SAFETY DATA SHEET

This Material Safety Data Sheet meets or exceeds the requirements of the Canadian Controlled Product Regulations (WHMIS)

1. Identification

• Product Name: Snappy Clean

• Product Identifier: All purpose cleaner

• Recommended use: Cleaning, degreasing auto parts

• Restrictions on use: Not Known

Supplier Details:

Ducan Industries LTD. 1920 Broadway Street,

Port Coquitlam, BC Canada, V3C 2N1

• Emergency telephone number and any restrictions on the use of that number, if

applicable: (604) 942-0722

2. Hazard Identification

• OSHA / HCS Status: Not Known

GHS Classification:

Classification of the Substance or Mixture:

H 314 Contact Hazard - Skin: Skin Corrosion - Sub-category 1A

H318 Contact Hazard – Eye: Eye Damage - Category 1 – causes serious eye damage

Reproductive Toxicity: Category 2

- Label Elements:
 - Symbol (image) or the name of the symbol : Corrosive Liquid (e.g., flame, skull and crossbones)



Signal word Danger

 Hazard statement(s) Potential Health Effects Acute effects:

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H290 May be corrosive to metals.

Precautionary statement(s):

Prevention:

P260 Do not breathe mist / vapours / spray.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves / protective clothing / eye protection / face protection

Response:

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P321 Specific treatment (see First Aid Measures on Safety Data Sheet).

P363 Wash contaminated clothing before re-use.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

P405 Store locked up.

P406 Store in corrosive resistant container with a resistant inner liner. Disposal:

P501 Dispose of contents/container in accordance with

local/regional/national/international regulations

 Other hazards which do not result in classification (e.g. molten metal hazard)

This product is harmful to aquatic life. Avoid release to the environment.

3. Composition / Information on Ingredients

• Substance: Mixture

Chemical Nature: Caustic Potash Solution

Component Name	CAS#	Wt%	Hazardous Codes
Potasium Hydroxide	1310 - 58 -3	1 - 5	H302 H314 H318
Sodium metasilicate	10213-79-3	2 – 4	P261
Alkohol Ethoxylate	68439-46-3	5 - 12	
Sodium Gluconate	527- 07-1	2 - 4	
Nitrilotriacetic Acid	139 -13 - 9	1 - 2	

4. First Aid Measures

- General Advice: In case of accident or if you feel unwell, seek medical advice immediately.
- Eye Contact: Check for and remove contact lenses, if present and easy to do. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a poison center or doctor/physician immediately.
- **Skin Contact:** Remove contaminated clothing and shoes immediately. Wash skin with plenty of water for at least 15 minutes. Wash clothing before reuse. Call a poison center or doctor/physician immediately.
- Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious, or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a

pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor/physician immediately.

- **Ingestion:** Do not induce vomiting, unless directed to do so by medical personnel. Rinse mouth with water. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. Call a poison center or doctor/physician immediately.
- Most Important Symptoms and Effects, Both Acute and Delayed: Corrosive. Causes severe burns and tissue damage if swallowed, inhaled, or exposed to the skin or eyes.
- **Protection of First- aiders:** First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
- Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Extinguishing Media:

- Suitable Extinguishing Media: Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).
 - Hazchem or Emergency Action Code: 2R
- **Specific Hazards Arising from Product:** Non-combustible material. Corrosive, Excessive thermal conditions may cause decomposition and yield potassium oxides. Contact with metals may yield hazardous hydrogen gas.
- Hazardous Combustion Products: Carbon monoxide, Carbon dioxide, Potassium oxides, and nitrogen oxides (NOx)
- Special Protective Equipment and Precautions for Fire- Fighters: Not combustible, however following evaporation of aqueous component residual material can decompose if involved in a fire, emitting toxic fumes. Contact with metals may liberate hydrogen gas which is extremely flammable. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. Accidental Release Measures

• Personal Precautions, Protective Equipment and Emergency Procedures:

- For Non-emergency Personnel: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing vapor or mist. Provide adequate ventilation.
- For Emergency Responders: See Section 8 for proper protective equipment to be worn while cleaning an accidental spill.
- **Environmental Precautions:** Prevent product from entering sewers, natural waterways, or confined spaces.

• Methods and Materials for Containment and Cleanup:

- **Small Spill:** Restrict access to area until completion of cleanup. Stop the flow if it can be done safely. For small spills, contain and collect with absorbent.
- Large Spill: For larger spills, soak up spill with absorbent that does not react with product. Put contaminated material into the proper covered, labeled containers for disposal. Contaminated absorbent may pose the same hazards as the spilled product.

