GAP PROFESSIONAL PRODUCTS

Safety Data Sheet
G-Force Cleaner/Degreaser

SECTION 1: Identification

1.1 Product identifier

Product name	G-Force Cleaner/Degreaser
Product number	5578

1.3 Recommended use of the chemical and restrictions on use

Cleaner Degreaser / Detergent

1.4 Supplier's details

Name	GAP Professional Products
Address	122 Route 105 Keswick Ridge, NB E6L 1B1 Canada
Telephone	(506) 363-9708
Fax	(506) 363-4241
email	info@gapauto.com

1.5 Emergency phone number(s)

For Medical or Transport Emergencies/
Pour les urgences médicales ou de transport
CANUTEC (24 Hours/Heures)
(613) 996-6666

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Acute toxicity, inhalation, Cat. 5
- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1B

2.2 GHS label elements, including precautionary statements

Pictogram

1. Corrosion

Signal word	**Danger**

Hazard statement(s)

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash … thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P280	Wear eye protection/face protection.
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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/...
P321	Specific treatment (see … on this label).
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container to …

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Component	Concentration
Potassium hydroxide (CAS no.: 1310-58-3; EC no.: 215-181-3; Index no.: 019-002-00-8)	**1 - 2 % (weight)**
CLASSIFICATIONS: Skin corrosion/irritation, Cat. 1A; Acute toxicity, oral, Cat. 4. HAZARDS: H302 - Harmful if swallowed; H314 - Causes severe skin burns and eye damage.	
Sodium hydroxide (CAS no.: 1310-73-2; EC no.: 215-185-5; Index no.: 011-002-00-6)	**1 - 2 % (weight)**
CLASSIFICATIONS: Skin corrosion/irritation, Cat. 1A. HAZARDS: H314 - Causes severe skin burns and eye damage.	
Ethanolamine (CAS no.: 141-43-5; EC no.: 205-483-3; Index no.: 603-030-00-8)	**1 - 1 % (weight)**
CLASSIFICATIONS: Acute toxicity, inhalation, Cat. 4; Acute toxicity, dermal, Cat. 4; Acute toxicity, oral, Cat. 4; Skin corrosion/irritation, Cat. 1B. HAZARDS: H302 - Harmful if swallowed; H312 - Harmful in contact with skin; H314 - Causes severe skin burns and eye damage; H332 - Harmful if inhaled.	
Alcohols, c9-11, ethoxylated (CAS no.: 68439-46-3; EC no.: 614-482-0)	**1 - 1 % (weight)**
CLASSIFICATIONS: Acute toxicity, oral, Cat. 4; Eye damage/irritation, Cat. 1. HAZARDS: H302 - Harmful if swallowed; H318 - Causes serious eye damage.	
2-Butoxyethanol (CAS no.: 111-76-2; EC no.: 203-905-0; Index no.: 603-014-00-0)	**1 - 1 % (weight)**
CLASSIFICATIONS: Skin corrosion/irritation, Cat. 2; Serious eye damage/eye irritation, Cat. 2; Acute toxicity, dermal, Cat. 4; Acute toxicity, inhalation, Cat. 4; Acute toxicity, oral, Cat. 4. HAZARDS: H302 - Harmful if swallowed; H312 - Harmful in contact with skin; H315 - Causes skin irritation; H319 - Causes serious eye irritation; H332 - Harmful if inhaled.	

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled	If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artifical respiration. Keep person warm, quiet, and get medical attention
In case of skin contact	Immediately flush skin with lots of running water for at least 30 minutes. Remove contaminated clothing and shoes. Wash before reuse.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary
No data available.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Not considered a fire hazard.

5.2 Specific hazards arising from the chemical
No specific fire or explosion hazard.

Ethanolamine: Carbon oxides, Nitrogen oxides (NOx)

5.3 Special protective actions for fire-fighters
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Further information
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection if necessary. Avoid breathing gas, mist, vapors, spray. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

6.2 Environmental precautions
Do not let concentrated product enter drains.

6.3 Methods and materials for containment and cleaning up

LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent. SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. material and place into containers for later disposal. Dispose in suitable waste container.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Put on appropriate personal equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Keep in original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials(see Section 10) and food and drink. Do not store under freezing conditions or above 49 C (120 F). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Keep
out of reach from children.

Specific end use(s)

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Potassium hydroxide (CAS: 1310-58-3 EC: 215-181-3)

PEL-C (Inhalation): 2 mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation, Eye irritation, Skin irritation

PEL-C (Inhalation): 2 mg/m3; USA (ACGIH)
Upper Respiratory Tract irritation, Eye irritation, Skin irritation

PEL-C (Inhalation): 2 mg/m3; USA (NIOSH)

PEL-C (Inhalation): 2 mg/m3; USA (Cal/OSHA)

2. Sodium hydroxide (CAS: 1310-73-2)

PEL (Inhalation): 2 mg/m3; USA (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): (C) 2 mg/m3; USA (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): (C) 2 mg/m3; USA (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

TLV® (Inhalation): (C) 2 mg/m3; USA (ACGIH)
OSHA Annotated Table Z-1, www.osha.gov

