

Material Safety Data Sheet

Intermediate Solvent

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Intermediate Solvent

OTHER/GENERIC NAMES: Toluene/Benzene Extraction Solvent (Area 16)

PRODUCT USE: Industrial feedstock for adhesives, paints, resins.

MANUFACTURER: Honeywell
101 Columbia Road
Morristown, New Jersey 07962-1053

Honeywell – Hopewell Plant
905 East Randolph Road
Hopewell, VA 23860

FOR MORE INFORMATION CALL:
(Monday-Friday, 8:30am-5:00pm)
Customer Service
1-877-370-7007 (Toll Free)

IN CASE OF EMERGENCY CALL:
(24 Hours/Day, 7 Days/Week)
Health Emergencies: 1-800-498-5701 (PROSAR)
Transportation Emergencies:
1-800-424-9300 (CHEMTREC - Domestic)
703-527-3887 (CHEMTREC - International)

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Toluene	108-88-3	65-95
Benzene	71-43-2	5-30
Cumene	98-82-8	<.1-10
Ethylbenzene	100-41-4	<.1-10
Sec-Butyl Benzene	135-98-8	<.1-10

Trace impurities and additional material names not listed above may also appear in Section 15 towards the end of the MSDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: A clear, colorless liquid with a sweet odor. Extremely flammable. Material is absorbed readily through the skin. May cause skin and eye irritation, headaches, dizziness, unconsciousness and death. Contains benzene, which is a known human carcinogen. Avoid contact.

POTENTIAL HEALTH HAZARDS

SKIN: Can be absorbed through the skin causing irritation, dermatitis (red skin) and blistering.

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EYES: Irritation may occur upon direct contact. Absorption may cause systemic effects and conjunctivitis.

INHALATION: May cause headache, dizziness and incoherent speech. In high concentrations, the material can cause unconsciousness and death.

INGESTION: May cause collapse and bronchitis. Aspiration of the solvent into the lungs may cause pulmonary edema or chemical pneumonitis.

DELAYED EFFECTS: Aplastic anemia, enlarged blood cells, bone marrow changes and leukemia (rare). Benzene is regulated as a carcinogen by OSHA and is listed by IARC and NTP.

Ingredients that are found on one of the OSHA designated carcinogen lists are listed below.

<u>INGREDIENT NAME</u>	<u>NTP STATUS</u>	<u>IARC STATUS</u>	<u>OSHA LIST</u>
Benzene	Known Carcinogen	1. - Known Carcinogen	Regulated

4. FIRST AID MEASURES

SKIN: Immediately wash with water for 30 minutes. Remove clothing. Seek medical attention.

EYES: Immediately flush with water for at least 30 minutes. Get medical assistance.

INHALATION: Remove to fresh air. If not breathing, apply artificial respiration, preferably mouth-to-mouth. If breathing is difficult, have a qualified operator administer oxygen. Get medical assistance.

INGESTION: Immediately give large amount of water. Do not induce vomiting. Seek medical attention.

ADVICE TO PHYSICIAN: No specific advice. Treat according to the symptoms.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: -11 °C (estimated)

FLASH POINT METHOD: Not applicable.

AUTOIGNITION TEMPERATURE: Not determined.

UPPER FLAME LIMIT (volume % in air): Not determined.

LOWER FLAME LIMIT (volume % in air): Not determined.

FLAME PROPAGATION RATE (solids): Not applicable.

OSHA FLAMMABILITY CLASS: Flammable liquid.

EXTINGUISHING MEDIA:

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Alcohol foam, carbon dioxide, dry chemical. Water spray is ineffective in extinguishing fire. Use water only to keep adjacent containers cool. Direct water stream will spread or spatter the material, thus spreading the fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Extremely flammable liquid and vapor. Vapor may cause a flash fire.

SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS:

Wear self-contained breathing apparatus and full fire protective equipment. Use water spray to keep fire exposed containers cool. Use water spray to disperse vapors and to protect personnel attempting to stop leak.

6. ACCIDENTAL RELEASE MEASURES

IN CASES OF SPILL OR OTHER RELEASE: (Always wear recommended personal protective equipment.)

Eliminate ignition sources and safely evacuate the area. Wear full protective clothing and equipment. Contain the spill by diking the area. Use water spray to reduce vapors and channel the spill away from sources of contamination. In the case of a small spill, use non-combustible absorbent material to remove the spill and containerize for proper disposal.

Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.

7. HANDLING AND STORAGE

NORMAL HANDLING: (Always wear recommended personal protective equipment.)

If skin contact or splashing is anticipated, wear the proper impervious clothing to prevent contact. Keep material away from heat, sparks and open flame. Ground equipment and comply with the National Electric Code.

STORAGE RECOMMENDATIONS:

Store in a cool, dry, well-ventilated area away from sources of ignition. Keep away from strong oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Maintain vapor levels below the recommended TLV's and/or PEL's by use of adequate local or general exhaust system at product transfer/use areas. Ground ventilation systems to reduce static electricity build-up.

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PERSONAL PROTECTIVE EQUIPMENT

SKIN PROTECTION:

Rubber gloves, rubber raincoat and pants if splashing or liquid contact is anticipated.

EYE PROTECTION:

Chemical safety goggles or face shield. Do not wear contact lenses.