7. Handling and Storage

Precautions for Safe Handling:

- **Protective Measures:** See Section 8 for proper protective equipment to be worn. Avoid contact with eyes, skin and clothing. Only use with adequate ventilation. Keep containers tightly closed while not in use.
- Advice on General Occupational Hygiene: Avoid inhalation of vapor or mist. Do not swallow. Do not get in eyes. Avoid prolonged or repeated contact with skin. Handle in accordance with good industrial hygiene and safety.
- Conditions for Safe Storage, Including Any Incompatibilities: Store in a dry, ventilated area. Store at 15-25 °C. Store away from heat and incompatible materials (see section 10). Store in original container. Do not store in metallic containers. Keep containers tightly closed and upright. Keep away from food, drink, and animal foodstuffs. Keep out of the reach of children. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of this product.
- Materials to Avoid: Do not store or handle near open flame, heat or other sources of ignition.

8. Exposure Controls / Personal Protection

Control Parameter, Including Occupational Exposure Limits:		
Ingredient Name	Exposure Limits	
Potassium Hydroxide	ACGIH TLV: 2 mg / m3 Ceil.	
	OSHA PEL: 2 mg / m3	

- Appropriate Engineering Controls: Ensure adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
- **Environmental Exposure:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual Protection Measures:

- **Hygiene Measures:** Wash hands, forearms and face thoroughly after handling the product, before eating, smoking and using the lavatory and at the end of working period.
- **Skin Protection:** Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves.
- **Eye and Face Protection:** Chemical splash-proof goggles, safety glasses with unperforated side shields. Make sure eyewash stations and safety showers are close to the workstation location.
 - Footwear: Chemical resistant boots or overshoes.
- **Respiratory Protection:** An air-purifying, NIOSH-approved respirator with appropriate cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive-pressure, air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are unknown, or if any other circumstances exist where air-purifying respirators may not provide adequate protection.
 - Other: Eye wash station should be located near work area.

9. Physical and Chemical Properties

• Appearance (Physical State, Color): Red

Clear Liquid

• Odor: Alcohol.

• Odor Threshold: Not Established

• pH: 13.0

• Melting Point: Not Applicable

• Boiling Point: 97 °C

• Flammability: Not Flammable

• Lower Flammable: Not Available

• Higher Flammable: Not Available

• Vapour Pressure: Not established

• Vapour Density: Not established

• Flash point: Not Applicable

• Evaporation Rate: Not established

(n-butyl acetate = 1)

• Decomposition Temperature:

Not applicable.

• Specific Gravity: 1.06 g/cm3

Water = 1

• Partition Coefficient: Not determined

• Autoignition temperature:

Not determined

Decomposition Temperature:

Not determined

Volatiles: Not determined
 Viscosity, Kinematic Not determined

• Solubility in water: Soluble

• Explosive Properties: Not Explosive

• Oxidizing Properties: The product is not

classified as oxidizing.

10. Stability and Reactivity

• Reactivity: Not Reactive

• Chemical Stability: Product is stable to normal heat, light.

• Possibility of Hazardous Reactions: Can react with strong oxidizing agents.

• Conditions to Avoid: To maintain product effectiveness, avoid excessive heat, open flames.

• Incompatibility: Strong oxidizing agents

• **Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide, Potassium oxide, nitrogen oxides (NOx)

11. Toxicological Information

Information on Likely Routes of Exposure: Inhalation, Skin Contact, Ingestion, Eye Contact.

• Acute Toxicity:

• **Product:** Not classified based on available information.

• Ingredients:

Potassium Hydroxide: LD50 Oral 273 mg/m3 Rat

Sodium Metasilicate:

Oral LD50 1,152 – 1,349 mg/kg (Rat) Inhalation LC50 > 2.06 mg/m3, (Rat) Dermal LD50 > 5,000 mg/kg (Rat)

Alcohol Ethoxylate:

Oral LD50, > 2,000 mg/kg (Rat)

Sodium Gluconate:

Oral LD50 > 2,000 mg/kg (Rat)

Intravenous LD50 7,630 mg/kg (Rabbit)

Nitrilotriacetic Acid:

Oral LD50, 1,100 mg/kg (Rat) Dermal LD50, > 5 mg/kg (Rabbit) Inhalation Gas LC50, > 5 mg/L (Rat)

• Skin Corrosion / Irritation:

• Product: Not classified based on available information.

Ingredients:

Potassium Hydroxide: Category 1 A – Causes severe skin burns and eye damage.

Sodium Metasilicate: Corrosive to skin

Serious Eye Damage/Eye Irritation:

• Product: Not classified based on available information.

• Ingredients:

Potassium Hydroxide: Category 1– Causes serious eye damage.

