SECTION 1 - CHEMICAL IDENTIFICATION

PRODUCT NAME: Budget Solve Complete Counting Cocktail
RPI CATALOG #: 111167
SUPPLIER'S NAME: Research Products International Corp.
SUPPLIERS ADDRESS: 410 N Business Center Drive Mount Prospect, Il 60056
EMERGENCY CONTACT: 1-800-424-9300
OTHER INFORMATION: 847-635-7330

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H226	Flammable liquids	Category 3
H302	Acute toxicity, Oral	Category 4
H304	Aspiration hazard	Category 1
H312	Acute toxicity, dermal	Category 4
H315	Skin corrosion/irritation	Category 2
H318	Serious eye damage	Category 1
H351	Carcinogenicity	Category 2
H373	Specific target organ toxicity - repeated exposure	Category 2
H401	Acute aquatic toxicity	Category 2
H411	Hazardous to the aquatic environment, Long term hazard	Category 2

2.2 GHS Label elements, including Hazard and Precautionary Statement(s)

Pictogram



Signal word: Danger

Hazard statement(s)

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage

H351	Suspected of causing cancer
H373	May cause genetic defects
H401	toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Prevention, Response, Storage and Disposal Precautionary Statement(s)

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/ventilating/lighting/.../equipment
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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	Do NOT induce vomiting.
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.
P321	Specific treatment (see supplemental first aid instructions on this label).
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

P391	Collect spillage.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	%age
Xylene	1330-20-7	65.0 - 75.0%
Nonylphenol, Ethoxylated	127087-87-0	20.0 – 30.0 %
Methyl alcohol	67-56-1	<10.0%
Scintillation Fluors	N/A	<1.0%

SECTION 4 - FIRST-AID MEASURES

4.1 Description of first aid measures
General advice: Consult a doctor and show this safety data sheet.

i. **If inhaled:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

ii. **In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

iii. **In case of eye contact:** Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

iv. **If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture: Under fire conditions: Will burn On combustion, toxic gases are released. Hazardous decomposition products formed under fire conditions. Carbon oxides, Oxides of phosphorus.

5.3 Precautions for fire-fighters: Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

5.4 Further information: No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections: For required PPE see section 8. For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling: Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

7.3 Specific end use(s): Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component		CAS Number	EINECS Number
Xylene		1330-20-7	215-535-7
Value	**Control parameters**	**Basis**	**Remarks**
TWA	100.000000 ppm	USA. ACGIH Threshold Limit Values (TLV).	Eye & Upper Respiratory Tract irritation Central Nervous System impairment Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen.
STEL	150.000000 ppm	USA. ACGIH Threshold Limit Values (TLV).	Eye & Upper Respiratory Tract irritation Central Nervous System impairment Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen.
TWA	100.000000 ppm 435.000000 mg/m^3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants	The value in mg/m^3 is approximate.
TWA	100.000000 ppm	USA. ACGIH Threshold Limit Values (TLV).	Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen.

STEL	150.000000 ppm	USA. ACGIH Threshold Limit Values (TLV).	Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen.
TWA	100 ppm	USA. ACGIH Threshold Limit Values (TLV).	Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen.
STEL	150ppm	USA. ACGIH Threshold Limit Values (TLV).	Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen.

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m^3 (Vacated) STEL: 250 ppm (Vacated) STEL: 325 mg/m^3 Skin TWA: 200 ppm TWA: 260 mg/m^3	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m^3 STEL: 250 ppm STEL: 325 mg/m^3
Component	**Quebec**	**Mexico OEL (TWA)**	**Ontario TWAEV**
Methyl alcohol	TWA: 200 ppm TWA: 262 mg/m^3 STEL: 250 ppm STEL: 328 mg/m^3 Skin	TWA: 200 ppm TWA: 260 mg/m^3 STEL: 250 ppm STEL: 310 mg/m^3	TWA: 200 ppm STEL: 250 ppm Skin

- **ACGIH:** American Conference of Governmental Industrial Hygienists.
- **OSHA:** Occupational Safety and Health Administration.
- **NIOSH IDLH:** The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health.

