# New Employee Health and Safety Orientation Training Booklet

Every Employee is required to read this guide and Sign the New Employee Health and Safety Orientation Form

## **MaxSys Group of Companies**

Issued under the Authority of the CEO March 2020





### INTRODUCTION

The purpose of this handbook is to provide all MaxSys employees with a copy of our Health and Safety policy and the basic health and safety rules applicable to our business. In the event that applicable legislation creates higher health and safety standards than are outlined in the book, then such higher standards shall apply and shall be complied with.

This health and safety book does not contain the detailed information outlined in the regulation, or information on Client Site Specific hazards therefor, when additional information is required, reference the applicable source or ask the Client for more information.

Please familiarize yourself with the contents of this book. It is your responsibility to be aware of the health and safety rules and requirements pertaining to your work and to follow safe and responsible work practices at all time.

MaxSys is committed to providing a safe work environment for all employees. Our objective is to deliver a high level of service to our customers in an efficient and safe responsible manner. It is our desire to pursue our endeavors in an open and co-operative manner; however, understand that compliance with our health and safety rules and requirements is a condition of employment.

If you have any questions or concerns regarding your rights and responsibilities, the contents of this resource book or any procedure or hazard, please do not hesitate to contact me directly.

Bryan Brulotte, Chairman and CEO

MaxSys Staffing and Consulting Inc.

2018

## **OCCUPATIONAL HEALTH & SAFETY POLICY**

**MaxSys** is committed to providing a healthy and safe work environment for its employees and preventing occupational illness and injury. To express this commitment, we issue the following policy on occupational health and safety.

As the employer, MaxSys is responsible for the health and safety of all its employees. MaxSys will make every effort to ensure the client is providing a healthy and safe work environment for our employees. We are dedicated to the objective of eliminating the possibility of injury and illness.

As President, I give you my personal promise to take all reasonable precautions necessary to prevent harm to our personnel.

Employees must protect their health and safety by complying with applicable Acts and Regulations and to follow policies, procedures, rules, and instructions as prescribed by MaxSys and our Clients.

MaxSys will, where feasible and possible, work with the clients to eliminate hazards and thus the need for personal protective equipment. If that is not possible, employees will be required to use safety equipment, clothing, devices and materials for personal protection as required by the client.

The MaxSys commitment is to conduct our business in accordance with the respective provincial Occupational Health and Safety Acts, along with our Client's safety rules and programs. By adhering to these programs and with co-operation from all employees and clients our goal is to operate without injury to any employee.

Past experience has been invaluable in providing us with various means and methods of improving safety and increasing safety awareness in the minds of our work force. To continue to do this on a regular daily basis requires specific activities by MaxSys, our employees and our clients.

## FIT FOR WORK

MaxSys is committed to providing a safe and healthy work environment for all employees, both deployed and internal. Safe and healthy operations require physically and mentally fit employees. Workplace consumption of certain substances, such as drugs and alcohol, may lead to injuries, accidents, poor working relationships, reduced productivity, absenteeism, illness and other negative consequences.

An employee is required to report to the Workplace *Fit for Work*. A "Workplace" is any site at which an employee is performing duties related to employment with MaxSys, including client locations and property.

An employee is prohibited from using, distributing, manufacturing, offering or selling an Intoxicant at the Workplace. An "Intoxicant" is any substance that has the effect of intoxicating its user or altering the employee's ability to perform assigned duties. This includes alcohol, medication and both illegal and legal drugs, such as cannabis.

Many MaxSys employees work in Safety Sensitive Positions (SSP). An SSP is a position in which impairment could result in direct risk of injury to ANY person or property. Examples of SSP's are the operation of machinery, vehicles or equipment; working with hazardous materials or in a hazardous environment, such as a warehouse; having responsibility for maters that can impact life or the potential for serious harm to any person.

If an employee is not Fit for Work, they must disclose this as set out below. If an employee becomes aware or is witnesses behaviour giving rise to concerns about whether another employee is Fit for Work, the employee is required to advise a manager or supervisor.

An Employee in a SSP has a duty to disclose the use of or being under the influence of any Intoxicant at the Workplace that may result in the employee being not Fit for Work. This includes:

- Disclosure of the use or being under the influence of a medication that could reasonably impact the employee's ability to perform their duties and responsibilities.
- It also includes the disclosure of a disability relating to an Intoxicant.

If an employee fails to follow the Fit for Work policy, they will be subject to immediate disciplinary action that will result in the immediate removal from the Workplace, it may also include suspension without pay or immediate termination.

