

# SAFETY DATA SHEET

## Section 1. Identification

### BioXy Plus

**Product identifier** : BioXy Plus  
**Product code** : Not available.  
**Other means of identification** : Not available.  
**Product type** : Solid.

#### Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : Sanitizer powder.

**Manufacturer** : Bioxy AFD Inc.  
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 Quebec, Canada  
 H4R 2K3  
 Tel: 1-514-830-9447  
 Fax: 1-514-745-5176  
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 Email: info@bioxyafd.com

**Emergency telephone number (with hours of operation)** : 514-745-2597  
 8:00 am - 4:00 pm EST

## Section 2. Hazard identification

**Classification of the substance or mixture** : ACUTE TOXICITY (oral) - Category 4  
 SKIN CORROSION/IRRITATION - Category 2 SERIOUS  
 EYE DAMAGE/ EYE IRRITATION - Category 1  
 OXIDIZING SOLUTION - Category 2

#### GHS label elements

##### Hazard pictograms



**Signal word** : Danger

**Hazard statements** : H302 - Harmful if swallowed.  
 H318 - Causes serious eye damage.  
 H315 - Causes skin irritation.  
 H272 - May intensify fire ; oxidizer

#### Precautionary statements

**Prevention** : P280 - Wear protective gloves. Wear eye or face protection.  
 P273 - Avoid release to the environment.  
 P270 - Do not eat, drink or smoke when using this product.  
 P264 - Wash hands thoroughly after handling.

## Section 2. Hazard identification

- Response** : P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.  
P302 + P352 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.  
P332 + P313 - If skin irritation occurs: Get medical attention.  
P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Storage** : Not applicable.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Other hazards which do not result in classification** : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

Ingredient name	% (w/w)	CAS number
Sodium percarbonate	30 - 60	15630-89-4
Sodium Carbonate	5 - 10	497-19-8
Edetic Acid	0.1 - 1	60-00-4 8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

### Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## Section 4. First-aid measures

- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

#### Potential acute health effects

- Eye contact** : Causes serious eye damage.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : Harmful if swallowed.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Carbon dioxide (CO<sub>2</sub>), Dry chemical, Water spray mist or foam.
- Unsuitable extinguishing media** : None known.

## **Section 5. Fire-fighting measures**

**Specific hazards arising  
from the chemical**

**Hazardous thermal  
decomposition products**

**Special protective actions  
for fire-fighters**

**Special protective  
equipment for fire-fighters**

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- : Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
- : 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.
- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- : The substance is irritating to the eyes.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Section 7. Handling and storage

### **Advice on general occupational hygiene**

: 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. See also Section 8 for additional information on hygiene measures.

### **Conditions for safe storage, including any incompatibilities**

: Store in accordance with local regulations. Store at temperatures between 20°C and 30°C. 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. Store locked up. 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. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

None.

### **Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### **Environmental exposure controls**

: 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 chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

#### Skin protection

##### **Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

##### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### **Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## Section 8. Exposure controls/personal protection

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Solid.  
**Color** : White.  
**Odor** : Light.  
**Odor threshold** : Not available.  
**pH** : 9.5 [Conc. (% w/w): 100%]  
**Melting point** : Not available.  
**Boiling point** : Not available.  
**Flash point** : Not applicable.  
**Evaporation rate** : Not available.  
**Flammability (solid, gas)** : Not applicable.  
**Lower and upper explosive (flammable) limits** : Not applicable.  
**Vapor pressure** : Not available.  
**Vapor density** : Not available.  
**Relative density** : 1  
**Solubility** : Easily soluble in the following materials: cold water and hot water.  
**Solubility in water** : Not available.  
**Partition coefficient: n-octanol/water** : Not available.  
**Auto-ignition temperature** : Not applicable.  
**Decomposition temperature** : Not available.  
**Viscosity** : Not available.  
**Flow time (ISO 2431)** : Not available.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials and acids, ammonia.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sodium percarbonate	LD50 Oral	Rat	2400 mg/kg	-
Sodium Carbonate	LD50 Oral	Rat	4090 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Effects	Species	Exposure	Observation
Sodium Carbonate	Eyes - Mild irritant	Rabbit	0.5 minutes 100 mg	-
	Eyes - Moderate irritant	Rabbit	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	50 mg	-
	Skin - Mild irritant	Rabbit	24 hours 500 mg	-

#### Sensitization

There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

There is no data available.

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

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- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : Harmful if swallowed.

#### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur



## Section 11. Toxicological information

**Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : No known significant effects or critical hazards.

**Potential delayed effects** : No known significant effects or critical hazards.

#### Long term exposure

**Potential immediate effects** : No known significant effects or critical hazards.

**Potential delayed effects** : No known significant effects or critical hazards.

#### Potential chronic health effects

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	1038.7 mg/kg
Dermal	55000 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Route	Species	Endpoint
Sodium percarbonate Sodium Carbonate	Acute	Algae - Pseudokirchneriella subcapitata	96 hours
		Algae - Navicula seminulum	96 hours
		Crustaceans - Amphipoda	48 hours
Edetic Acid	Acute	Daphnia - Daphnia magna	48 hours
		Fish - Lepomis macrochirus	96 hours
		Daphnia - Daphnia magna - Neonate	48 hours
	Acute	Fish - Ictalurus punctatus - Fingerling	96 hours

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

Product/ingredient name	LogP	BCF	Potential
Edetic Acid	-2	1.8	low

### Mobility in soil

**Section 12. Ecological information**Soil/water partition  
coefficient ( $K_{oc}$ )

Other adverse effects

**Section 14. Transport information**

	<b>TDG Classification</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	3378	3378	3378
<b>UN proper shipping name</b>	Sodium Carbonate Peroxyhydrate	Sodium Carbonate Peroxyhydrate	Sodium Carbonate Peroxyhydrate
<b>Transport hazard class(es)</b>	5.1	5.1	5.1
<b>Packing group</b>	III	III	III
<b>Labels</b>	5.1	5.1	5.1

: No known significant effects or critical hazards.

## Section 13. Disposal considerations

### Disposal methods

- : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and
- : ~~Not available.~~

### Guidebook (ERG)

**Special precautions for user :** **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 or spillage. The temperature during expedition should be between 20°C and 30°C.  
runoff and contact with soil, waterways, drains and sewers.

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9/10

### Emergency Response

: Not applicable.

## Section 15. Regulatory information

- [Canadian lists](#) : Not determined.  
[Canada inventory \(DSL NDSL\)](#) : None of the components are listed.  
[Canadian NPRI](#) : None of the components are listed.  
[CEPA Toxic substances](#)

## Section 16. Other information

### Procedure used to derive the classification

Classification	Calculation method
ACUTE TOXICITY (oral) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2 SERIOUS	Calculation method
EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
OXYDIZING SOLUTION - Category 2	Calculation method

### History

- [Date of issue](#) : 09/21/2018  
[Date of previous issue](#) : Not applicable  
[Version](#) : 1  
[Prepared by](#) : Bioxy AFD Inc.  
[Key to abbreviations](#) : ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations  
 HPR = Hazardous Products Regulations

### Notice to reader

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