

## Zep Formula 777 E.C.

Version 1.0

Revision Date 06/04/2015

Print Date 04/26/2016

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : Zep Formula 777 E.C.

EPA ID Number: 1270-113

Material number : 000000000000136435

**Manufacturer or supplier's details**

Company : Zep, Inc.

Address : 1310 Seaboard Industrial Blvd., NW  
Atlanta, GA 30318

Telephone : 404-352-1680

**Emergency telephone numbers****For SDS Information** : Compliance Services 1-877-428-9937**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded**For a Transportation** : CHEMTREC: 800-424-9300 - All Calls Recorded.**Emergency** : In the District of Columbia 202-483-7616

## SECTION 2. HAZARDS IDENTIFICATION

**Emergency Overview**

Appearance	liquid
Colour	brown
Odour	solvent-like

**GHS Classification**

Carcinogenicity : Category 2

Reproductive toxicity : Category 1B

**GHS Label element**

Hazard pictograms :



Signal word : Danger

Hazard statements : H351 Suspected of causing cancer.  
H360 May damage fertility or the unborn child.Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P281 Use personal protective equipment as required.  
**Response:**  
P308 + P313 IF exposed or concerned: Get medical advice/

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attention.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

**Potential Health Effects****Carcinogenicity:**

<b>IARC</b>	Group 2B: Possibly carcinogenic to humans	
	naphthalene	91-20-3
<b>ACGIH</b>	Confirmed animal carcinogen with unknown relevance to humans	
	bromacil	314-40-9
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
<b>NTP</b>	Reasonably anticipated to be a human carcinogen	
	naphthalene	91-20-3

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

Chemical Name	CAS-No.	Concentration [%]
1-methyl-2-pyrrolidone	872-50-4	>= 1 - < 5
bromacil	314-40-9	>= 1 - < 5
naphthalene	91-20-3	>= 0.1 - < 1

**SECTION 4. FIRST AID MEASURES**

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician. Move to fresh air.
In case of skin contact	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops and persists.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.

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If eye irritation persists, consult a specialist.  
Immediately flush eyes for at least 15 minutes. Get medical attention.

If swallowed : Clean mouth with water and drink afterwards plenty of water. Induce vomiting immediately and call a physician. Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. DO NOT induce vomiting unless directed to do so by a physician or poison control center.

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**SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Dry chemical  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Water spray

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Smoke  
Nitrogen oxides (NO<sub>x</sub>)  
Bromine compounds

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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Keep in suitable, closed containers for disposal.

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**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Do not breathe vapours/dust.  
 Avoid exposure - obtain special instructions before use.  
 Avoid contact with skin and eyes.  
 For personal protection see section 8.  
 Smoking, eating and drinking should be prohibited in the application area.  
 Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 Observe label precautions.  
 Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Store and keep away from, oxidizing agents and acids.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
1-methyl-2-pyrrolidone	872-50-4	TWA	10 ppm	US WEEL
bromacil	314-40-9	TWA	10 mg/m <sup>3</sup>	ACGIH
		TWA	1 ppm 10 mg/m <sup>3</sup>	NIOSH REL
		TWA	1 ppm 10 mg/m <sup>3</sup>	OSHA P0
naphthalene	91-20-3	TWA	10 ppm	ACGIH
		STEL	15 ppm	ACGIH
		TWA	10 ppm 50 mg/m <sup>3</sup>	NIOSH REL
		ST	15 ppm 75 mg/m <sup>3</sup>	NIOSH REL
		TWA	10 ppm 50 mg/m <sup>3</sup>	OSHA Z-1
		TWA	10 ppm 50 mg/m <sup>3</sup>	OSHA P0
		STEL	15 ppm 75 mg/m <sup>3</sup>	OSHA P0

**Biological occupational exposure limits**

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis

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N-METHYL-2-PYRROLIDINONE	872-50-4	5-Hydroxy-N-methyl-2-pyrrolidone	Urine	End of shift (As soon as possible after exposure ceases)	100 mg/l	ACGIH BEI
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### Personal protective equipment

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection  
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Safety goggles  
Ensure that eyewash stations and safety showers are close to the workstation location.
- Skin and body protection : impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : brown
- Odour : solvent-like
- Odour Threshold : no data available
- pH : not applicable
- Melting point/freezing point : not applicable
- Boiling point : > 315.5 °C
- Flash point : > 93.3 °C  
Method: closed cup
- Evaporation rate : no data available
- Upper explosion limit : no data available
- Lower explosion limit : no data available
- Vapour pressure : no data available
- Relative vapour density : no data available
- Density : 0.896 g/cm<sup>3</sup>