An employee needing support for substance dependency or addiction shall be encouraged to seek professional care and support and is directed to contact the provincial crisis and help hotline for drug and addiction.

## WORKER RESPONSIBILITIES

- a. Work in accordance with the Occupational Health and Safety Act and Regulations.
- b. Adhere to the health and safety policy, procedures, rules, and practices of MaxSys and the Client to ensure compliance.
- c. Ensure work activity and behavior does not, through act or omission, place their own health and safety and the health and safety of others at risk.
- d. Report any and all workplace hazards, unsafe acts and unsafe conditions to the client and MaxSys.
- e. Report all incidents to MaxSys immediately.
- f. Wear personal protective equipment (PPE), as required and as instructed, and use machinery, equipment, and materials only as authorized and trained.
- g. Participate, wherever possible, in defining safe work practices and job procedures to protect and promote health and safety on the job.
- h. Cooperate with the JOHSC or Safety Representative or any person performing a duty under the Occupational Health and Safety Act and Regulations.

#### Employee's Rights

The Occupational Health & Safety Act outlines three basic rights for **all** employees:

- 1. <u>The Right to Know</u> Every employee has the <u>right to know</u> any hazard that may be faced by them on a worksite including working with or in close proximity to hazardous materials, the danger of the material and how to protect yourself from the hazards.
- <u>The Right to Participate</u> Every worker has the <u>right to participate</u> in safety meetings when it concerns his/her safety at a worksite. This may be as a member of the Joint Occupational Health and Safety Committee or in a site specific safety meeting (tool box). The primary purpose is to involve workers and their employers in the exchange of safety information.
- <u>The Right to Refuse</u> Every worker has the <u>right to refuse</u> to do work when there is reasonable grounds for believing that the act is likely to endanger that worker or the health and safety of any other person.

#### Procedure to refuse unsafe work:

- a. Report the hazard to the client and work with him/her to correct the problem;
- b. If the Client disagrees with you regarding the safety of the situation, he/she will explain why and advise you to return to work;
- c. If you do not agree with the Clients opinion, the matter must then be referred to the Joint Occupational Health and Safety Committee/Representative for investigation; At this point please advise MaxSys of the situation.
- d. If you do not agree with the opinion of the Committee/Representative or your MaxSys Representative, the matter should then be referred to the Department of Labour.

When an employee has refused to do a job, that job may be assigned to another worker if the employee is told:

- 1. That another worker has refused to do the job;
- 2. Why the worker has refused the job;
- 3. That he/she also has the right to refuse the job.
- 4. <u>The Right to Make a Complaint or File a Grievance</u> Every worker has the right to make a complaint or file a grievance.

## **REPORTING AN INJURY**

If you are involved in a workplace accident, regardless of how minor, the following step should occur:

- 1. Get proper medical treatment
  - Go to the nearest first aid station and notify a trained first aid attendant.
  - If your injury is serious, go to the doctor or the hospital.
- 2. Report the incident to your MaxSys Representative immediately
  - Your employer needs to know about your injury or illness immediately to provide assistance and fulfill their employer responsibilities and take measures to prevent further incidents

## **GENERAL RULES & DISCIPLINE**

Rules are an essential part of our Health and Safety Program. The rules are directives instituted by MaxSys that will govern the conduct and actions of all employees while on Client worksites.

## Immediately report all incidents, including near misses, and any unsafe act or condition, no matter how minor, to the Client and to your MaxSys representative.

- 1. The use, possession, and distribution of illegal drugs, deadly weapons or unauthorized explosives while on Client premises, in company vehicles, or rental/personal vehicles while on Client business is prohibited.
- 2. Always use proper tools and equipment for the job. Do not use a damaged or incorrect tool to perform your task. Damaged tools are to be reported to the Client immediately.
- 3. Smoking on Client premises is restricted to designated areas only.

- 4. The MaxSys safety policy and procedures will be read and followed by all personnel deployed by *MaxSys.*
- 5. All employees will be aware of their responsibilities under the Clients and the MaxSys Health & Safety Program, the Occupational Health & Safety Act, and applicable Regulations.
- 6. Vehicle/equipment operators will have a valid license and operating ticket, when required.
- 7. Consuming alcohol or illegal drugs during working hours or breaks is strictly prohibited, as it is a matter of safety. Employees who are taking over the counter or prescription drugs that could affect their ability to perform their duties are to notify the client in confidence.
- 8. All employees are to practice good housekeeping at the work site.
- 9. The appropriate CSA-approved personal protective equipment must be worn at all times by employees.
- 10. Theft, vandalism, or other misuse of the Client's property is prohibited.
- 11. Fighting, horseplay, practical jokes, harassment or otherwise interfering with other workers is prohibited.