RESPIRATORY PROTECTION:

Organic vapor cartridge respirator, full-face airline respirator or SCBA may be required depending upon the expected exposure levels. For circumstances where the air concentrations are unknown, wear SCBA.

ADDITIONAL RECOMMENDATIONS:

Eyewash station, emergency showers and washing facilities are recommended.

EXPOSURE GUIDELINES

<u>INGREDIENT NAME</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER LIMIT</u>
Toluene	50 ppm TWA - skin	200 ppm TWA 300 ppm ceiling	None
Benzene	10 ppm TWA	1 ppm TWA 5 ppm STEL	***50 mg/g creatinine (Mandelic acid in urine at end of work shift)
Cumene	50 ppm TWA - skin	50 ppm TWA - skin	None
Ethylbenzene	100 ppm TWA 125 ppm STEL	100 ppm TWA	***1.5 g/g creatinine (Mandelic acid in urine at end of work shift)

* = Limit established by Honeywell for internal use.

** = Workplace Environmental Exposure Level (AIHA).

*** = Biological Exposure Index (ACGIH).

OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear colorless liquid.

PHYSICAL STATE: Liquid.

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MOLECULAR WEIGHT Not Applicable - mixture
CHEMICAL FORMULA Not Applicable - mixture
ODOR: Sweet odor.
SPECIFIC GRAVITY (water = 1.0): (Water - 1.0) 0.861
SOLUBILITY IN WATER (weight %): Insoluble
pH: Not applicable.
BOILING POINT: Not determined.
MELTING POINT: Not determined.
VAPOR PRESSURE: 107 mm Hg @ 43°C
VAPOR DENSITY (air = 1.0): (Air - 1.0) >1
EVAPORATION RATE: Not determined. **COMPARED TO:**
% VOLATILES: 100
FLASH POINT: -11°C (estimated)
(Flash point method and additional flammability data are found in Section 5.)

10. STABILITY AND REACTIVITY

NORMALLY STABLE? (CONDITIONS TO AVOID):

Stable under normal conditions. Avoid heat, flames or sparks.

INCOMPATIBILITIES:

Oxidizing agents and heat.

HAZARDOUS DECOMPOSITION PRODUCTS:

None expected.

HAZARDOUS POLYMERIZATION:

Will not occur.

11. TOXICOLOGICAL INFORMATION

IMMEDIATE (ACUTE) EFFECTS:

Benzene component:

Irritant.

Toluene component:

Produces CNS depression.

DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS:

Benzene component:

Human carcinogen - increased incidence of nonlymphocytic leukemia from occupational exposure.

Animal carcinogen - increased incidence of neoplasia in rats and mice exposed by inhalation and gavage.

Toluene component:

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Produces CNS depression, loss of memory, progressive brain and nerve damage.

Toluene mixed with Benzene:
Effects the blood.

OTHER DATA:

None

12. ECOLOGICAL INFORMATION

No information is available for the mixture.

13. DISPOSAL CONSIDERATIONS

RCRA

Is the unused product a RCRA hazardous waste if discarded? Yes.

If yes, the RCRA ID number is: D001/D018/F005

OTHER DISPOSAL CONSIDERATIONS: 40 CFR Section 268 should be consulted for federal regulatory requirement. Containerize and treat via incineration.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

14. TRANSPORT INFORMATION

US DOT HAZARD CLASS: Class 3 - Flammable Liquid

US DOT ID NUMBER: UN 1993 (UN 1993 (PIN # in Canada))

For additional information on shipping regulations affecting this material, contact the information number found in Section 1.

15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA)

TSCA INVENTORY STATUS: All components are on the TSCA Inventory.

OTHER TSCA ISSUES: None.

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SARA TITLE III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

<u>INGREDIENT NAME</u>	<u>SARA/CERCLA RQ (lb.)</u>	<u>SARA EHS TPQ (lb.)</u>
Toluene	1000	None
Benzene	10	None
Cumene	5000	None
Ethylbenzene	1000 None	

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.

SECTION 311 HAZARD CLASS: Immediate. Delayed. Fire.

SARA 313 TOXIC CHEMICALS:

The following ingredients are SARA 313 "Toxic Chemicals". CAS numbers and weight percents are found in Section 2.

<u>INGREDIENT NAME</u>	<u>COMMENT</u>
Toluene	None
Benzene	None
Cumene	None
Ethylbenzene	None

STATE RIGHT-TO-KNOW

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

<u>INGREDIENT NAME</u>	<u>WEIGHT %</u>	<u>COMMENT</u>
No ingredients listed in this section		

ADDITIONAL REGULATORY INFORMATION:

None

WHMIS CLASSIFICATION (CANADA):

Not determined.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

FOREIGN INVENTORY STATUS:

Canadian DSL (Domestic Substance List)

EINECS (European Inventory of Existing Commercial Chemical Substances)

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16. OTHER INFORMATION

CURRENT ISSUE DATE: August, 2010
PREVIOUS ISSUE DATE: December, 2004

CHANGES TO MSDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:

1. February 2003 - Change company letterhead.
2. Addition of Health Emergency Information.
3. Update/minor corrections and addresses.
4. Change product name.

OTHER INFORMATION: UNITED NATIONS NUMBER:
ADR/RID CLASS:
PACKING GROUP:
IMDG CODE:
ICAO/IATA:
IMO SHIPPING NAME:
IATA SHIPPING NAME:
ADR SHIPPING NAME:
RID SHIPPING NAME: