

# **GAP PROFESSIONAL PRODUCTS**

# Safety Data Sheet AOE - Auto Odour Eliminator

# **SECTION 1: Identification**

#### 1.1 Product identifier

Product name AOE - Auto Odour Eliminator

Product number AOE

#### 1.3 Recommended use of the chemical and restrictions on use

Odour control, odour remover

# 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

#### GHS classification in accordance with: WHMIS 2015

- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 2
- Acute toxicity, inhalation, Cat. 2
- Acute toxicity, oral, Cat. 3

- Specific target organ toxicity following single exposure, Cat. 2
- Specific target organ toxicity following repeated exposure, Cat. 2
- Hazardous to the aquatic environment, short-term (acute), Cat. 3

#### 2.2 GHS label elements, including precautionary statements

# **Pictogram**



1. Corrosion; 2. Exclamation mark; 3. Skull and crossbones; 4. Health hazard

Cional word	Danasa
Signal word	Danger

Hazard	statem	ent	ſ۷
ı ıazaı u	<b>JUALEIII</b>	CIIL	31

Hazard statement(s)	
H272	May intensify fire; oxidizer
H330	Fatal if inhaled
H318	Causes serious eye damage
H315	Causes skin irritation
H331	Toxic if inhaled
H301	Toxic if swallowed
H371	May cause damage to organs [organs, route]
H373	May cause damage to organs [organs] through prolonged or repeated exposure
	[route]

Harmful to aquatic life

H402

Precautionary statement(s)	
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
	No smoking.
P232	Protect from moisture.
P233	Keep container tightly closed.
P234	Keep only in original packaging.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/
P302+P352	IF ON SKIN: Wash with plenty of water/
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.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/...

P310 Immediately call a POISON CENTER/doctor/...
P314 Get medical advice/attention if you feel unwell.
P320 Specific treatment is urgent (see ... on this label).

P330 Rinse mouth.

P332 If skin irritation occurs: get medical attention

P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container to ...

### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

### **Hazardous components**

Component	Concentration	
Sodium chlorite (CAS no.: 7758-19-2) 35 - 45 % (weight)		
CLASSIFICATIONS: No data available. HAZARDS: No data available.		
SODIUM HYDROGENSULPHATE (CAS no.: 7681-38-1; EC no.: 231-665-7; Index no.: 016-046-00-X)	55 - 70 % (weight)	
CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 1. HAZARDS: H318 - Causes serious eye damage.		

#### Trade secret statement (OSHA 1910.1200(i))

Exact % withheld under Confidential Business Information rules

# **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 inhalation occurs and adverse effects result, remove to uncontaminated area and

treat symptomatically. GET MEDICAL ATTENTION IMMEDIATELY. Specific

Treatment: There is no specific antidote. Treat symptomatically. Pulse oximetry may

not be reliable, see notes to physician.

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. If symptoms persist, GET

MEDICAL ATTENTION IMMEDIATELY.

In case of eye contact Immediately flush contaminated eyes with a directed stream of water for as long as

possible. Remove contact lenses, if present, then continue rinsing. If symptoms

persist, GET MEDICAL ATTENTION IMMEDIATELY.

If swallowed If swallowed, do not induce vomiting. Give large amounts of water. If vomiting

occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious or convulsive person. GET

MEDICAL ATTENTION IMMEDIATELY.

Personal protective equipment for first-aid responders

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8).

#### 4.2 Most important symptoms/effects, acute and delayed

Inhalation (Breathing): This product gives off Chlorine Dioxide gas.

Respiratory System Effects: Exposure to airborne material may cause irritation, redness of upper and lower airways, coughing, laryngeal spasm and edema, shortness of breath, bronchio-constriction, and possible pulmonary edema. Severe and permanent scarring may occur. The pulmonary edema may develop several hours after a severe acute exposure.

Skin: Skin Irritation. Skin exposure may cause irritation, redness, itching, swelling, burning sensation.

Eye: Serious Eye Damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye.

Ingestion (Swallowing): Ingesting this material may cause irritation, nausea, and vomiting. Oxidation may cause significant metabolic issues such as: methemogobinemia, hemolysis, and intravascular coagulation and renal failure.

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician: Chlorine dioxide vapors are emitted when this product contacts acids or chlorine. If these vapors are inhaled, monitor patient closely for delayed development of pulmonary edema which may occur up to 48-72 hours post-inhalation. Following ingestion, neutralization and use of activated charcoal is not indicated. Probable mucosal damage may contraindicate the use of gastric lavage. Treat as a corrosive due to the pH of this material. This is also a strong oxidizer which will react with tissue in the presence of water. For prolonged exposures and significant exposures, consider delayed injury to exposed tissues. There is no specific antidote. Treatment is supportive care. Follow normal parameters for airway, breathing, and circulation. Ingestion of even small amounts of solution should be closely monitored for methemoglobinemia, hemolysis, and glutathione depletion, followed by renal failure. This chemical acts similarly to its related compound chlorate, and produces a drug induced G6PD deficiency. Methylene blue has not been reported as effective. Consult the PubMed Case Report PMID 22996135 for the case description and treatment utilized.