## ANTI-HARASSMENT POLICY STATEMENT

MaxSys is committed to providing a safe and respectful work environment for all staff and clientele. Everyone has the right to equal treatment with respect to employment without discrimination because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, age, record of offences, marital status, same-sex partnership status, family status or disability.

Everyone has the right to freedom from harassment in the workplace by the employer or agent of the employer or by another employee because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, age, record of offences, marital status, same-sex partnership status, family status or disability. "Harassment" refers to comments or actions that are unwelcome or should be known to be unwelcome. Every person has the right to be free from humiliating or annoying behaviour that is based on one or more grounds listed above.

#### Harassment is against the law:

The Canadian Human Rights Act and the Canada Labour Code protect you from harassment. The Criminal Code protects you from physical and sexual assault. You have a right to live and work without being harassed, and if you are harassed, you can do something about it.

#### Employees' responsibilities:

All employees have the responsibility to treat each other with respect, and to speak up if they or someone else is being harassed. All employees have a responsibility to report harassment to the appropriate person. All employees are responsible for respecting the confidentiality of anyone involved in a harassment complaint.

#### MaxSys responsibilities:

As an employer and consulting partner, MaxSys is committed to the following duties on an ongoing basis:

 To ensure that our work environment is free from discriminatory and harassing behaviour, training is provided to all employees and managers with respect to anti-discrimination and anti-harassment policies and legislation;

- To respond to all claims of discrimination or harassment in an immediate and empathetic manner;
- To take immediate remedial action once made aware of discriminatory or harassing conduct;
- To protect the privacy of the parties involved, and to ensure that no reprisal action is taken against those who bring forward claims of discrimination and harassment; and
- To ensure that the safety of all of our employees and consultants is of paramount concern in addressing claims of harassment.
- To take appropriate action to safeguard its employees against the effects of unfounded or malicious allegations of harassment and discrimination.

#### The Internal Complaint Process

If you believe that you have been or are currently the victim of discrimination or harassment within the MaxSys environment:

- **1.** Bring forward your complaint **immediately** to any one of the following:
  - i. Your immediate supervisor
  - ii. Manager
  - iii. Vice President
- 2. You must provide your complaint in writing to ensure that MaxSys has a complete and accurate understanding of the circumstances. However, **your identity shall remain completely confidential.**
- **3.** The Senior Management of MaxSys will review the complaint and identify the appropriate course of action with respect to the following tasks:
  - i. Speaking with the individual whose behaviour is the subject of the complaint;
  - ii. Speaking to witnesses, if any, to the behaviour which forms the subject of the complaint; and
  - iii. Reconvening as a Senior Management team to discuss findings of fact and detailing what, if any, disciplinary action shall be taken.
- 4. The manager to whom you addressed your complaint shall report back to you on the findings and actions of Senior Management, where possible, within 3 days of your initial complaint.

**Please note**: At any time during this process, you have the legal right to proceed with a complaint to the respective provincial Human Rights Commission.

#### **Disciplinary Action**

Disciplinary measures will be applied if a claim of harassment or discrimination is proven. Remedies that are available to MaxSys if a claim of harassment or discrimination is proven, which includes verbal warnings and reprimands, written warnings and reprimands, reallocation of work activities, suspensions from work and dismissal without notice. Senior Management reserves the right to apply the most severe disciplinary measure necessary to address any complaint regardless of the frequency of the behaviour's occurrence.

## SAFE WORK PRACTICES & JOB PROCEDURES

Safe Work Practices and Job Procedures are guidelines for the performance of a particular type of work or activity. Their purpose is to help avoid types of incidents that have historically occurred when using certain types of tools, equipment, or performing a particular task. Safe Work Practices and Job Procedures are used to train new employees and workers that moved to new jobs. They can also be used as a reference, especially for complex jobs, particularly hazardous jobs, or for jobs that are not done very often.

**MaxSys** will request of each Client that safe work practices and job procedures be used to ensure both knowledge and understanding for employees before they begin any task. To ensure our employees understand their meaning, we have provided an overview to what each means.

## SPRAINS AND STRAINS

One of the most common injuries in the workplace are sprains and strains, stretched ligaments and overexerted muscles. These injuries can be caused by different tasks such as lifting, twisting and pulling with the body.