3. Ethanolamine (CAS: 141-43-5)

PEL (Inhalation): 3 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 6 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 3 ppm, (ST) 6 ppm (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 3 ppm, (ST) 6 ppm (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

STEL (Inhalation): 6 ppm (ACGIH)
Eye irritation. Skin irritation

TLV® (Inhalation): 3 ppm (ACGIH)
Eye irritation. Skin irritation

4. 2-Butoxyethanol (CAS: 111-76-2 EC: 203-905-0)
PEL (Inhalation): 50 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 240 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 20 ppm (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 5 ppm (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 20 ppm
97 mg/m3
California permissible exposure limits for chemical contaminants
(Title 8, Article 107)/Skin

TWA (Inhalation): 50 ppm
240 mg/m3; USA (OSHA)
USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air
Contaminants/Skin designation
The value in mg/m3 is approximate

TWA (Inhalation): 5 ppm
24 mg/m3; USA (NIOSH)
USA. NIOSH Recommended Exposure Limits/Potential for dermal absorption

TWA (Inhalation): 20 ppm; USA (ACGIH)
USA. ACGIH Threshold Limit Values (TLV)/Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans

TLV® (Inhalation): 20 ppm; USA (ACGIH)
OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Provide local exhaust or general dilution ventilation to keep exposure to airborne contaminants below the permissible exposure limits where mists or vapors may be generated.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Recommended: Chemical splash goggles Ensure that eyewash stations and/or safety showers are close to the workstation location if working with concentrated product.

Skin protection
Recommended: Chemical-resistant gloves. Neoprene Nitrile

Respiratory protection
Recommended: Dust mask or Respirator should be worn if product is used in confined space or used for a prolonged period of time.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Purple Liquid
Odor	Peculiar Odour
Odor threshold	N/D
pH	10-11
Melting point/freezing point	N/A
Initial boiling point and boiling range	>212F
Flash point	None
Evaporation rate	1 (water=1)
Flammability (solid, gas)	N/A
Upper/lower flammability limits	LEL=N/A UEL=N/A
Upper/lower explosive limits	N/A
Vapor pressure	N/D
Vapor density	N/D
Relative density	N/D
Solubility(ies)	100%
Partition coefficient: n-octanol/water	N/D
Auto-ignition temperature	N/D
Decomposition temperature	N/D
Viscosity	Thin Liquid
Explosive properties	None
Oxidizing properties	None

SECTION 10: Stability and reactivity

10.1 Reactivity
Contact with incompatible materials.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Stable under normal use conditions.

10.4 Conditions to avoid
None under normal use conditions.

10.5 Incompatible materials

Sodium hydroxide : Caustic soda reacts with all the mineral acids to form the corresponding salts. It also reacts with weak-acid gases, such as hydrogen sulfide, sulfur dioxide, and carbon dioxide. Caustic soda reacts with amphoteric metals (Al, Zn, Sn) and their oxides to form complex anions such as AlO2(-), ZnO2(-2), SNO2(-2), and H2 (or H2O with oxides). All organic acids also react with sodium hydroxide to form soluble salts. Another common reaction of caustic soda is dehydrochlorination.

Potassium hydroxide: Nitro compounds, Organic materials, Magnesium, Copper, Water, reacts violently with:, Metals, Light metals, Contact with aluminum, tin and zinc liberates hydrogen gas. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts., vigorous reaction with:, Alkali metals, Halogens, Azides, Anhydrides

---

Ethanolamine: Strong acids and oxidizing agents, Iron, Copper, Brass, Rubber

---

2-Butoxyethanol: Strong oxidizing agents

10.6 Hazardous decomposition products

2-Butoxyethanol: Hazardous decomposition products formed under fire conditions. - Carbon oxides
Sodium hydroxide : Sodium oxides
Other decomposition products - No data available. In the event of fire: see section 5

Potassium hydroxide: Other decomposition products - No data available
Hazardous decomposition products formed under fire conditions. - Potassium oxides
In the event of fire: see section 5

2-Butoxyethanol: Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

ATE (inhalation, gaseous) of mixture: 90000 ppmv

2-Butoxyethanol LD50 Oral - Rat - 880 mg/kg

2-Butoxyethanol LD50 Skin - Rabbit - 1,060 mg/kg

2-BUTOXYETHANOL LC50 Inhalation - Rat - 450 ppm

2-Butoxyethanol LC50 - Oncorhynchus mykiss (rainbow trout) - 1,474 mg/l - 96 h

2-Butoxyethanol EC50 - Pseudokirchneriella subcapitata (green algae) - 1,840 mg/l - 72 h

Sodium metasilicate pentahydrate LD50 Oral - Rat - 847 mg/kg

// ----- From the Suggestion report (05/16/2018, 9:55 AM) ----- //

ATE (inhalation, gaseous) of mixture: 225000 ppmv

Skin corrosion/irritation
Acute and delayed symptoms and effects:
May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Serious eye damage/irritation
Acute and delayed symptoms and effects:
Can cause severe irritation, redness, tearing, blurred vision.

