

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP FORMULA 22 5GL

Material number : 000000000000067835

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 Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance	liquid
Colour	dark, red
Odour	strong, characteristic

GHS ClassificationSkin corrosion : Category 1A
Serious eye damage : Category 1
Skin sensitisation : Category 1**GHS Label element**

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.
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

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

induce vomiting.

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

P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/ physician.

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 or doctor/ physician.

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

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

Dispose of contents/container in accordance with local regulation.

Potential Health Effects**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.

ACGIH

Confirmed animal carcinogen with unknown relevance to humans

2-butoxyethanol

111-76-2

OSHA

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.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
2-butoxyethanol	111-76-2	>= 5 - < 10
sodium xylenesulphonate	1300-72-7	>= 1 - < 5
Alcohols, C10-14, ethoxylated	66455-15-0	>= 1 - < 5
Sodium metasilicate (disodium salt)	6834-92-0	>= 1 - < 5
Citrus, ext.	94266-47-4	>= 0.1 - < 1

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

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

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

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.
If on skin, rinse well with water.
If on clothes, remove clothes. |
| In case of eye contact | : | Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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. |
| If swallowed | : | Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital. |

SECTION 5. FIREFIGHTING MEASURES

- | | | |
|---|---|---|
| Suitable extinguishing media | : | Dry chemical |
| 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 ₂)
Carbon monoxide
Smoke
Sulphur oxides
Phosphorus 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. |

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

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.
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 : Do not freeze.
Do not store near acids.
Oxidizing agents

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm	NIOSH REL

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

			24 mg/m ³	
		TWA	50 ppm 240 mg/m ³	OSHA Z-1
		TWA	25 ppm 120 mg/m ³	OSHA P0

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200 mg/g	ACGIH BEI
Remarks: Creatinine						

Personal protective equipment

Hand protection

Remarks

: 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 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	: dark, red
Odour	: strong, characteristic
Odour Threshold	: No data available
pH	: > 12.5
Melting point/freezing point	: No data available
Boiling point	: 104.44 °C
Flash point	: does not flash
Evaporation rate	: 1

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 0.002 hPa
Relative vapour density	: No data available
Density	: 1.049 g/cm ³
Solubility(ies)	
Water solubility	: soluble in cold water, soluble in hot water
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 5.3 mm ² /s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: No data available
Incompatible materials	: Acids
Hazardous decomposition products	: Carbon oxides Phosphorus compounds Sulphur oxides

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

Acute oral toxicity	: Acute toxicity estimate : 4,563 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 40 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method

SAFETY DATA SHEET



ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

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

Components:

Sodium metasilicate (disodium salt):

Acute oral toxicity : LD50 Rat: 1,153 mg/kg

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-butoxyethanol:

sodium xylenesulphonate:

Alcohols, C10-14, ethoxylated:

Sodium metasilicate (disodium salt):

Citrus, ext.:

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

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

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

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.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
--

SAFETY DATA SHEET



ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

Transportation Regulation: IMDG (Vessel):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

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

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ethane-1,2-diol	107-21-1	5000	*

*: 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 : Acute Health Hazard

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

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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	On the inventory, or in compliance with the inventory
NZIoC	Not in compliance with the inventory
PICCS	Not in compliance with the inventory

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

IECSC On the inventory, or in compliance with the inventory

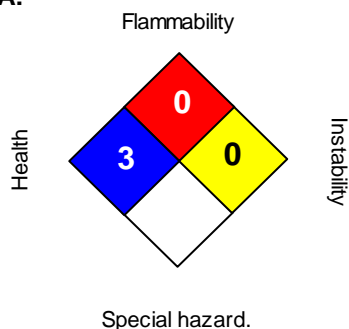
Inventory Acronym and Validity Area Legend:

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

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

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

OSHA 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/ face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. 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 or doctor/ physician. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

Storage: Store locked up.**Disposal:** Dispose of contents/container in accordance with local regulation.

Version:	2.0
Revision Date:	02/03/2016
Print Date:	01/10/2018

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it

ZEP FORMULA 22 5GL

Version 2.0

Revision Date 02/03/2016

Print Date 01/10/2018

is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes.

This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.