# **SECTION 5: Fire-fighting measures**

#### 5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

# 5.2 Specific hazards arising from the chemical

Strong oxidizer. This product may represent an explosion hazard if it contacts acids, chlorine or organic materials (Refer to Section 10).

----

Sodium chloride: Hydrogen chloride gas, Sodium oxides

#### 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. Wear self-contained breathing apparatus for firefighting if necessary.

#### **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Isolate hazard area and deny entry. Keep unnecessary and unprotected personnel from entering the area. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, vapors, or spray. Do not ingest. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls I Personal Protection, of the SDS.

#### 6.2 Environmental precautions

This material is harmful to aquatic life. Keep out of water supplies and sewers. Should not be released into the environment. Dilute spill with plenty of water.

#### 6.3 Methods and materials for containment and cleaning up

Large Spills: Absorb large spills with suitable adsorbent. Lime slurry, soda ash, or other alkali can neutralize the acid. Wash the residue down the drain or pit with plenty of water. Small Spills: Small spills can be flushed down the drain with plenty of water.

#### Reference to other sections

For disposal see section 13.

# **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.

Avoid contact with acids and strong oxidizers such as chlorine, permanganate, etc.

#### 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. This product does not contain any components that have regulatory occupational exposure limits (OEL's) established.

Ce produit ne contient aucun composant réglementaire limites d'exposition professionnelle (VLEP) établies.

### 8.2 Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Ensure good general ventilation. Wear appropriate PPE at all times.

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

### Eye/face protection

Splash goggles

### Skin protection

Chemical resistant gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wash and dry hands after use.

#### **Body protection**

Skin Protection: Protective gloves (for hands). Long sleeve shirts and pants should be worn to protect exposed skin.

#### Respiratory protection

An appropriate NIOSH approved hydrocarbon canister or respirator for mineral acids.

# **SECTION 9: Physical and chemical properties**

#### Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.) Clear

Odor Chlorine odour

Odor threshold N/A
pH 3.5
Melting point/freezing point 0°C
Initial boiling point and boiling range >212° F

Flash point None to 100°C

Evaporation rate 1
Flammability (solid, gas) N/A

Upper/lower flammability limits No data available.

Upper/lower explosive limits N/A
Vapor pressure >2
Vapor density N/D
Relative density N/A

Solubility(ies) 100% in water

Partition coefficient: n-octanol/water 12 @ 25° C (25% solution)

Auto-ignition temperature No data available.

Decomposition temperature N/A
Viscosity Thin Liquid
Explosive properties N/A

Oxidizing properties

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Chlorine dixide is formed and released into the atmosphere.

#### 10.2 Chemical stability

Stable after release of chlorine dioxide.

### 10.3 Possibility of hazardous reactions

Avoid heat, flames, sparks and other sources of ignition. Avoid contamination with foreign materials. Avoid exposure to sunlight or ultraviolet light.

# 10.5 Incompatible materials

Version: 1.0, Date of issue: 2019-04-12, Printed on: 2019-04-12, p. 6 of 10

Acids. Reducing agents. Combustible material. Oxidizing agents. Hypochlorite. Organic solvents and compounds. Garbage. Dirt. Organic materials. Household products. Chemicals. Soap products. Paint products. Vinegar, beverages, oils, pine oil, dirty rags, sulfur-containing rubber, or any other foreign matter.

----

Sodium chloride: Strong oxidizing agents

#### 10.6 Hazardous decomposition products

Thermal decomposition products include chlorine and oxides of sodium

# **SECTION 11: Toxicological information**

#### Information on toxicological effects

### **Acute toxicity**

PRODUCT TOXICITY DATA:

LD50 Oral: Rat 2100 mg/kg LD50 Dermal: Rabbit > 15 g/kg LC50 Inhalation: 2.2 mg/L (4 hr-Rat)

Sodium chlorite

LD50 Oral: 165 mg/kg (Rat)

LD50 Dermal: 107.2 mg/kg (Rabbit) LD50 Inhalation: 230 mg/m3 (4hr.-Rat)

Sodium Chloride

LD50 Oral: 3 g/kg (Rat)

LD50 Dermal: 10 g/kg (Rabbit) LD50 Inhalation: 42 g/m3 (1 hr.-Rat)

#### Skin corrosion/irritation

Vapours as well as liquid can cause severe burns which may not immediately be noticed.

#### Serious eye damage/irritation

Causes serious eye damage. Eye exposures may cause burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. May cause permanent eye damage including blindness. Significant and prolonged contact may cause damage to the internal contents of eye.

