

MATERIAL SAFETY DATA SHEET

p-Naptholbenzein

SECTION 1 . Product and Company Identification

Product Name and Synonym: p-Naptholbenzein
Product Code: 6100
Material Uses:
Manufacturer: Science Stuff
1104 Newport Ave
Austin, TX 78753
(512) 837-6020
Entry Date : 6/12/2013
Print Date: 6/12/2013
24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	2
Flammability:	3
Reactivity:	0

Hazard Rating:
Least Slight Moderate High Extreme
0 1 2 3 4

NA=Not Applicable NE=Not Established

SECTION 2 HAZARD IDENTIFICATION

Keep away from heat and ignition sources. Harmful if swallowed. Avoid breathing vapors. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input checked="" type="checkbox"/>	Isopropyl Alcohol (2-propanol)	CAS# 67-63-0	49.5%	V/V	OSHA TWA 400 ppm, STEL 500 ppm
<input type="checkbox"/>	p-Naptholbenzein	CAS# 145-50-6	1%	W/V	None Established
<input checked="" type="checkbox"/>	Toluene	CAS# 108-88-3	50%	V/V	OSHA TWA 200 ppm
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	0.5%	V/V	None Established

SECTION 4 FIRST AID MEASURES

Keep away from heat and ignition sources. Harmful if swallowed. Avoid breathing vapors. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. if irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

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SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Water spray, dry chemical, carbon dioxide, alcohol foam

Fire / Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. Run-off to sewer may create a fire/explosion hazard.

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing. Use water spray to cool exposed containers.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law.

SECTION 7 HANDLING AND STORAGE

Store in a cool dry well ventilated area. Keep away from heat and flame. Do not get in eyes, on skin, or on clothing.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: NIOSH/MSHA-approved respirator

Ventilation

Local Exhaust

Mechanical

Protective Gloves: Solvent resistant gloves

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	<-100°C	Percent Volatile by Volume:	100%
Boiling Point:	>180°C	Evaporation Rate	N/E
Vapor Pressure:	>20mm Hg @ 70°F	Evaporation Standard	Not Applicable
Vapor Density:	>1	Auto Ignition Temp	>700°F
Solubility in Water:	Miscible	Lower Flamm. Limit in Air	~1%
Appearance /Odors:	Dark Brwn liquid with strong alcohol/aromatic odor	Upper Flamm. Limit in Air	~10%
Flash Point:	<10°C		
Specific Gravity:	<1.0		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability: Stable

Conditions to Avoid: Avoid contact with heat, sparks, flames, or other sources of ignition.

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Materials to Avoid: Aluminum, ketones, strong oxidizers, strong acids
Hazardous Decomposition Products: Toxic fumes of: Carbon Monoxide, Carbon Dioxide
Hazardous polymerization: Will Not Occur
Conditions to Avoid: None known

SECTION 11 Toxicological Information

Toxicity data

United States

Product/ingredient name – Isopropyl Alcohol

Test	Result	Route	Species
LD50	12800 mg/kg	Dermal	Rabbit
LD50	2735 mg/kg	Dermal	Rat
Intraperitoneal			
LD50	1088 mg/kg	Intravenous	Rat
LD50	5045 mg/kg	Oral	Rat
LD50	5000 mg/kg	Oral	Rat
LD50	6410 mg/kg	Oral	Rabbit
LDLo	1537 mg/kg	Oral	Dog
LDLo	3570 mg/kg	Oral	Human
LDLo	5272 mg/kg	Oral	Man
TDLo	800 mg/kg	Oral	Rat

