



# MATERIAL SAFETY DATA SHEET COMMANDO

## SECTION 1 – CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: Commando  
GENERAL/GENERIC NAME:  
PRODUCT USE: Low temperature mechanical detergent  
EFFECTIVE DATE: August 21, 2014  
VENDOR NAME AND ADDRESS: Alpine Specialty Chemicals Ltd.  
9 City View Drive, Etobicoke, Ontario M9W 5A5  
24 HOUR EMERGENCY NO. 613-996-6666

## SECTION 2 – COMPOSITION / INFORMATION INGREDIENTS

INGREDIENT	%W/W	CAS.NO	TLV	LD50 / LC50
Potassium Hydroxide	10 - 15	1310-58-3	2mg/m3	LD50 365 mg/kg (oral/rat)
Nitilotriaceticacid sodium salt	10 - 20	ND	139-13-9	ND

## SECTION 3 – HAZARDS IDENTIFICATION

### Route of Entry:

**Skin Contact:** Causes burns.

**Eye Contact:** Causes burns.

**Inhalation:** Mist causes irritation of the respiratory tract.

**Ingestion:** Causes burns to digestive tract.

**Effects of Acute Exposure:** (see section 11 for Toxicological information).

## SECTION 4 – FIRST AID

**Eyes:** Flush with running water for at least 15 minutes while holding eyelids open. Get medical attention.

**Skin Contact:** Flush contaminated skin with plenty of soap and water. Remove contaminated clothing. Launder contaminated clothing thoroughly before re-use. Seek medical attention if skin is burned or symptoms continue.

**Inhalation:** Remove victim to fresh air. Aid in breathing if necessary. If breathing stops, administer artificial respiration. Seek medical attention. Effects may be delayed for a few hours and aggravated by physical exertion.

**Ingestion:** Give plenty of water to drink to dilute stomach contents. **Do not induce vomiting.** Seek immediate medical attention.

**Note to Physician:** Risk of corneal injury and possible blindness if splashed into eyes.

## SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT: ND

FLAMMABLE LIMITS: ND

AUTO-IGNITION TEMP: ND

EXTINGUISHING MEDIA: As per surrounding fire.

SPECIAL FIREFIGHTING PROCEDURES: Wear self - contained breathing apparatus and special protective clothing.

EXPLOSION DATA: ND

HAZARDOUS COMBUSTION PRODUCTS: None.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Leak/Spill:** Contain spill; absorb onto inert material.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures:** Avoid all skin contact. Ventilate adequately, otherwise wear an appropriate breathing apparatus. Avoid contact with eyes, skin or clothing. Keep container closed when not in use.

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**Storage Procedures:** Keep from freezing. Keep containers closed when not in use. Do not store with incompatible materials.

### SECTION 8 – EXPOSURE CONTROLS

#### PROTECTIVE EQUIPMENT TO BE USED:

RESPIRATORY PROTECTION: Not required under adequate ventilation.  
VENTILATION: General ventilation adequate.  
PROTECTIVE GLOVES: Rubber  
EYE PROTECTION: Safety goggles  
OTHER PROTECTIVE MEASURES: ND

### SECTION 9 – PHYSICAL PROPERTIES

PHYSICAL STATE: Liquid  
APPEARANCE AND ODOUR: Clear, red liquid  
ODOUR THRESHOLD: ND  
SPECIFIC GRAVITY: 1.25  
VAPOUR PRESSURE: ND  
VAPOUR DENSITY: ND  
PH: (1%) 13  
EVAPORATION RATE: ND  
INITIAL BOILING POINT: 100°C approximately  
WATER SOLUBILITY: Complete  
FREEZING POINT: 0°C approximately

### SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable  
INCOMPATIBILITY: Strong acids and some metals  
HAZARDOUS DECOMPOSITION PRODUCTS: Strong acids and soft metals  
HAZARDOUS POLYMERIZATION: Will not occur.  
CONDITIONS TO AVOID: Contact with acids will generate heat and toxic chlorine gas. Contact with soft metals will generate flammable hydrogen gas.

### SECTION 11 – TOXICOLOGICAL INFORMATION

THRESHOLD LIMIT VALUE: ND  
**EFFECTS OF ACCUTE EXPOSURE**  
SKIN CONTACT: Corrosive. Causes burns.  
EYE CONTACT: Corrosive. Causes permanent damage if not treated promptly.  
INHALATION: Corrosive. Breathing mist or spray causes severe irritation.  
INGESTION: Corrosive. Causes burns to digestive tract.  
EFFECT OF CHRONIC EXPOSURE: Repeated or prolonged exposure may cause drying and cracking of skin.  
IRRITANCY OF PRODUCT: Moderate  
CARCINOGENICITY: ND  
SENSITIZATION TO MATERIAL: ND  
REPRODUCTION TOXICITY: ND  
TERATOGENICITY: ND  
MUTAGENICITY: ND

### SECTION 12 – ECOLOGICAL CONSIDERATION

No permanent effects on ecosystems.

### SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** In accordance with federal, provincial or local government requirements.

### SECTION 14 – TRANSPORT INFORMATION

**TDG Classification:** Corrosive Liquid, Basic, Inorganic, N.O.S. (Potassium Hydroxide)

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Class 8 UN 3266 PG III

### **SECTION 15 – REGULATORY INFORMATION**

**WHMIS Classification:** D2B, E

### **SECTION 16 – OTHER INFORMATION**

Prepared by: Lab Personnel

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