#### Respiratory or skin sensitization

May be fatal if inhaled. Inhalation may cause coughing, irritation (possibly severe), redness of upper and lower airways, shortness of breath, chemical burns and possibly pulmonary edema. Pulmonary edema may develop several hours after a severe acute exposure.

#### Germ cell mutagenicity

No data availableNot classified as a mutagen per GHS criteria. Sodium chlorite has tested positive in some studies. The significance of

these test results for human health is unclear because the oxidizing effects of the chlorite or salting effects of sodium may significantly affect the ability of the tests to accurately detect mutagens.

#### Carcinogenicity

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

#### Reproductive toxicity

No data available

### STOT-single exposure

Depending on the degree and duration of exposure, possible signs and symptoms from contact of this material with the skin and eyes, breathing this material, and swallowing this material may include:.

Inhalation (Breathing): Respiratory System Effects: Exposure to evolving gas of chlorine dioxide may cause irritation, redness of upper and lower airways, coughing, laryngeal spasm and edema, shortness of breath, bronchio-constriction, and possible pulmonary edema. Severe and permanent scarring may occur. The pulmonary edema may develop several hours after a severe acute exposure.

Skin: Skin Irritation. Skin exposure may cause irritation, redness, itching, swelling, burning sensation.

Eye: Serious Eye Damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye.

Ingestion (Swallowing): Ingesting this material may cause irritation, nausea, and vomiting. Oxidation may cause significant metabolic issues such as: methemogobinemia, hemolysis, and intravascular coagulation and renal failure.

#### STOT-repeated exposure

Sodium chlorite has produced hemolytic anemia in several animal species at concentrations of 100 mg/L or higher. In a subchronic study using rats, hematological alterations included decreased erthrocyte counts, hemoglobin levels, and hemacrit. Methemoglobin levels decreased in females, but increased in males. There is no evidence of kidney effects in humans; however, in animal studies with sodium chlorite, there is limited evidence of kidney effects. Repeated and prolonged skin contact may result in dermatitis.

#### **Additional information**

Sodium chlorite: guinea pig LD50 oral 300mg/kg (300mg/kg) Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 45(4), Pg. 6, 1980.

man TDLo oral 143mg/kg (143mg/kg) LUNGS, THORAX, OR RESPIRATION: CYANOSIS

GASTROINTESTINAL: NAUSEA OR VOMITING

KIDNEY, URETER, AND BLADDER: "CHANGES IN TUBULES (INCLUDING ACUTE RENAL FAILURE, ACUTE TUBULAR NECROSIS)" Renal Failure. Vol. 15, Pg. 645, 1993.

Link to PubMed

mouse LD50 oral 350mg/kg (350mg/kg) Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 45(4), Pg. 6, 1980. rat LC50 inhalation 230mg/m3/4H (230mg/m3) National Technical Information Service. Vol. OTS0534543, rat LD50 oral 165mg/kg (165mg/kg) LIVER: "JAUNDICE, OTHER OR UNCLASSIFIED"

KIDNEY, URETER, AND BLADDER: INTERSTITIAL NEPHRITIS Yakkyoku. Pharmacy. Vol. 31, Pg. 959, 1980.

----

Sodium chloride: Vomiting, Diarrhoea, Dehydration and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12: Ecological information**

#### **Toxicity**

**Aquatic Toxicity:** 

LC50 rainbow trout = 290 mg/I as 80% NaCl02 (96 hour);

LC50 bluegill = 265-310 mg/I as 80% NaCl02 (96 hour);

LC50 Sheepshead minnow = 62-90 ppm (96 hour)

Invertebrate Toxicity:

LC50 Daphnia Magna = 0.29 mg/L as 80% NaCl02 (48 hour)

Other Toxicity:

LD50 Mallard duck = 0.49-1.00g/kg as 80% NaCl02 (gavage);

LD50 Bob White quail = 0.66 g/kg as 80% NaCl02 (gavage);

Sodium chlorite in the diet of birds was not acutely toxic. Eight-day dietary LC50's in the Mallard duck and Bob White quail were > 10,000 ppm

# **SECTION 13: Disposal considerations**

#### Disposal of the product

Rinse empty container with plenty of water. Dispose of accordance in local, and provincial regulations.

#### Disposal of contaminated packaging

Dispose of container in accordance with local, and provincial regulations.

# **SECTION 14: Transport information**

14.1 UN Number UN1496

14.2 UN Proper Shipping Name Sodium chlorite solution

14.3 Transport hazard class(es)5.114.4 Packing group2

# 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

#### CANADA

WHMIS (Canada): This product has been classified according to the hazard criteria of the HPR and the SDS contains all information required by the HPR.

Canadian Domestic Substances List (DSL)

#### **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