



ZEP Inc.  
11627 178th Street  
Edmonton, Alberta T5S 1N6  
1-877-I-BUY-ZEP (428-9937)  
Superior Solutions www.zep.com

# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

**Product name**                    **FORMULA 50**  
**Product use**                    General Purpose Cleaner  
**Product code**                   **0859**  
**Date of issue**                   **02/11/14**                    **Supersedes 03/17/11**

### Emergency Telephone Numbers

**For MSDS Information:**

Technical Services Group  
Telephone (780) 453-8100  
(Business Hours 8:00am - 5:00pm)

**For Medical or Transportation Emergency**

CANUTEC (24 Hours)  
(613) 996-6666 - Call Collect

### Prepared By

Technical Services Group  
11627 178th Street  
Edmonton, Alberta T5S 1N6

## Section 2. Hazards Identification

### Emergency overview

**WARNING !**

HARMFUL IF ABSORBED THROUGH SKIN. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Wash thoroughly after handling.

**NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.**

### Acute Effects

#### Routes of Entry

Absorbed through skin. Inhalation.

#### Eyes

Irritant. Inflammation of the eye is characterized by redness, watering and itching. Prolonged contact with eye tissue may cause severe and permanent eye injury (blindness).

#### Skin

Irritating to skin. permeator Skin inflammation is characterized by itching, scaling, or reddening.

#### Inhalation

Irritating to respiratory system. Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Over-exposure by inhalation may cause respiratory irritation.

#### Ingestion

Not harmful if accidentally ingested in small quantities.

### Chronic effects

Repeated eye exposure may produce chronic inflammation of the eye or corneal damage. Animal studies indicate a potential for liver, kidney or red blood cell damage. Relevance of these studies or exposure levels which might produce these effects in humans has not been established.

**Additional Information: See Toxicological Information (Section 11)**

## Section 3. Composition/Information on Ingredients

### Name of Hazardous Ingredients

### CAS number

### % by Weight

SODIUM METASILICATE; silicic acid (H2-Si-O3) disodium salt; water glass	6834-92-0	3 - 7
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	1 - 5
SODIUM DODECYLBENZENE SULFONATE; linear alkyl aryl sodium sulfonate; Sodium	25155-30-0	1 - 5
DDBSA		

**Section 4. First Aid Measures**

<b>Eye Contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Inhalation</b>	If inhaled, remove to fresh air. If irritation persists, get medical attention.
<b>Ingestion</b>	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

<b>Flash Point</b>	Closed cup (Tagliabue.): Higher than 93.3°C (200°F).
<b>Flammable Limits</b>	Not applicable.
<b>Flammability</b>	Non-combustible.
<b>Auto-ignition Temperature</b>	
<b>Fire-Fighting Procedures</b>	Cool closed containers exposed to fire with water. Fire-fighters should wear appropriate protective equipment. Use an extinguishing agent suitable for the surrounding fire.
<b>Fire hazard</b>	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Products of Combustion</b>	carbon oxides (CO, CO <sub>2</sub> ) and other unidentified organic compounds
<b>Explosion hazard</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Spill Clean up</b>	Put on appropriate personal protective equipment (see Section 8). Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
-----------------------	--

**Section 7. Handling and Storage**

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Wash thoroughly after handling.
<b>Storage</b>	Keep container in a cool, well-ventilated area. S7/8- Keep container tightly closed and dry. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

**Section 8. Exposure Controls/Personal Protection****Product name** **Exposure limits**

No exposure limit value known.

**Personal Protective Equipment (PPE)****Eyes** Splash goggles.**Hands and Body** Gloves

**Respiratory** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. A respirator is not needed under normal and intended conditions of product use. Use with adequate ventilation.

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Thin liquid	<b>Color</b>	Blue. [Dark]
<b>pH</b>	12.5 -13.0	<b>Odor</b>	Butyl [Slight]
<b>Boiling Point</b>	104.4°C (219.9°F)	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	1.07	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Easily soluble in the following materials: cold water and hot water.	<b>Evaporation Rate</b>	1 (Water = 1)
<b>Freezing Point</b>		<b>VOC (Consumer)</b>	4.9%

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Reactive or incompatible with the following materials: oxidizing materials and acids.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Section 11. Toxicological Information****Carcinogenicity****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
disodium metasilicate	LD50 Oral	Mouse	770 mg/kg	-
	LD50 Oral	Rat	1153 mg/kg	-
	LD50 Oral	Rat	1153 mg/kg	-
sodium dodecylbenzenesulfonate	LD50 Oral	Rat	438 mg/kg	-

**Mutagenicity**

**Conclusion/Summary** : Not available.

**Teratogenicity**

**Conclusion/Summary** : Not available.

**Reproductive toxicity**

**Conclusion/Summary** : Not available.

**Section 12. Ecological Information**

**Environmental Effects** No known significant effects or critical hazards.

**Aquatic Ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
Not available.				

**Section 13. Disposal Considerations****Waste Information**

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

**Waste Stream** Code: - [None.]  
 Classification: - [Non-hazardous waste]  
 Origin: - [RCRA waste.]

**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>TDG Classification</b>	Not regulated.	-	-	-		-
<b>IMDG Class</b>	Not available.	Not available.	Not available.	-		-

**NOTE:** DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG\* : Packing group

**Section 15. Regulatory Information****Canada****WHMIS (Canada)**

Class D-2B: Material causing other toxic effects (Toxic).

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.

**Section 16. Other Information**

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.  
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*