#### There are different factors that can cause these injuries:

Excessive force; excessive repetition; awkward posture; poor rest and recovery; vibration; extreme temperature; poor nutrition, fitness and hydration. **Prevention:** 

- Warming up, stretching and cooling down.
- Adequate Training
- Recognizing the signs early
- Using the proper equipment and tools for the job
- Avoiding strenuous activity on the job when tired or in pain.

#### Heavy lifting and Carrying

- Plan the lift. If the object is too heavy, seek additional help or use a mechanical lifting device
- Minimize bending, reaching & twisting.
- Position work so hands are above knees & below head.
- Always lift with your legs and not your back
- Always carry objects close to your body.
- Avoid twisting

## **RETURN TO WORK PROGRAM**

In fulfilling MaxSys' commitment to providing a safe and healthy working environment, a Return to Work Program was established for workers who sustain workplace injuries. Our overall goal is to reduce the number of days lost to injury or illness and achieve zero lost time accidents.

A Return to Work Program is a way to help injured workers return to productive employment as soon as it is safe to do so.

In the case of an occupational injury, MaxSys will work toward facilitating a timely and appropriate return to pre-injury duties. Additionally, we shall make every reasonable effort to provide suitable

transitional employment or modified job duties to workers who are temporarily or permanently unable to return to their regular employment duties, as a result of an occupational injury.

If a workplace injury occurs it is the employee's responsibility to notify both a MaxSys Representative and the Client of the incident. It should be understood that in the case of an injury the employee is required to participate in the program to the best of their abilities and capacities. Early assistance is considered the cornerstone of disability management.

### MANAGEMENT COMMUNICATION

#### **Reporting Concerns When Warranted**

If at any point in the work contract, an employee is offered an assignment with a specific customer that is unsafe or the job description has changed, call the MaxSys **representative immediately**. No employee is expected to undertake a job until he/she has received on-site instruction on how to do it properly and has been authorized to perform that job.

#### Semi Annual Written Communication

When MaxSys employees are placed in a work position with a Client that lasts more than (3) three months, you may be called upon by MaxSys to provide a written overview of the Occupational Health and Safety at that site. This information will allow us to communicate together in the occupational health and safety of the work of your worksite.

### SAFETY TRAINING & MEETINGS

**MaxSys** is committed to provide all employees with current Occupational Health and Safety information required to perform their assignments in the safest possible manner. The Occupational Health and Safety Act and MaxSys Health and Safety policy requires that employees receive information and training regarding their duties under the policy and the Act, including rights and responsibilities, hazard reporting and control, safe work practices, job procedures.

#### WHMIS Training:

All MaxSys employees will be required to review the Workplace Hazardous Materials Information System (WHMIS) program at the point of signing with MaxSys.

#### **Specialized Safety Training:**

Any training required under the OH&S Act and Regulations must be provided by a competent trainer or an accredited training organization. Where appropriate, the client must provide other training required under the OH&S Act including, First Aid, Fire Extinguisher, Fall Protection, Confined Space, etc.

## EQUIPMENT LOCK OUT/ TAG OUT (This section only applies to Industrial Applicants)

All employees working on or around equipment and machinery must be protected against the inadvertent energization and startup of such machinery. The effective isolation of power sources and/or controls is essential to prevent employees being exposed to such hazards. Isolation should also extend to control valves when employees are working on or around open ended pipe work which has the potential of transmitting gases, air, steam, water, oil or any other fluid which, if inadvertently released, will create a hazardous working environment. All employees who work on or around equipment and/or machinery or piping systems must have a full knowledge and understanding of this procedure.

#### Responsibilities

#### Client

- 1. The Client shall be responsible under the Occupational Health and Safety Act to implement and enforce this equipment lock-out/tag-out policy.
- 2. The Client must inspect machines for compliance by employees of equipment lock-out/tag-out procedures.
- 3. The Client must provide the necessary locks, keys, tags, and chains to ensure adequate lockout/tag-out.
- 4. The Client must be responsible for training of employees in equipment lock-out/tag-out.
- 5. The Client must ensure that absolutely no safety device is removed unless the owner of the lock or safety device has given permission directly to the Client. If the person cannot be contacted, the Client may remove the lock or safety device only after the machine has been checked to see if it is repaired and NO person is in danger.

#### Employee

- 1. The employee shall be responsible to ensure machines are rendered in a zero energy state and tagged before maintenance procedures shall proceed.
- 2. The employee shall familiarize themselves with the Clients equipment lock/tag-out policy and implement the policy.
- 3. The employee shall participate in training for equipment lock/tag-out.

