

ZEP FIRE AND SMOKE PLUS 20L

Version 1.0

Revision Date 02/08/2017

Print Date 08/29/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP FIRE AND SMOKE PLUS 20L

Material number : B22947C

Manufacturer or supplier's details

Company : Zep Inc.

Address : 11627 - 178 Street
Edmonton, Alberta T5S 1N6
Canada

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 Emergency | : CHEMTREC: 800-424-9300 - All Calls Recorded. |

Recommended use of the chemical and restrictions on use

Recommended use : Cleaner

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| | |
|------------|------------|
| Appearance | liquid |
| Colour | yellow |
| Odour | like fruit |

GHS Classification

Skin corrosion : Category 1

Serious eye damage : Category 1

Skin sensitisation : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

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P264 Wash skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Disposal:

Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical name | CAS-No. | Concentration [%] |
|--|------------|-------------------|
| 2-(2-butoxyethoxy)ethanol | 112-34-5 | >= 20 - < 30 |
| Alcohols, C9-11, ethoxylated | 68439-46-3 | >= 5 - < 10 |
| sodium xylenesulphonate | 1300-72-7 | >= 1 - < 5 |
| tetrasodium ethylenediaminetetraacetate | 64-02-8 | >= 1 - < 5 |
| 2-aminoethanol | 141-43-5 | >= 1 - < 5 |
| potassium hydroxide | 1310-58-3 | >= 1 - < 5 |
| Oils, sweet orange (terpenes and terpenoids) | 68647-72-3 | >= 0.1 - < 1 |

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
 Consult a physician.
 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.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

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- If on skin, rinse well with water.
If on clothes, remove clothes.
Wash off immediately with plenty of water for at least 15 minutes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.
Effects are dependent on exposure (dose, concentration, contact time).
Symptoms may include blistering, irritation, burns, and pain.
Symptoms may include irritation, redness, pain, and rash.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 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 (CO₂)
Carbon monoxide
Smoke
Sulphur oxides
Nitrogen oxides (NO_x)
- 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.

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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.

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). Keep in suitable, closed containers for disposal.

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. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Materials to avoid : Do not store near acids. Oxidizing agents. Keep away from metals.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of | Control parameters / | Basis |
|------------|---------|---------------------|----------------------|-------|
| | | | | |

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| | | exposure) | Permissible concentration | |
|---------------------|-----------|---------------------------------------|---------------------------|-----------|
| | | TWA (Inhalable fraction and vapor) | 10 ppm | ACGIH |
| 2-aminoethanol | 141-43-5 | STEL | 6 ppm 15 mg/m3 | CA AB OEL |
| | | TWA | 3 ppm 7.5 mg/m3 | CA AB OEL |
| | | TWA | 3 ppm | CA BC OEL |
| | | STEL | 6 ppm | CA BC OEL |
| | | TWAEV | 3 ppm 7.5 mg/m3 | CA QC OEL |
| | | STEV | 6 ppm 15 mg/m3 | CA QC OEL |
| | | TWA | 3 ppm | ACGIH |
| | | STEL | 6 ppm | ACGIH |
| | | TWA | 3 ppm 8 mg/m3 | NIOSH REL |
| | | ST | 6 ppm 15 mg/m3 | NIOSH REL |
| | | TWA | 3 ppm 6 mg/m3 | OSHA Z-1 |
| | | STEL | 6 ppm 15 mg/m3 | OSHA P0 |
| | | TWA | 3 ppm 8 mg/m3 | OSHA P0 |
| | | PEL | 3 ppm 8 mg/m3 | CAL PEL |
| | | STEL | 6 ppm 15 mg/m3 | CAL PEL |
| potassium hydroxide | 1310-58-3 | (c) | 2 mg/m3 | CA AB OEL |
| | | C | 2 mg/m3 | CA BC OEL |
| | | C | 2 mg/m3 | CA QC OEL |
| | | C | 2 mg/m3 | ACGIH |
| | | C | 2 mg/m3 | NIOSH REL |
| | | C | 2 mg/m3 | OSHA P0 |
| | | C | 2 mg/m3 | CAL PEL |

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material

Remarks

: Protective gloves

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

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problems.