Sodium Metasilicate: Corrosive to eyes

• Respiratory or Skin Sensation: Negative

Germ Cell Mutagenicity: Not available

• Carcinogenicity:

• Ingredients:

Nitrilotriacetic Acid:

IARC (International Agency for Research on Cancer) has listed Group 2B (Possibly Carcinogenic to Humans) for Nitrilotriacetic Acid.

NTP (National Toxicity Program) has listed Nitrilotriacetic Acid as "Reasonably Anticipated" carcinogen.

• Reproductive Toxicity: No known significant effects.

• STOT- Single Exposure:

Sodium Metasilicate: Irritating to respiratory system

- STOT Repeated Exposure: Not classified based on available information.
- Repeated Dose Toxicity: Not classified based on available information.
- Aspiration Toxicity: Not classified based on available information.
- Potential Acute Health Effects:

No information available

Symptoms Related to the Physical, Chemical and Toxicological Characteristics:

Eye Contact: Adverse symptoms may include the following:

Pain or irritation, watering, redness.

Inhalation: Adverse symptoms may include the following: Nausea or vomiting, headache, drowsiness / fatigue, dizziness /

vertigo, unconsciousness.

Skin Contact: No specific data is available. Ingestion: No specific data is available.

12. Ecological Information

Ecotoxicity:

• Ingredients:

Potassium Hydroxide:

Avoid release into the environment – harmful to aquatic organisms.

Runoff from fire control or dilution water may cause polyution.

Fish Toxicity

Ingredients:

Potassium Hydroxide: LC50 Western Mosquitofish (Gambusia affinis): 80 mg/m3, 96 h

Sodium Metasilicate: LC50 210 mg/l (Brachydanio rerio) 96 h
Nitrilotriacetic Acid: LC50 > 100 mg/l 96 h Freshwater
EC50 > 100 mg/l 96 h Water Flea

Toxicity to Algae:
• Ingredients:

Nitrilotriacetic Acid: EC50 > 100 mg/l 72 h Fresh Water Algae

Invertebrate Toxicity:
• Ingredients:

Sodium Metasilicate: Aquatic invertebrates: EC50 1,700 mg/l (Daphnia magna) 48 h.

Persistence and degradability:

Nitrilotriacetic Acid: Soluble in water Persistence is unlikely based on information available. **Sodium Metasilicate:** Inorganic ingredient, soluble upon dilution, rapidly depolymerize into molecular species indistinguishable from natural dissolved silica.

Bioaccumulative Potential:

Biodegradation:

• Ingredients:

Potassium Hydroxide: Expected to be readily biodegradable.

Mobility in Soil:

Nitrilotriacetic Acid: Will likely be mobile in the environment due to water solubility.

- Results of PBT and vPvB assessment half-life: No data available.
- Other Adverse Effects: The alkalinity of this product will have a local effect on ecosystems sensitive to changes in pH.

13. Disposal Considerations

• **Disposal Method:** Do not empty into drains; dispose of this material and its container in a safe way. To be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation.

14. Transport Information

• **UN Number:** UN 1814

• UN Proper Shipping Name: Potassium Hydroxide Solution

• Transport Hazard Class: 8

• Packing Group: III

• ERG: 154

- Environmental Hazards: See Section 12. Ecological Information
- Transport in Bulk, If Applicable: Not Applicable
- Special Precautions: Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident and spillage.

15. Regulatory Information

• Canadian Federal Regulations:

- **DSL:** All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).
- WHMIS classification: Class D2B Other Toxic Effects, Corrosive
- U. S. TSCA Inventory Status: All component of this product are either on the Toxic Substances Control Act (TSCA) inventory list or exempt.
- **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 threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

16. Other Information

• NFPA:

Flammability: 2 Health : 2 Instability : 0

Special Hazard: None

- Preparation Date: September 27th, 2016
- Prepared by: Ducan Industries 1920 Broadway Street Port Coquitlam B.C. Canada V3C 2N1
- **Disclaimer:** Ducan Industries Ltd. provides the information in this Safety Data Sheet in the belief that it is reliable but assumes no responsibility for its completeness or accuracy. Ducan Industries Ltd. makes and gives no representations or warranties with respect to the information contained herein or the product to which it refers, whether express, implied, or statutory, including without limitation, warranties of accuracy, completeness, merchantability, non-infringement, performance, safety, suitability, stability, and fitness for a particular purpose. No warranty against infringement of any patent, copyright or trademark is made or implied. This SDS is intended only as a guide to the appropriate handling of the material by a properly trained person. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. Accordingly, Ducan Industries Ltd. assumes no liability whatsoever for the use of or reliance upon this information including results obtained, incidental or consequential damages, or lost profits.
- Revisions/Review Date: Not Applicable