#### Definitions

**Isolating Device:** A device which prevents the operation of an electrical system, hydraulic system, pneumatic system, machinery or equipment, or the transportation of gases, fluids, etc. which could cause health problems, injury or death to personnel. An example of an isolating device could be, but is not limited to:

- A manually operated circuit breaker.
- A manual disconnect arrangement.
- A manually operated switch.
- A pipeline blank or blind.
- A hydraulic or pneumatic valve.

NOTE: Push button electrical switches and simple check valves are **NOT** isolating devices.

- **Lock-Out/Tag-Out:** The fixing of a lock and the attachment of a tag on an isolating device in accordance with this procedure indicates that the isolating device and its associated equipment, machinery or system shall not be operated until the lock and tag are removed in accordance with this procedure.
- *Lock-Out Device:* Is a device that requires the use of a lock and key to hold an isolating device in a safe position and render the equipment, machinery or system inoperable for the purpose of protecting personnel.
- *Tag-Out Device:* Is a prominent warning sign, which is securely attached to the isolating device for the equipment, machinery or system, which for the purpose of personnel protection forbids the operation of the isolating device and identifies the person who applied the tag and has control of the procedure.

## HUMAN RIGHTS & ACCESSIBILITY

#### Human Rights Code

The goal of the Human Rights Code is to provide for equal rights so as to create a climate of respect where everyone feels part of the community and can contribute fully. The Code says people with disabilities must be free from discrimination where they work, live, and receive services, and their needs must be accommodated.

- Accommodation means not denying people jobs or services in the first place if they can be accommodated to the point of undue hardship Changes to an organization's policies and practices or staff training so that discrimination doesn't recur may be required.
- The Code is not meant to punish. When discrimination happens, the goal is to fix the situation to provide equal opportunity for the person with a disability. The Code promotes educating and working with organizations to make changes that prevent discrimination and harassment.
- Accommodating the individual needs of people with disabilities is a legal duty under the Code.

#### Accessibility for Ontarians with Disabilities Act (AODA)

- The goal of the AODA is to remove and prevent barriers so that people with disabilities can
  participate more fully in communities.
- The Accessibility Standard for Customer Service applies to all people or organizations in Ontario that provide goods or services, and have one or more employees.

There are various different types of disabilities. Openly communicating with you customers' needs is key to excellent customer service.

- Physical disabilities
- People with vision loss
- People who have hearing loss
- People who are deafblind
- People with speech or language impairments
- People who have learning disabilities
- People who have intellectual / developmental disabilities
- People who have mental health disabilities

If you require any special accommodations due to a disability, please speak directly to your Manager.

For additional information and resources:

http://www.ohrc.on.ca/en/learning/working-together-code-and-aoda

http://accessforward.ca/

## WHMIS 2015 Orientation

#### WHAT IS WHMIS EDUCATION AND TRAINING?

The Workplace Hazardous Materials Information System (WHMIS) is a nationwide communication system designed to provide information on the safe use of hazardous materials used in the workplace. WHMIS affects workers, employers, suppliers and regulators. WHMIS has aligned with the worldwide hazard communication system known as GHS – the Globally Harmonized System of Classification and Labelling of Chemicals.

#### DO I HAVE TO BE EDUCATED AND TRAINED IN WHMIS?

Yes. All Canadian jurisdictions require that employers develop, implement, and maintain a worker education program that will enable workers to work safely with hazardous chemicals. Instruction on requirements for labels and data sheets, information on how product may affect the workers' health or safety as well as training in safe work procedures are necessary.

#### WHAT ARE THE MAIN COMPONENTS OF WHMIS?

- 1. Supplier Labels on hazardous materials to alert employers and workers. These labels recommend precautions that should be taken to ensure safe handling.
- Safety Data Sheets (SDSs) to provide detailed health and safety information to protect workers from hazards and for safe handling use. The SDSs should always be read before handling a hazardous material.
- **3.** Worker education and training to provide instruction on hazards and training in workplace procedures.

#### WHAT QUALIFIES AS A HAZARDOUS MATERIAL?

#### **Controlled products**

A "controlled" product is defined for WHMIS under the federal Hazardous Products Act as meaning any product, material or substance specified by the regulations to be included in any of the classes listed in Schedule II of the Act. (See Appendix A: for symbols). Examples are:

- Gases under pressure (fire extinguishers)
- Flammables (gases, aerosols, liquids, solids)
- Oxidizing materials (bleach)
- Acute toxicity (mercury)
- Corrosive (ammonia)
- Self-reactive substances and mixtures (benzoyl peroxide)

#### ARE THERE ANY HAZARDOUS MATERIALS NOT INCLUDED IN WHMIS?

The exclusions under WHMIS 2015 are:

- Explosives as defined in the Explosives Act.
- Cosmetic, device, drug or food as defined in the Food and Drugs Act.
- Pest control products as defined in the Pest Control Products Act.

