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## PRODUCT & COMPANY IDENTIFICATION

### CHEMICAL ALLOY CORPORATION

PRODUCT NAME:	<b>VORTEX PLUS 20W50</b>
PRODUCT TYPE:	Lubricating Oil
INTENDED USE:	Engine Application
VALIDATION DATE:	May 30, 2013
EMERGENCY PHONE NUMBERS:	(02) 744-3467 & (02) 744-3468

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## COMPOSITION/ INFORMATION ON INGREDIENTS

The ingredients of the product and its composition are proprietary information. Rest assured that this product does not contain any significant health hazard as long as normal precautions in handling this product are observed. Thus in the event of a medical emergency the ingredients and its composition will be provided to the physician or nurse.

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## HAZARDS IDENTIFICATION

Primary hazards and critical effects:	Warning. CAUSES EYE IRRITATION.
Environmental hazards:	Not classified as dangerous for the environment

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## FIRST AID MEASURES

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

**Ingestion:** If affected person is fully conscious, give one glass of water to drink. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

**Skin contact:** Wash with soap and water. Get medical attention if irritation develops.

**Eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

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## FIRE FIGHTING MEASURES

**Extinguishing media:** In case of fire, use water spray (fog), foam, dry chemical or CO<sub>2</sub>,

**Fire-fighting procedures:** Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

**Hazardous decomposition products:** Decomposition products may include the following materials: Carbon dioxide, Carbon monoxide, Metal oxide/oxides, Hydrogen sulfide.

**Flashpoint:** 238 °C

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## ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment. Follow all fire-fighting procedures (section 5).

**Environmental precautions:** If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways.

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## HANDLING AND STORAGE

**Handling:** Avoid contact with eyes. Wash thoroughly after handling.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

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## EXPOSURE CONTROLS & PERSONAL PROTECTION

Personal protective equipment:

**Respiratory system:** Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s)

**Skin and Body:** Disposable outer garments when there is a risk of contact with the material.

**Hands:** Wear chemical resistant gloves. Nitrile gloves of minimum thickness 0.4 mm have an expected breakthrough time of 480 minutes or less when in frequent contact with the product. Due to variable exposure conditions the user must consider that the practical use of a chemical-protective glove in practice may be much shorter than the permeation time above. Manufacturer's directions for use, especially about the minimum thickness and the minimum breakthrough time, must be observed.

**Eyes:** Safety goggles are considered minimum protection. Goggles with a face shield may be necessary depending on quantity of material and conditions of use.

## 9 PHYSICAL & CHEMICAL PROPERTIES

**Physical state & appearance:** Clear Liquid

**Color:** L-3.0

**Odor:** Fresh

**Density:** 0.8991

**Viscosity:** 18 @ 100 °C  
154.45 @ 40 °C

**Flashpoint:** 238 °C

## 10 STABILITY & REACTIVITY

**Stability:** Product is stable.

**Materials to avoid:** Strong oxidizing and reducing agents.

**Conditions to avoid:** High temperatures, sparks, and open flames

## 11 TOXICOLOGICAL INFORMATION

**Routes of entry:** Skin, eyes, ears, nose, ingestion, and inhalation.

**Target organs:** Contains material which may cause damage to vital organs

Acute effects:

**Inhalations:** Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

**Skin contact:** Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

**Eye Contact:** Irritating to eyes

## 12 DISPOSAL CONSIDERATION

Waste must be disposed of in accordance with local and regional environmental control regulations.