Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product Name **TOLUENE**

MSDS# 0000000133

Historic MSDS#: 05467 Amoco, 10027 BP

EMERGENCY HEALTH INFORMATION: 1 (800) 447-8735

EMERGENCY SPILL INFORMATION: 1 (800) 424-9300
CHEMTREC (USA)

OTHER PRODUCT INFORMATION 1 (866) 4 BP - MSDS
(866-427-6737 Toll Free - North America)
email: bpcares@bp.com

Inhalation	Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness, and nausea, and may lead to unconsciousness or death. May cause respiratory tract irritation.
Ingestion	Aspiration hazard if swallowed- can enter lungs and cause damage. Ingestion may cause gastrointestinal irritation and diarrhea.

Section 8. Exposure Controls, Personal Protection

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eyes Avoid contact with eyes. Chemical splash goggles.

Skin and Body Avoid prolonged or repeated contact with skin. Wear protective clothing if prolonged or repeated contact is likely.

Respiratory Use with adequate ventilation. Avoid breathing vapor or mist. If ventilation is inadequate, use a NIOSH certified respirator with an organic vapor cartridge and P95 particulate filter.

Hands Wear protective gloves if prolonged or repeated contact is likely.

Chemical name	Exposure Limits
1) TOLUENE	**ACGIH (United States, 1996). Skin** TWA: 188 mg/m^3 TWA: 50 ppm **OSHA Final Rule (United States, 1989).** STEL: 560 mg/m^3 STEL: 150 ppm TWA: 375 mg/m^3 TWA: 100 ppm **OSHA Transitional Rule (United States, 1993).** AMP: 500 ppm Period: 10 minute(s). CEIL: 300 ppm TWA: 200 ppm

Consult local authorities for acceptable exposure limits.

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Liquid.	Aromatic.
7 [Neutral.]	Clear. Colorless.

Boiling/Condensation Point 110.5°C (230.9°F) (1013 millibars)

Melting/Freezing Point -95°C (-139°F)

318.7°C (605.7°F)

0.867 (Water = 1)

2.9 kPa (21.8 mmHg) (at 20°C)

3.18 (Air = 1)

Not available.

2 compared to (n-BUTYL ACETATE=1)

Dynamic: 0.59 cP at 20°C

2.6

negligible < 0.1% at 20°C

Section 11. Toxicological Information

Acute toxicity

Acute oral toxicity (LD50): >5000 mg/kg [Rat].
Acute dermal toxicity (LD50): >10000 mg/kg [Rabbit].
Acute toxicity of the vapor (LC50): 5060 ppm 4 hour(s) [Rat].

Chronic toxicity

CARCINOGENIC EFFECTS: No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).

Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [TOLUENE].

MUTAGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

TERATOGENIC EFFECTS/DEVELOPMENTAL TOXICITY: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

REPRODUCTION TOXICITY: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.

Other information

Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material. Toluene: Deliberate inhalation to concentrated levels of toluene may cause brain and nervous system damage and possibly death. Mental and/or growth retardation may also occur in children of women who deliberately inhale toluene (usually at thousands of ppm). Pregnant rats exposed to toluene at levels greater than approximately 1500 ppm caused adverse fetal developmental effects.
Prolonged, high exposure to toluene has resulted in hearing loss in laboratory animals.

Section 12. Ecological Information

Ecotoxicity

24 mg/l [LC50], 96 hours [Fish (Bluegill.)]. 11.5 mg/l [EC50], 48 hours [Daphnia (daphnia)]. >400 mg/l [IC50], 96 hours [Algae (Algae.)].

Persistence Potential

This product is readily biodegradable.

Mobility

This product is not likely to move rapidly with surface or groundwater flows because of its low water solubility of: < 0.1% at 20°C

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Avoid contact of spilled material and runoff with soil and surface waterways. Burn in an appropriate incinerator or offer to a licensed hazardous waste disposal contractor. Dispose of in accordance with all applicable local and national regulations.

Proper shipping name	Toluene
ADR/RID Class	3
Packing Group	II

IMO/IMDG Classification

Proper shipping name	Toluene
IMDG Class	3
UN number	UN1294
Packing Group	II
Marine Pollutant	Not pollutant.

ICAO/IATA Classification

Proper shipping name	Toluene
IATA Class	3
UN number	UN1294
Packing Group	II

U.S. Regulations

Pennsylvania RTK: TOLUENE: (environmental hazard, generic environmental hazard)
Florida: TOLUENE
Minnesota: TOLUENE
Massachusetts RTK: TOLUENE
New Jersey: TOLUENE

Marine Pollutant

N269

Hazardous Material Information System (U.S.A.)

Health	2
Fire Hazard	3
Reactivity	0

National Fire Protection Association (U.S.A.)

HISTORY

Date of issue	**10/8/2001.**
Version	**1**
Prepared by	**Product Stewardship**

Notice to Reader

NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.