- Consumer products as defined in the Canada Consumer Product Safety Act.
- Wood or products made of wood.
- Nuclear substances within the meaning of the Nuclear Safety and Control Act, that are radioactive.
- Hazardous waste being a hazardous product that is sold for recycling or recovery and is intended for disposal.
- Tobacco and tobacco products as defined in the Tobacco Act.
- Manufactured articles.

#### WHO SUPPLIES THE INFORMATION?

Both employers and suppliers are responsible for providing hazard information. The employer is responsible for WHMIS education and training how to properly handle hazardous materials.

The supplier is responsible for ensuring the appropriate classification of hazardous products. When a product is considered a "hazardous product", the supplier is responsible for labeling the product or container and must provide a safety data sheet (SDS) to their customers.

**Supplier labels** should accompany every controlled product. The labels must be bilingual (English/French), easy to read and durable. Supplier Labels for hazardous workplace products must display the following items (See Appendix B for example):

- Product identifier
- Hazard pictograms
- Signal Word (NEW) "Danger / Warning"
- Hazard Statements
- Precautionary Statements
- Supplier Identifier

**Safety Data Sheets (SDSs)** are an important component of WHMIS. Employers and workers use this information to protect themselves from potential hazards and for safe handling / use. They are considered to be the "back-up" to the supplier label. The SDSs contain more comprehensive safe handling information. SDSs need to be kept readily available to employees. They should be kept in a binder in a centralized location in or around the work area **(See Appendix C for example).** The Hazardous Products Regulations specifies 16 sections and content for the SDS which will include:

- 1. Identification
- 2. Hazardous identification
- 3. Composition/Information on ingredients
- 4. First-aid measures
- 5. Firefighting measures
- 6. Accidental release measures
- 7. Handling and storage
- 8. Exposure controls/Personal protection

- 9. Physical and chemical properties
- 10. Stability and reactivity
- 11. Toxicological
- 12. Ecological information
- 13. Disposal considerations
- 14. Transport information
- 15. Regulatory information
- 16. Other Information

#### WHAT SHOULD BE DONE IN THE CASE OF AN EMERGENCY?

In case of an emergency (i.e. a hazardous chemical comes in contact with your skin) you need to refer to the supplier label and the SDS for first aid measures and safety precautions. Seek Medical help and treatment as necessary.

## ANNEX A: WHMIS PICTOGRAMS AND THEIR HAZARDS

Gases under Pressure	Gases under pressure (Compressed gas, Liquefied gas, Refrigerated liquefied gas, and Dissolved gas)
Flammable	Flammables (gases, aerosols, liquids, solids), Pyrophoric (liquids, solids, gases), Self-reactive substances and mixtures, Self-heating substances and mixtures, Substances and mixtures which, in contact with water, emit flammable gases, Organic peroxides
Oxidizing	Oxidizing liquids, solids and gases
Acute toxicity (fatal or toxic)	Acute toxicity – oral, dermal and/or inhalation
Carcinogenicity	Carcinogenicity, Germ cell mutagenicity, Respiratory sensitization, Reproductive toxicity, Specific target organ toxicity - single exposure, Specific target organ toxicity - repeated exposure, Aspiration hazard
Acute toxicity (harmful)	Skin irritation, Eye irritation, Skin sensitization, Specific target organ toxicity - single exposure (respiratory irritation or drowsiness or dizziness)
Corrosive	Corrosive to metals, Skin corrosion, Serious eye damage
Self-reactive substance	Self-reactive substances and mixtures, Organic peroxides
Biohazard	Biohazardous infectious materials