Carcinogenicity Classification

Product/ingredient name: Isopropyl Alcohol

ACGIH: A4

IARC: 3

EPA: -

NIOSH: -

NTP: -

OSHA: -

Product/ingredient name – o-Toluene

Test	Route	Species	Result
LD50	Dermal	Rabbit	14100 uL/kg
LD50	Intraperitoneal	Rat	1332 mg/kg
LD50	Intravenous	Rat	1960 mg/kg
LD50	Oral	Rat	636mg/kg
LD50	Unreported	Rat	6900mg/kg
LDLo	Oral	Human	50mg/kg
LDLo	Intraperitoneal	Rat	2.5 mL/kg
TDLo	Oral	Rat	800 mL/kg
TDLo	Oral	Rat	1200 mg/kg
TDLo	Intraperitoneal	Rat	1 g/kg
TDLo	Intraperitoneal	Rat	750 mg/kg
TDLo	Intraperitoneal	Rat	900 mg/kg
TDLo	Intraperitoneal	Rat	600 mg/kg
TDLo	Oral	Rat	400 mg/kg
LC50	Inhalation Vapor	Rat	49 g/m3
LC50	Inhalation Vapor	Rat	49 mg/m3

Carcinogenicity

Classification

Product/ ingredient name Toluene ACGIH- A4 IARC-3 EPA NIOSH NTP OSHA

No known significant effects or critical hazards.

Specific effects

Carcinogenic effects: No known significant effects or critical hazards

Mutagenic effects: No known significant effects or critical hazards

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Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards

SECTION 12 Ecological Information

Ecotoxicity data - United States

Product/ingredient name: Isopropyl Alcohol

Result	Species	Exposure
Acute EC50 10000 mg/L	Fish	48 hours
Acute LC50 10400 mg/L	Fish	96 hours
Acute LC50 11130 mg/L	Fish	96 hours
Acute LC50 9640 mg/L	Fish	96 hours
Acute LC50 6550 mg/L	Fish	96 hours
Acute LC50 <1400 mg/L	Fish	96 hours

Result: Acute LC50<1400000 ug/L
 Species: Fish – Western mosquitofish–Gambusia affinis – 20 to 30 mm
 Exposure: 96 hours

Product/ ingredient name
 Toluene

Result	Species	Exposure
Acute EC50 6.78mg/L	Fish	48 hours
Acute EC50 6.56mg/L	Daphnia	48 hours
Acute EC50 6mg/L	Daphnia	48 hours
Acute EC50 6880 to 9830 ug/L fresh water	Daphnia-Water flea- Daphnia magna- Neonate	48 hours
Acute EC50 6780 to 7810 ug/L fresh water	Fish- Rainbow trout, donaldson trout- Oncorhynchus mykiss- Juvenile (Fledgling, Hatchling, Weanling -54mm - 2.187 g	96 hours
Acute EC50 6000 ug/L fresh water	Daphnia- Water flea Daphnia magna- Juvenile (Fledgling, Hatchling, Weanling)	48 hours
Acute EC50 19600ug/L fresh water	Daphnia- Water flea Daphnia magna- LARVAE	48 hours
Acute LC50 8110 ug/L fresh water	Fish- Coho salmon, Silver salmon- Oncorhynchus kisutch- 0.3g	96 hours
Acute LC50 8090 to 8780 ug/L Marina water	Fish- pink salmon- Oncorhynchus gorbuscha FRY- 3.5cm - 0.35g	96 hours

SECTION 13 Disposal Considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14 Transport Information

DOT Classification: UN1993, Flammable Liquid, n.o.s. (Toluene, Isopropyl Alcohol), 3,PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Isopropyl Alcohol (67-63-0)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes
-----\Chemical Inventory Status - Part 2\-----				
--Canada--				
Ingredient	Korea	DSL	NDSL	Phil.
Isopropyl Alcohol (67-63-0)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

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-----Federal, State & International Regulations - Part 1\-----
-SARA 302- -----SARA 313-----
Ingredient RQ TPQ List Chemical Catg.