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Solubility(ies)	
Water solubility	: emulsifiable
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: not determined
Thermal decomposition	: no data available
Viscosity	
Viscosity, kinematic	: 10.5 mm <sup>2</sup> /s (20 °C)

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Stable under recommended storage conditions. No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Acids Oxidizing agents
Hazardous decomposition products	: Carbon oxides Bromine Nitrogen oxides (NO <sub>x</sub> )

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**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

**Components:****1-methyl-2-pyrrolidone:**

Acute oral toxicity : LD50 Oral rat: 3,914 mg/kg

Acute dermal toxicity : LD50 Dermal rabbit: 8,000 mg/kg

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**Skin corrosion/irritation**

**Product:**

Remarks: May cause skin irritation and/or dermatitis.

**Serious eye damage/eye irritation**

**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**1-methyl-2-pyrrolidone:**  
**bromacil:**  
**naphthalene:**

**STOT - single exposure**

no data available

**STOT - repeated exposure**

no data available

**Aspiration toxicity**

no data available

**Further information**

**Product:**

Remarks: no data available

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

**Product:**

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Partition coefficient: n-octanol/water : Remarks: no data available

**Components:**

**1-methyl-2-pyrrolidone** :  
Partition coefficient: n-octanol/water : log Pow: -0.46

### Mobility in soil

no data available

### Other adverse effects

no data available

**Product:**

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : no data available

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life.

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

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## SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
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Transportation Regulation: IMDG (Vessel): UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-METHYL-2-PYRROLIDINONE, BROMACIL), 9, III
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Transportation Regulation: IATA (Cargo Air):  
UN3082, Environmentally hazardous substance, liquid, n.o.s., (N-METHYL-2-PYRROLIDINONE,  
BROMACIL), 9, III

Transportation Regulation: IATA (Passenger Air):  
UN3082, Environmentally hazardous substance, liquid, n.o.s., (N-METHYL-2-PYRROLIDINONE,  
BROMACIL), 9, III

Transportation Regulation: TDG (Canada):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

### SECTION 15. REGULATORY INFORMATION

This product is regulated under the United States Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

#### Pesticide Labeling Information Required Under U.S. FIFRA Regulations

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

##### WARNING

Causes substantial but temporary eye injury.

Harmful if swallowed.

Harmful if absorbed through skin.

Observe label precautions.

#### EPCRA - Emergency Planning and Community Right-to-Know Act

##### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
naphthalene	91-20-3	100	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Chronic Health Hazard

**SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

1-methyl-2-pyrrolidone	872-50-4	1.9999 %
bromacil	314-40-9	1.6426 %
naphthalene	91-20-3	0.12 %

**California Prop 65** WARNING! This product contains a chemical known to the

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State of California to cause cancer.

naphthalene 91-20-3  
ethylbenzene 100-41-4

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

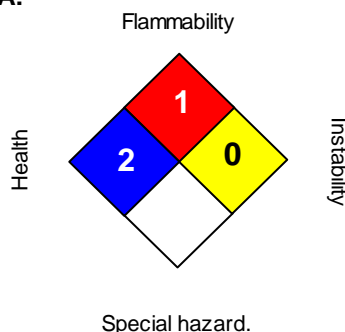
1-methyl-2-pyrrolidone 872-50-4

**The components of this product are reported in the following inventories:**

**TSCA** On TSCA Inventory  
**DSL** This product contains one or several components that are not on the Canadian DSL nor NDSL.  
**AICS** Not in compliance with the inventory  
**NZIoC** Not in compliance with the inventory  
**PICCS** Not in compliance with the inventory  
**IECSC** Not in compliance with the inventory

**Inventory Acronym and Validity Area Legend:**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS III:**

<b>HEALTH</b>	<b>2*</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

**OSHA GHS Label Information:**

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

: **Danger:**  
: Suspected of causing cancer. May damage fertility or the unborn child.

: **Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

: **Response:** IF exposed or concerned: Get medical advice/ attention.

: **Storage:** Store locked up.

: **Disposal:** Dispose of contents/container in accordance with local regulation.

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