#### ANNEX B: SUPPLIER LABEL EXAMPLE



## **ANNEX C: SAFETY DATA SHEET EXAMPLE**

#### SAFETY DATA SHEET

1.		UCT IDENTIFICA	TION		HYSICAL AND CHE	MICAL PRO
Product Name				Physical state	Gas	pH
Common Names/Synonyms: Triatomic Oxygen, Trioxygen,			Molecular Weight	48.0	Decompositio temperature	
ABC Coma	ny Inc.			Appearance	Clear at low	Evaporation r
123 Main St					concentration, blue at	
ON KIK XX					higher concentration	
				Odor	Distinct pungent odor	Flash point
roduct Use: 1	This SDS i	s limited to ozone prod	nced in gaseous form	Odor	0.02 to 0.05 ppm;	Auto-ignition
		or, in varying concentr	-	threshold	exposure desensitizes	temperature
		uposes of odor abatem		Melting point	-193°C/-315°F	Relative dens
		microbial intervention,		Boiling point	-112°C/-169°F	Partition coef
lications.				Vapor	> 1 atm	Flammability
	17.4 5		Tox	pressure		
-		ARD IDENTIFICA	HON	Vapor density	1.6 (air = 1)	Explosive lim
S Classificati			Training 1	Solubility in	570 mg/L @20°C &	Viscosity
vsical	Health:		Environmental:	water	100% O <sub>3</sub> ; 0.64 @0°C	μ
dizing Gas		tation – Category 3	Acute Aquatic	1	0. STABILITY AND	REACTIVIT
		ation – Category 2B	Toxicity -		y unstable and highly read	
		ory System Toxicity – / 1 (Single & Repeated)	Category I		stances. Ozone will readil	
TE: Settere re		toxicity will develop be			ler normal ambient tempe	
		ategories. Anyone with			•	
		a, should avoid exposi		11.	TOXICOLOGICA	
		orkplace Hazardous M			f exposure: inhalation, ey	
tem, Canada)	: C, D1À,	D2A, D2B, F			te Exposure: Discomfort,	
Source:	CCOHS C	HEMINFO Record Numb	er 774		tness of breath, pulmonar	
		001 000000000			sify symptoms. Possible i	
	3.	COMPOSITION			mic Exposure: Similar to	
mical name		Ozone			pment of chronic breathi	
nmon names		Triatomic oxyg	en, trioxygen		.6 ppm for 3 hours; hamst	
mical Formu		O3		Irritancy of Oz Sensitization to		YES
Registry N	umber	10028-15-6			v (NTP, LARC, OSHA)	NO
	4. I	TRST AID MEASU	RES			NO Not Proven
				Mutagenicity	loxicity, Teratogenicity,	Not Proven
e of Entr	_	Symptoms	First Aid		y Synergistic Products	Increased sus
ontact	YES	Irritation	Rinse with water	Toxicologically	y synergistic Products	allergens, pati
Absorption	_	NA	NA Dimo mith motor			
Contact	YES	Irritation	Rinse with water, remove contacts	1	2. ECOLOGICAL IN	FORMATIC
estion	NO	NA	NA	The immediate	surrounding area may be	adversely affect
tion	YES	NA Headache, cough,	NA Remove to fresh air,		particularly plant life. Dis	
andtion	153	heavy chest,	provide oxygen		e harmful to aquatic life.	
		shortness of breath	therapy as needed	bioaccumulatio	on will not occur, and the	area affected wi
severe cases	or if sum	ptoms don't improve, s		1	A DISDOCAL CONS	IDEDATION
			-		<ol> <li>DISPOSAL CONS ozone should be through</li> </ol>	
5.	FIRE	FIGHTING MEAS	URES		ozone should be through own to oxygen before rel	
		ole. As a strong oxidant		oreans ozoile d	own to oxygen before fel	ease mito me au
		or cause explosions. Us		1	4. TRANSPORT IN	FORMATIO
iguishing ag	ents are in	dicated for the burning	materials.		ABLE, as ozone is unstab	
6. A	CODEN	TAL RELEASE M	FASURES		nd must be generated at th	
		or, and ventilate the are			DECIT CODE	TODICIE
		or, and ventilate the are ife level (<0.1 ppm).	a. Evacuate until		5. REGULATORY I	
e revers sub	side to a si	ae ievei (~v.1 ppm).			Section 302 EHS TPQ: 1	
7. HANDLING AND STORAGE				SARA Title III Section 304, EHS RQ: 100 lbs.		
Ozone must be contained within ozone-resistant tubing and pipes from				Section 313: > 10,000 lb	s. used/year.	
		application point.		Sourc	e: EPA List of Lists	
					16. OTHER INFO	RMATION
		TROLS/PERSONA		Half-life of ozo	one in water at 20°C = 20	
		re Limit: 8 hour TWA			s significantly with increases	
HA Permissib		A 0.1 ppm, STEL 0.3 p	pm		air movement, and/or inci	
SHA Permissik NSI/ASTM: 8		ppm; STEL 0.3 ppm		continuents, t	and the second state of the	the second competer
SHA Permissib NSI/ASTM: 8 CGIH: 8 hour						
HA Permissik SI/ASTM: 8 GIH: 8 hour OSH: ELCV (	). <b>1 ppm l</b> i	ght; 0.08 ppm moderat				
HA Permissit ISI/ASTM: 8 GIH: 8 hour OSH: ELCV ( Light, mode	). <b>1 ppm li</b> rate, heavy	ght; 0.08 ppm moderate y work TWA <= 2 hour	s: 0.2 ppm			
SHA Permissib NSI/ASTM: 8 CGIH: 8 hour OSH: ELCV ( Light, mode Immediately	).1 ppm lij rate, heavy y Dangerou	ght; 0.08 ppm moderate y work TWA <= 2 hour is to Life or Health (ID	s: 0.2 ppm LH) 5 ppm			
HA Permissib ISI/ASTM: 8 ISI/ASTM: 8 CGIH: 8 hour OSH: ELCV ( Light, mode Immediately spiratory Pro	).1 ppm lij rate, heavy y Dangerou otection: U	ght; 0.08 ppm moderate y work TWA <= 2 hour is to Life or Health (ID Jse full face self-contain	s: 0.2 ppm LH) 5 ppm aed breathing			
SHA Permissib NSI/ASTM: 8 CGIH: 8 hour IOSH: ELCV ( Light, mode Immediately espiratory Pro paratus for ent	).1 ppm lig rate, heavy y Dangerou otection: U ering area	ght; 0.08 ppm moderate y work TWA <= 2 hour is to Life or Health (ID	s: 0.2 ppm LH) 5 ppm hed breathing tion of ozone.			

