48h (daphnia magna)
EC50, microtox: 9.68 mg/L 30min

CAS#67-64-1 Acetone:

LC50, freshwater fish: 5540 mg/L 96h (oncorhynchus mykiss)
LC50, freshwater fish: 11000 mg/L 96h (alburnus alburnus)
LC50, freshwater fish: 11300 mg/L 48h (leuciscus idus)
LC50, freshwater fish: 6100 mg/L 24h (salmo gairdneri)
EC50, water flea: 8800 mg/L 48h
EC50, microtox: 14500 mg/L 15min

Persistence and degradability: Persistence is unlikely based on information available.

Bio-accumulative potential: Not available.

Mobility: Will likely be mobile in the environment due to its volatility.

| |
|--------------------------------------|
| Section 13 - Disposal Considerations |
|--------------------------------------|

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

| |
|------------------------------------|
| Section 14 – Transport Information |
|------------------------------------|

DOT

Proper Shipping Name: Flammable Liquids, N.O.S. (Acetone & Xylenes)

UN1993

PG II

Hazard class 3 (flammable)

| |
|-------------------------------------|
| Section 15 - Regulatory Information |
|-------------------------------------|

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

| |
|-------------------------------------|
| Section 16 - Additional Information |
|-------------------------------------|

SDS Creation Date: May 11, 2012

Revision #1. 1/3/2014 YM

Revision #2. 8-25-22

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.