Respiratory or skin sensitization
Acute and delayed symptoms and effects:
Breathing of dust or mist can cause mild to severe irritation of nasal or respiratory passage.
Prolonged or repeated contact can cause moderate irritation, defatting, dermatitis.

Germ cell mutagenicity
No data available

Carcinogenicity
Carcinogenicity: Ingredients not listed by OSHA, NTP, IARC.

Reproductive toxicity
No data available.

STOT-single exposure
Primary route of entry: A) Skin B) Inhalation

STOT-repeated exposure
Pre-existing skin, eye and respiratory disorders may be aggravated by exposure to product.

Aspiration hazard
May be harmful if swallowed and enters airways.

Additional information

Potassium hydroxide: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.,spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

---
Ethanolamine: *TOXICITY:
typ. dose mode specie amount unit other
LD50 orl rat 2050 mg/kg
LD50 ipr rat 67 mg/kg
LD50 ivn rat 225 mg/kg
LD50 orl rbt 1000 mg/kg
LD50 scu rat 1500 mg/kg
LD50 skn rbt 1000 mg/kg
LD50 ims rat 1750 mg/kg
LD50 orl mus 700 mg/kg
LD50 ipr mus 50 mg/kg
LD50 orl gpg 620 mg/kg

*AQTX/TLM96: Not available

*SAX TOXICITY EVALUATION:
THR: Poison by intraperitoneal route. Moderately toxic by ingestion, skin contact, subcutaneous, intravenous and intramuscular routes.

*CARCINOGENICITY: Not available

*MUTATION DATA:
test Lowest dose | test Lowest dose
---------- ---------- | ---------- ----------
cyt-hmn-lym 100 umol/L |

*TERATOGENICITY:
Reproductive Effects Data:
TDLo: orl-rat 500 mg/kg (6-15D preg)

*STANDARDS, REGULATIONS & RECOMMENDATIONS:
OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z
Transitional Limit: PEL-TWA 3 ppm [610]
Final Limit: PEL-TWA 3 ppm; STEL 6 ppm [610]
ACGIH: TLV-TWA 3 ppm; STEL 6 ppm [015,415,421,610]
NIOSH Criteria Document: None
NFPA Hazard Rating: Health (H): 2
Flammability (F): 2
Reactivity (R): 0
H2: Materials hazardous to health, but areas may be entered freely with full-faced mask self-contained breathing apparatus which provides eye protection (see NFPA for details).
F2: Materials which must be moderately heated before ignition will occur (see NFPA for details).
R0: Materials which are normally stable even under fire exposure conditions and which are not reactive with water (see NFPA for details).

*OTHER TOXICITY DATA:
Skin and Eye Irritation Data:
skn-rbt 505 mg open MOD
eye-rbt 763 ug SEV
Standards and Regulations: DOT-Hazard: Corrosive material; Label: Corrosive
Status: EPA TSCA Chemical Inventory, 1986
EPA TSCA Test Submission (TSCATS) Data Base, January 1989
NIOSH Analytical Methods: see Aminoethanol compounds, 2007
Meets criteria for proposed OSHA Medical Records Rule

SECTION 12: Ecological information

Toxicity
ENVIROMENTAL DATA: No known significant effects or critical hazards
ECOTOXICOLOGICAL INFORMATION: Not Available

SECTION 13: Disposal considerations

Disposal of the product
Dispose of contents/ container in accordance with the local/regional/national/international regulations. Dispose of empty bottle in the trash or recycle where facilities exist.

SECTION 14: Transport information

14.1	UN Number	UN1760
14.2	UN Proper Shipping Name	Sodium Hydroxide
14.3	Transport hazard class(es)	8
14.4	Packing group	2

Special precautions for user
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.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Canadian Domestic Substances List (DSL)

Massachusetts Right To Know Components
Potassium hydroxide
CAS-No. 1310-58-3

New Jersey Right To Know Components
Potassium hydroxide
CAS-No. 1310-58-3

Pennsylvania Right To Know Components
Potassium hydroxide
CAS-No. 1310-58-3

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
Chemical name: Sodium hydroxide
CAS number: 1310-73-2

New Jersey Right To Know Components
Common name: Sodium hydroxide
CAS number: 1310-73-2

Pennsylvania Right To Know Components
Chemical name: Sodium hydroxide
CAS number: 1310-73-2

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

New Jersey Right To Know Components
Common name: Ethanolamine
CAS number: 141-43-5

Pennsylvania Right To Know Components
Common name: Ethanolamine
CAS number: 141-43-5

Massachusetts Right To Know Components
Ethylene glycol monobutyl ether
CAS: 111-76-2

New Jersey Right To Know Components
Ethylene glycol monobutyl ether
CAS: 111-76-2

Pennsylvania Right To Know Components
Ethylene glycol monobutyl ether
CAS: 111-76-2

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:
Ethylene glycol monobutyl ether
CAS: 111-76-2

SECTION 16: Other information

16.1 Further information/disclaimer

These SDS are written in an effort to provide information to the worker in the workplace and in such a way it can be understood. 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.

16.2 Preparation information

Prepared by Craig Gourley