

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** CASKADE ENGINE SOL  
**Product Code:** C2132830L05, C2132840L20  
**Product DG Class:** 8  
**Version:** 1.1  
**Revision Date:** January 2022

#### Description

Engine Sol is an effective heavy degreaser and cleaner product, that removes surface contaminations and grime i.e. (fats, oils and grease, etc), by suspending oils and dirt so that it can be washed away from surfaces, equipment and fabrics.

#### Contact Details

Integra Industries  
42 Riverbank Rd  
OTAKI  
Telephone (03)455 6805

**Poisons Information Centre  
New Zealand  
Telephone 0800 764 766**

#### Chemical Details

**Chemical Name:** Engine Sol.  
**Chemical Classification:** Corrosive Alkali.  
**Chemical Formula:** No Data Available.

**Section 1 Notes:** This Material Safety Data Sheet may not provide exhaustive guidance for all HASNO Controls assigned to this substance. The EPA website [www.epa.govt.nz](http://www.epa.govt.nz) should be consulted for a full list of triggered controls and cited regulations.

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Entity</u>	<u>C.A.S. No</u>	<u>HSNO Classification</u>	<u>Proportion % WT</u>
Silicic Acid, Disodium Salt (Pentahydrate)	10213-79-3	6.1D, 8.2C, 8.3A, 9.3C	2.5 - 3.5
Alcohols, C9 - 11 Ethoxylated	68439-46-3	6.1D (ORAL), 6.3A, 8.3A, 9.1D, 9.3C	4 - 6
Potassium Hydroxide	1310-58-3	6.1C, 8.1A, 8.2B, 8.3A, 9.1D, 9.3B	0.1 - 0.4
2-Butoxyethanol	111-76-2	3.1D, 6.1D, 6.1E, 6.3B, 6.4A, 9.3C	13.5 - 14.5

*Non hazardous ingredients and water make product to 100%.*

#### **HSNO classification of the substance**

3.1D Flammable liquid - low hazard, 6.1C Substances that are acutely toxic. 6.3A Substances that are irritating to the skin, 6.4A Substances that are irritating to the eye,



## MATERIAL SAFETY DATA SHEET

### 3. HAZARDS IDENTIFICATION

<b>Emergency Overview:</b>	Moderately toxic and alkaline by ingestion. Irritating to eyes and skin. Do not inhale vapors.
<b>Carcinogenicity:</b>	Not Carcinogenic.
<b>Acute Health Hazards:</b>	Moderately toxic by ingestion.
<b>Chronic Health Hazards:</b>	May cause headaches, nausea, dizziness, and vomiting, leading to unconsciousness and collapse.

### Potential Health Effects

<b>Eyes:</b>	May cause inflammation and irritation to eye(s).
<b>Skin:</b>	On prolonged contact may cause irritation due to a "Defatting" effect on the skin.
<b>Ingestion (Oral):</b>	Moderately toxic by ingestion. May cause headaches, dizziness, nausea, and vomiting.
<b>Inhalation:</b>	May cause headaches, dizziness, nausea, and vomiting.

### 4. FIRST AID MEASURES

<b>Physicians or First Aiders:</b>	This product is a weak corrosive alkali. Treat symptomatically based on judgment of doctor and individual reactions of the patient.
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### Directions

<b>Eyes:</b>	If splashed in eye(s), remove contact lenses if worn and irrigate eyes with running water for fifteen minutes. Seek medical attention.
<b>Skin:</b>	Wash area affected with running water. Seek medical attention if irritation develops.
<b>Ingestion (Oral):</b>	Give a glass of water or milk to drink and do NOT induce vomiting. Seek urgent medical attention.
<b>Inhalation:</b>	Remove to a well-ventilated area. Seek urgent medical attention.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing Media:</b>	Product is a non-flammable liquid. In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions.
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### 6. ACCIDENTAL RELEASE MEASURES

<b>Accidental Release Measures:</b>	Contain large spills by absorbing with sand or earth. Store contained spill in clearly labelled drum for disposal. Wash small spills down with water.
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### 7. HANDLING AND STORAGE

<b>Handling and Storage:</b>	Store in a cool dry and secure area. Keep out of reach of children. Do not mix with other chemicals.
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## MATERIAL SAFETY DATA SHEET