9. PI	IVSICAL AND CHE	MICAL PROPERT	TES
Physical state	Gas	pH	NA
Molecular Weight	48.0	Decomposition temperature	NA
Appearance	Clear at low concentration, blue at higher concentration	Evaporation rate	NA
Odor	Distinct pungent odor	Flash point	NA
Odor threshold	0.02 to 0.05 ppm; exposure desensitizes	Auto-ignition temperature	NA
Melting point	-193°C/-315°F	Relative density	NA
Boiling point	-112°C/-169°F	Partition coefficient	NA
Vapor pressure	> 1 atm	Flammability	NA
Vapor density	1.6 (air = 1)	Explosive limits	NA
Solubility in water	570 mg/L @20°C & 100% O <sub>3</sub> ; 0.64 @0°C	Viscosity	NA

ITY AND REACTIVITY I highly reactive. Avoid contact with e will readily react and spontaneously ibient temperatures.

decompose under normal amolent temperatures.					
11. TOXICOLOGICA	L INFORMATION				
Likely routes of exposure: inhalation, eye	es, skin exposure.				
Effects of Acute Exposure: Discomfort, i					
dry throat, shortness of breath, pulmonar					
exposure intensify symptoms. Possible in	rritation of skin and/or eyes.				
Effects of Chronic Exposure: Similar to acute exposure effects, with					
possible development of chronic breathing disorders, including asthma.					
LC50: mice, 12.6 ppm for 3 hours; hamsters, 35.5 ppm for 3 hours					
Irritancy of Ozone	YES				
Sensitization to Ozone	NO				
Carcinogenicity (NTP, IARC, OSHA)	NO				
Reproductive Toxicity, Teratogenicity,	Not Proven				
Mutagenicity					
Toxicologically Synergistic Products	Increased susceptibility to				
	allergens, pathogens, irritants				
12 FOOL OCICAL IN	TODICATION				
12. ECOLOGICAL INFORMATION					
The immediate surrounding area may be adversely affected by an					
ozone release, particularly plant life. Discharge of ozone in water					
solution may be harmful to aquatic life. Due to natural decomposition,					
bioaccumulation will not occur, and the area affected will be limited.					
13. DISPOSAL CONSIDERATIONS					
Off-gassing of ozone should be through an ozone destruct unit which					
breaks ozone down to oxygen before release into the atmosphere.					
14. TRANSPORT INFORMATION					
NOT APPLICABLE, as ozone is unstable and either reacts or					
decomposes, and must be generated at the location and time of use.					
15. REGULATORY INFORMATION					
SARA Title III Section 302 EHS TPQ: 100 lbs.					
SARA Title III Section 304, EHS RQ: 100 lbs.					
SARA Title III Section 313: > 10,000 lbs. used/year.					
Source: EPA List of Lists					

 $20^{\circ}C = 20 \text{ min}$ ; in dry still air at  $24^{\circ}C =$ 

with increase in humidity, presence of and/or increase in temperature.