8.2 Exposure Controls

i. **Appropriate engineering controls:** Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

8.3 Personal protective equipment

i. **Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

ii. **Skin protection:** 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

iii. **Body Protection:** Wear appropriate protective clothing. Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

iv. **Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

v. **Control of environmental exposure:** Do not let product enter drains

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid	**Vapor Pressure**	6.6 mmHg) at 20 °C
Odor	No Data Available	**Vapor Density**	3.7 - (Air = 1.0)
Odor Threshold	No Data Available	**Specific Gravity**	0.87 g/mL at 25 °C
pH	No Data Available	**Water Solubility**	No Data Available
Melting / Freezing Point	No Data Available	**Partition Coefficient**	No Data Available
Initial Boiling Point Range	138 - 141 °C	**Auto-Ignition Temperature**	No Data Available
Flash Point	13.3 °C (56 °F)	**Decomposition Temperature**	No Data Available
Evaporation Rate	0.80	**Viscosity**	No Data Available
Flammability (Solid, Gas)	No Data Available	**Explosive Properties**	No Data Available
Upper / Lower Flammability Or Explosive Limits	Upper explosion limit: 7 %(V) Lower explosion limit: 1.0 %(V)	**Oxidizing Properties**	No Data Available

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.
Hazardous Decomposition Products: No Data Available.
Hazardous Polymerization: No Data Available.
Incompatibilities: strong oxidizing agent.
Conditions to avoid: Heat, flames and sparks.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	LD50 Oral	LD50Dermal	LC50 inhalation
Xylene	3500 mg/kg (Rat)	4350 mg/kg (Rabbit)	29.08 mg/L [MOE Risk Assessment Vol.1, 2002]
Methyl alcohol	1,187 - 2,769 mg/kg (Rat)	17,100 mg/kg (Rabbit)	128.2 mg/l (Rat) 4 h

Nonylphenol, Ethoxylated	72 mg/kg	Not Listed	Not Listed

SECTION 12 - ECOLOGICAL INFORMATION

Eco Toxicity: Do not empty into drains. The product contains following substances which are hazardous for the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Contains a substance which is toxic to aquatic organisms.

Component	Freshwater Fish	Microtox	Water Flea
Xylene	LC50 96 h 3 0.26 - 40.75 mg/L LC50 96h 780 mg/L LC50 96 h 23.53- 29.97 mg/L LC50 96 h7.711 - 9.591 mg/L LC50 96h 19 mg/L LC50 96 h 13.1 -16.5 mg/L LC50 96 h 13.5 -17.3 mg/L LC50 96 h 2.661 -4.093 mg/L LC50 96 h 13.4 mg/L	EC50 = 0.0084 mg/L 24 h	EC50 =48 h 0.6 mg/L LC50 = 48 h 3.82 mg/L

Component	Freshwater Fish	Microtox	Water Flea
Methyl alcohol	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 mi	EC50 > 10000 mg/L -24h

Persistence and degradability: Insoluble in water Persistence is unlikely based on information available.
Bioaccumlative potential: No data available
Results of PBT and vPvB assessment: No data available
Other adverse effects: May be harmful to the aquatic environment.

Mobility in soil: is not likely mobile in the environment due its low water solubility. Will likely be mobile in the environment due to its volatility

Component	log Pow
Xylene	3.15
Methyl alcohol	-0.74

SECTION 13 - DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Component	RCRA - U Series Wastes
Xylene	U239
Methyl alcohol	U154

SECTION 14 - TRANSPORT INFORMATION

	UN#	Proper Shipping Name	Hazard Class	Packaging Group
DOT	1993	Flammable Liquid, NOS (Xylene & Methanol)	3	II
TDG	1993	Flammable Liquid, NOS (Xylene & Methanol)	3	II
IATA	1993	Flammable Liquid, NOS (Xylene & Methanol)	3	II
IMDG/IMO	1993	Flammable Liquid, NOS (Xylene & Methanol)	3	II

SECTION 15 - REGULATORY INFORMATION

USA FEDERAL REGULATION

SARA 311/312 HAZARDOUS CATEGORIZATION

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release Of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	No	No

SARA 313

Component	CAS#	Weight %	SARA 313 – Threshold Values %
Xylene	1330-20-7	65.0 - 75.0%	1.0
Methyl alcohol	67-56-1	< 10.0	1.0

Clean Water Act

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Xylene	Listed	100 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Xylene	Listed	-	-
Methyl alcohol	Listed	-	-

California Proposition 65: This product contains Proposition 65 chemicals.

Component	CAS#	California Prop. 65	Prop 65 NSRL	Category
Methyl alcohol	67-56-1	Developmental	-	Developmental

TSCA 12(b)/ OSHA: Not Applicable

CERCLA: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Xylene	100 lb	-
Methyl alcohol	5000 lb	-

HMIS Rating

Health hazard	Chronic Health Hazard	Flammability	Physical Hazard
1	*	3	0

NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
1	3	0

STATE RIGHT TO KNOW

Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Listed	Listed	Listed	Listed	Listed

US DEPARTMENT OF TRANSPORTATION

REPORTABLE QUANTITY (RQ)	DOT MARINE POLLUTANT	DOT SEVER MARINE POLLUTANT
Yes	No	No

U.S. DEPARTMENT OF HOMELAND SECURITY: This product does not contain any DHS chemicals.

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

This SDS complies with the requirements of Regulation (EC).

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Research Products International Corp. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. This product is sold for laboratory research and development purposes use only.