

Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200)

Reviewed on 09/27/2017

1 Identification

OxNot LiquidBlast

Product identifier

Trade name: OxNot LiquidBlast – Part 2

Other Identifiers: Acidic Sodium Chlorine

Recommended use and restriction on use

Recommended use: Visual and microscopic decontamination of metal surfaces including removal of soluble salts, iron sulfides and other contaminants that interfere with coating/metal substrate adhesive interface.

Restrictions on use: Contact manufacturer.

Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier: equipment.

PI Industries, Inc.

8275 S Eastern Ave Suite # 200-882, Las Vegas NV 89123-2545

Emergency telephone number:

ChemTel Inc.

(800)255-3924, +1 (813)248-0585



2 Hazard(s) identification

Classification of the substance or mixture



GHS03

H272: May intensify fire; oxidizer



GHS07

H335: May cause respiratory irritation H315: Causes skin irritation

Additional information:

There are no other hazards not otherwise classified that have been identified.
0 percent of the mixture consists of ingredient(s) of unknown toxicity.

Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



Signal word Danger

Hazard-determining components of labeling:

Stabilized Liquid Chlorine Dioxide

Hazard statements

H315: Causes skin irritation.

Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200)

Reviewed on 09/27/2017

H335: May cause respiratory irritation.
H272: May intensify fire; oxidizer.
H320: Causes eye irritation

Precautionary statements

- P284 In case of inadequate ventilation wear respiratory protection.
- P261 Avoid breathing mist/vapors/spray.
- P280 Wear protective gloves and eye protection.
- P264 Wash thoroughly after handling.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P342+P311 If experiencing respiratory symptoms: Call a poison center/doctor.
- P363 Wash contaminated clothing before reuse.
- P304+P341 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P302+P352 If on skin: Wash with plenty of water.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**
- **Hazard description:**
- **WHMIS-symbols:** Not hazardous under WHMIS.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 0
Reactivity = 1

HMIS-ratings (scale 0 - 4)

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	E

Health = 1
Fire = 0
Reactivity = 1
Personal Protection = E

* - Indicates a long-term health hazard from repeated or prolonged exposures.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Reviewed on 09/27/2017

· **Dangerous components:**

10049-04-4	Stabilized Liquid Chlorine Dioxide Compounded with proprietary inert ingredient solution. Not considered hazardous at this concentration 29 CFR 1910.1200. The aqueous solution can off-gas and if the vapor is inhaled directly from the container it can temporarily irritate mucous membrane. Ingesting large amounts of the liquid may be harmful and cause stomach and intestinal problems. Always keep from eyes. Keep away from skin if irritation should occur.	<1.0%
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· **Additional information:**

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

4 First-aid measures

- **Description of first aid measures**
- **General information:** Take affected persons out into the fresh air.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
Breathing difficulty
Allergic reaction
Irritant to eyes.
Causes mild skin irritation.
Gastric or intestinal disorders when ingested.
- **Danger:** Danger of impaired breathing.
- **Indication of any immediate medical attention and special treatment needed**
Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.
Medical supervision for at least 48 hours.
If necessary oxygen respiration treatment.
Treat skin and mucous membrane with antihistamine and corticoid preparations.
Contains Stabilized Liquid Chlorine Dioxide. May produce an allergic reaction.
In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use firefighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Reviewed on 09/27/2017

- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire. ·
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
For large spills, wear protective clothing.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
Isolate area and prevent access.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**
Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).
Dispose contaminated material as waste according to item 13.
Send for recovery or disposal in suitable receptacles.
Prevent release of large amounts of material from entering any bodies of water or sewers particularly those discharging to the ocean. Dike the spill to prevent runoff. Have liquid removed by pumping to a tank or other appropriate waste container. If large amounts of wet earth remain then it should be removed by excavation. For small spillage, wear gloves and soak up liquid with paper towels or other absorbent material and dispose of properly.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Use only in well ventilated areas.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Provide ventilation for receptacles.
Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:**
Store well out of bright light or sunlight at temperatures below 110° F or 43° C. Material will become inactive if frozen (less than 32° For 0° C). Store in original containers.
Store away from foodstuffs.
- **Further information about storage conditions:** This product is stable if diluted on site for use in 1 – 3 weeks. Normally products are designed to be used as received and for the purpose designated on label instructions. This product is not compatible with sunlight or temperatures over 110° F (43° C) which lowers stability. Diluting the product with polluted water will lower efficacy and reactivity.
- **Specific end use(s)** No further relevant information available.

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Reviewed on 09/27/2017

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7. ·

- Components with limit values that require monitoring at the workplace:

10049-04-4 Stabilized Liquid Chlorine Dioxide.

This product is a liquid. Gas exposure limits normally should not apply.

Control parameters

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls:** Gas exposure limits are quoted here in the spirit of caution should a user of the product cause the product to decompose. OSHA PEL (permissible exposure limit) for ClO₂ gas is .1 PPM in an 8-hour weighted average.
NIOSH and ACGIH STEL (short term exposure limits) are .3 PPM for a period not exceeding 15 minutes. The STEL concentration should not be repeated over 4 times per day separated by a 60 minute interval.
- **Engineering controls:** Ensure that there is adequate ventilation to not exceed that gas exposure limit.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
- **Engineering controls:** No further relevant information available.
- **Breathing equipment:**
Use suitable respiratory protective device where aerosol or mist forms or high concentrations present.
- Recommended: NIOSH approved non-powered half mask air purifying respirator with organic vapor filters.
Minimum: NIOSH approved N-95 filtering facepiece respirator, organic vapor type.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time should be supplied by the protective gloves manufacturer and must be observed.

- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing **Limitation and supervision of exposure into the environment** Use in an environment where there is adequate ventilation. Do not use in an enclosed space. Monitor to ensure that the vapor exposure limit of .1 PPM is not exceeded.

9 Physical and chemical properties**Information on basic physical and chemical properties ·****General Information · Appearance:****Form:** Liquid.**Color:** Light Yellow Liquid at low concentrations
Golden Color at higher concentrations

Should the product become inactive due to improper storage, it will be clear.

Odor: Faint chlorine odor. User should not infer concentration or efficacy from odor or appearance.**Odor threshold:** Not determined.**Change in condition****Boiling point/Boiling range:** >100 °C (>212 °F)**Flash point:** Not applicable.**Flammability (solid, gaseous):** Not applicable.**Auto-ignition temperature:** Not determined.**Decomposition temperature:** Not determined.**Auto igniting:** Product is not self-igniting.**Danger of explosion:** Product does not present an explosion hazard.**Explosion limits:****Lower:** Not determined.**Upper:** Not determined.**Oxidizing properties** Contains oxidizing agent.**Relative density** Not determined.**Vapor density** Not determined.**Evaporation rate** Not determined.**Solubility in / Miscibility with Water:** Easily soluble.**Partition coefficient (n-octanol/water):** Not determined.**Viscosity:****Dynamic:** Not determined. **Kinematic:** Not determined.**Specific Gravity:** 1

10 Stability and reactivity

Reactivity

Hazardous Polymerization: NA

Hazardous Decomposition: NA

Chemical Stability:

This product is stable as received for six months at room temperatures and not in sunlight.

This product is stable as received (packaged) and refrigerated for about 1 year.

This product is stable if diluted on site for use in 1 – 3 weeks. Normally products are designed to be used as received and for the purpose designated on label instructions.

Incompatibility

This product is not compatible with sunlight or temperatures over 110° F (43° C) which lowers stability. Diluting the product with polluted water will lower efficacy and reactivity.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications. If allowed to decompose, gas may form. Gas can irritate mucous membrane and respiratory tract.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **on the skin:** Causes mild skin irritation.
- **on the eye:** Irritating effect.
- **Sensitization:** May cause sensitization by inhalation and skin contact.
- **Subacute to chronic toxicity:** No further relevant information available.
- **Additional toxicological information:** Toxic and/or corrosive effects may be delayed up to 24 hours.

Target Organ Effects:

Gas is an irritant to mucous membrane and particularly the respiratory tract. Product should be kept from the eyes at all times, the vapors should not be inhaled, higher concentrations should be kept from the skin. The product is a very dilute suspension of the gas in purified water. Gas can escape

- **Carcinogenic categories**

· NTP (National Toxicology Program)
None of the ingredients is listed.
· OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

· Probable Routes of Exposure

Inhalation.

Ingestion.

Eye contact.

Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

May cause sensitization by inhalation and skin contact.

Irritating to eyes.

· Repeated Dose Toxicity:

May cause damage to organs through prolonged or repeated exposure.

Repeated exposures may result in skin and/or respiratory sensitivity.

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Reviewed on 09/27/2017

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Must not reach bodies of water or drainage ditch.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods** ·
Recommendation:
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **Uncleaned packagings:** Dispose of as unused product
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

Corrosive liquid n.o.s., (0.1% Stabilized Liquid Chlorine Dioxide), 8, UN1760, PG III

UN-Number: UN1760

DOT, ADR, ADN, IMDG, IATA

UN proper shipping name: Corrosive liquid n.o.s., (0.1% Stabilized Liquid Chlorine Dioxide.)

DOT, ADR, ADN, IMDG, IATA

Transport hazard class(es):

DOT, ADR, ADN, IMDG, IATA Class: Class 8

Packing group

DOT, ADR, IMDG, IATA: PGIII

Under USDOT regulations, the transport of corrosive gas is forbidden. However, dilute solutions are safe and permitted. The product is classified as a Class 8 corrosive, and is classified as a Hazardous Material (HazMat) under requirements of 49 C.F.R. All packaging, labeling, and shipping papers must conform to DOT regulations.

- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

Safety Data Sheet

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· Section 355 (extremely hazardous substances):
None of the ingredients is listed.
· Section 313 (Specific toxic chemical listings):
Does not exceed threshold
· TSCA (Toxic Substances Control Act):
All ingredients are listed.
15 Regulatory information
· Safety, health and environmental regulations/legislation specific for the substance or mixture
· United States (USA) SARA
· Chemicals known to cause cancer:
None of the ingredients are listed.
· Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.
· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.
Proposition 65 (California) :
Carcinogenic categories:
· EPA (Environmental Protection Agency)
Ingredients are listed EPA Accidental Release 40 CFR 68: >1,000 lbs..
· IARC (International Agency for Research on Cancer)
None of the ingredients is listed.
· TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.
· NIOSH-Ca (National Institute for Occupational Safety and Health)
Ingredients are listed. OSHA Process Safety Mgt. 29CFR 1910: >1,000 lbs
· State Right to Know Listings
Contact manufacturer.

Safety Data Sheet

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Canadian substance listings:

- **Canadian Domestic Substances List (DSL)**

Contact manufacturer.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

Contact manufacturer.

- **Canadian Ingredient Disclosure list (limit 1%)**

Contact manufacturer.

- **Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 10/24/2017

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

- **Sources**

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