- 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.
-

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : yellow
- Odour : like fruit
- Odour Threshold : No data available
- pH : 12.9
- Boiling point : 100 °C
- Flash point :
Not applicable
- Evaporation rate : 1
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : No data available
- Relative density : No data available
- Density : 1.032 g/cm³No data available
- Solubility(ies)
- Water solubility : completely soluble
- Partition coefficient: n-octanol/water : No data available
- Auto-ignition temperature : not determined
- Thermal decomposition : No data available
- Viscosity
- Viscosity, kinematic : No data available
-

SECTION 10. STABILITY AND REACTIVITY

- Reactivity : Stable
- Chemical stability : Stable under normal conditions.
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| | |
|------------------------------------|---|
| Possibility of hazardous reactions | : No decomposition if stored and applied as directed. |
| Conditions to avoid | : No data available |
| Incompatible materials | : Acids Metals Oxidizing agents |
| Hazardous decomposition products | : No decomposition if stored normally. |

SECTION 11. TOXICOLOGICAL INFORMATION**Potential Health Effects**

| | |
|------------------------------|--|
| Aggravated Medical Condition | : None known. |
| Symptoms of Overexposure | : Effects are immediate and delayed. Effects are dependent on exposure (dose, concentration, contact time). Symptoms may include blistering, irritation, burns, and pain. Symptoms may include irritation, redness, pain, and rash. |

Carcinogenicity:

| | |
|-------------|---|
| IARC | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
|-------------|---|

Acute toxicity**Product:**

| | |
|---------------------------|--|
| Acute oral toxicity | : Acute toxicity estimate : 4,422 mg/kg Method: Calculation method |
| Acute inhalation toxicity | : Acute toxicity estimate : > 40 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method |
| Acute dermal toxicity | : Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method |

Components:**Alcohols, C9-11, ethoxylated:**

| | |
|---------------------|------------------------------|
| Acute oral toxicity | : LD50 Oral Rat: 1,400 mg/kg |
|---------------------|------------------------------|

2-aminoethanol:

| | |
|---------------------|--|
| Acute oral toxicity | : LD50 Oral Mouse: 700 mg/kg LD50 Oral Rat: 1,515 mg/kg |
|---------------------|--|

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Acute inhalation toxicity : LC50 Mouse: > 1.21 mg/l

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

- 2-(2-butoxyethoxy)ethanol:
- Alcohols, C9-11, ethoxylated:
- sodium xylenesulphonate:
- tetrasodium ethylenediaminetetraacetate:
- 2-aminoethanol:
- potassium hydroxide:
- Oils, sweet orange (terpenes and terpenoids):

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

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No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**Partition coefficient: n-
octanol/water : Remarks: No data available**Components:****2-(2-butoxyethoxy)ethanol :**
Partition coefficient: n-
octanol/water : Pow: 1**Mobility in soil**

No data available

Other adverse effects

No data available

Product:Additional ecological
information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**Waste from residues : Do not dispose of waste into sewer.
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.

SECTION 14. TRANSPORT INFORMATION

| |
|--|
| Transportation Regulation (TDG) / Règlement Pour Le Transport (TMD): (Canada): UN1760, CORROSIVE LIQUID, N.O.S., (POTASSIUM HYDROXIDE), 8, II |
|--|

| |
|---|
| Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel): UN1760, CORROSIVE LIQUID, N.O.S., (POTASSIUM HYDROXIDE), 8, II |
|---|

| |
|--|
| Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air): UN1760, Corrosive liquid, n.o.s., (POTASSIUM HYDROXIDE), 8, II |
|--|

| |
|--|
| Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air): UN1760, Corrosive liquid, n.o.s., (POTASSIUM HYDROXIDE), 8, II |
|--|

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Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA):
UN1760, Corrosive liquids, n.o.s., (POTASSIUM HYDROXIDE), 8, II

The product as delivered to the customer conforms to packaging requirements for shipment by road under Transport Dangerous Goods (TDG) Canada regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

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

TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

WHMIS - GHS Label Information:

Hazard pictograms :



Signal word :

Danger:

Hazard statements :

Causes severe skin burns and eye damage. May cause an allergic skin reaction.

Precautionary statements :

Prevention: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ faceprotection.
Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. If skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse.

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

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