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Ventilation:</b>	Use with adequate ventilation.
<b>Eye Protection:</b>	It is recommended that eye protection be worn.
<b>Skin Protection:</b>	It is recommended that rubber gloves and protective clothing be worn.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Red liquid
<b>Odor:</b>	No Data Available
<b>Physical State:</b>	Liquid
<b>Ph As Supplied:</b>	13
<b>Specific Gravity:</b>	1.0
<b>Flash Point:</b>	No Data Available
<b>Boiling Point:</b>	100°C
<b>Solubility in Water:</b>	Miscible
<b>Viscosity (at 20 0<sup>c</sup>):</b>	No Data Available

### 10. STABILITY AND REACTIVITY

No Data Available

### 11. TOXICOLOGICAL INFORMATION

#### Toxicological Health Effects

<b>Eyes:</b>	May cause inflammation and irritation to eye(s).
<b>Skin:</b>	On prolonged contact may cause irritation due to a "Defatting" effect on the skin.
<b>Ingestion (Oral):</b>	Moderately toxic by ingestion. May cause headaches, dizziness, nausea and vomiting.
<b>Inhalation:</b>	May cause headaches, dizziness, nausea and vomiting.

### 12. ECOLOGICAL INFORMATION

No Data Available.

### 13. DISPOSAL CONSIDERATIONS

Empty packaging should be disposed of in accordance with local and state regulations or recycled at an approved facility. Refer to waste management authorities for disposal of the contents or through a licensed waste contractor.

## MATERIAL SAFETY DATA SHEET

### 14. TRANSPORT INFORMATION

**Proper Shipping Name:** CORROSIVE LIQUID BASE INORGANIC NOS  
**Technical Name:** CONTAINS METASILICATE  
**Class - Primary:** 8  
**UN No:** 3266  
**Hazchem Code:** 2X  
**Flash Point:** /  
**Packing Group:** III



### 15. REGULATION INFORMATION

**HSNO Act 1996:** HSNO Approval Number HSR002530. Cleaning Products (Subsidiary Hazard) Group Standard 2006.

#### Location and Transit Depot Test Certification (3.1C Trigger Quantities)

250 L: Open containers.  
500 L: Closed containers greater than 5L.  
1,500 L: Closed containers up to and including 5L.

#### Hazardous Atmosphere Zone (3.1C Trigger Quantities)

1 L: Open containers in continuous use.  
5 L: Open occasionally.  
25 L: Decanting.  
100 L: Closed containers.

#### Fire Extinguishers (3.1D Trigger Quantities)

500 L: Required.

#### Response Plans and Secondary Containment (Trigger Quantities)

100 L or 100 kg: HSNO: 9.1A substance.  
1,000 L or 1,000 kg: HSNO: 6.1D, 6.5A, 6.5B, 6.7A, 8.2B, 9.1B, OR 9.1C substance.  
10,000 L or 10,000 kg: HSNO: 9.1D, 8.3A, 6.6A, 6.8A, or 6.9A substance.

#### Signage (Trigger Quantities)

100 L or 100 kg: HSNO: 9.1A substance.  
250 L or 250 kg: HSNO: 8.2B substance  
1,000 L or 1,000 kg: HSNO: 6.1D, 6.5A, 6.5B, 9.1B, OR 9.1C substance.  
10,000 L or 10,000 kg: HSNO: 9.1D, 8.3A, 6.6A, 6.8A, or 6.9A substance.

## ***MATERIAL SAFETY DATA SHEET***

### **16. OTHER INFORMATION**

**Disclaimer:**

The information contained herein has been provided in good faith, compiled by Kyle Chemicals, from sources it considers reliable and, is accurate to the best of Kyle Chemicals knowledge. Before using the product identified hereon, the foregoing MSDS and product label should be read carefully. The information contained herein relates only to the product identified hereon, and does not relate to its use in combination with any other material or in any process.

Customers are encouraged to conduct their own tests concerning the uses of the product identified hereon as each customer's manner and conditions of use and handling may involve additional considerations.

Kyle Chemicals assumes and shall incur no liability for any damages, losses. Injuries, costs, or consequential damages that may result from the use or misuse of the product identified hereon, and the recipient assumes all of such liability.