Isopropyl Alcohol (67-63-0) No No Yes No
Water (7732-18-5) No No No No

-----Federal, State & International Regulations - Part 2\-----
-RCRA- -TSCA-
Ingredient CERCLA 261.33 8(d)

Isopropyl Alcohol (67-63-0) No No No
Water (7732-18-5) No No
No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No
Reactivity: No (Mixture / Liquid)
Australian Hazchem Code: 2[S]2
Poison Schedule: None allocated.
WHMIS:

HCS Classification: Toluene

Flammable liquid
Highly toxic material
Irritating material
Target organ effects

U.S. Federal regulations:

United States inventory (TSCA 8b): This material is listed or exempted
TSCA8 (d) H and S data reporting: Toluene : 1982
TSCA (Toxic Substance Control Act): This product is listed on the TSCA Inventory.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notifications: No products were found.
SARA 302/304/311/312 hazardous chemicals: Toluene
SARA 311/312 MSDS distribution- Chemical inventory- hazard identification: Toluene: Fire
hazard, immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: Toluene
Clean Water Act (CWA) 311: Toluene
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substance: No products were found.
Clean Air Act (CAA) 112 regulated toxic substance: No products were found.

DEA List I Chemicals : not listed
(Precursor Chemicals)
DEA List II Chemicals : listed
(essential Chemicals)

SARA 313
Form R – Reporting : Toluene CAS number : 108-88-3 Concentration : 100
Requirements
Supplier notification : Toluene CAS number : 108-88-3 Concentration : 100

SARA 313 notifications must not be detached from the MSDS and any copying and
redistribution of the MSDS shall include copying and redistribution of the notice attached to
copies of the MSDS subsequently redistributed.
Massachusetts Substance : This material is listed.
New Jersey Hazardous Substances : This material is listed.
New York Acutely Hazardous Substances : This material is listed.
Pennsylvania RTK Hazardous Substances : This material is listed.

California Prop. 65

WARNING: this product contains a chemical known to the State of California to cause birth
defects or other reproductive harm

Ingredient name: Toluene Cancer: No Reproductive: Yes No significant risk level: no
Maximum acceptable dosage level: 7000 ug/day (ingestion) 13000 ug/day (inhalation)

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Canada

WHMIS (Canada) : Class B-2 : Flammable liquid
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists : CEPA Toxic Substance: This material is not listed.
Canadian ARET: This material is not listed.
Canadian NPRI: This material is not listed.
Alberta Designated Substances: This material is not listed.
Ontario Designated Substances: This material is not listed.
Quebec Designated Substances: This material is not listed.

CEPA DSL/ CEPA NDSL : this material is listed or exempted.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

EU regulations:

Risk phrases: R11- Highly Flammable.
R63- Possible risk of harm to the unborn child.
R48/20- harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65- harmful: may cause lung damage if swallowed.
R38- irritating to skin
R67- vapors may cause drowsiness and dizziness

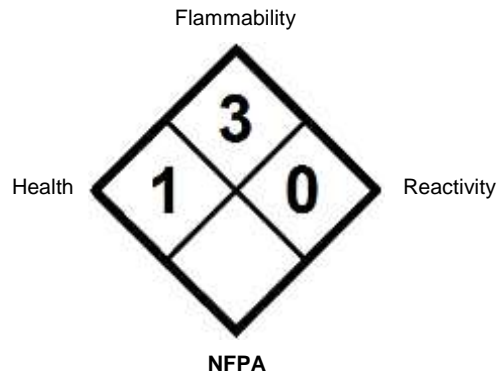
Safety phrases: S2- keep out the reach of children.
S36/37- Wear suitable protective clothing and gloves.
S46- If swallowed, seek medical advice immediately and show this container or label
S62 – if swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

International regulations

International lists: Australia inventory (AICS): This material is listed or exempted.
China inventory (IECSC): This material is listed or exempted.
Japan inventory (ENCS): This material is listed or exempted.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): This material is listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): This material is listed or exempted.
Philippines inventory (PICCS): This material is listed or exempted.
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

SECTION 16

Additional Information



Revisions

5/16/2013	0.1	Revised to 16 sections LS
3/4/2009	0	Creation date

The information herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of the information whether originating from the above mentioned company or not. Users of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely.