Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
9.77-<29.30% Chlorine and ≤23.5% Oxygen in Helium, Nitrogen, or Argon

Product Description
Classification determined in accordance with Compressed Gas Association standards.

Product Use
Industrial and Specialty Gas Applications.

Restrictions on Use
None known.

Details of the supplier of the safety data sheet
MATHESON TRI-GAS, INC.
150 Allen Road, Suite 302
Basking Ridge, NJ 07920
General Information: 1-800-416-2505
Emergency #: 1-800-424-9300 (CHEMTREC)
Outside the US: 703-527-3887 (Call collect)

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.
Oxidizing Gases - Category 1
Gases Under Pressure - Compressed gas
Acute Toxicity - Inhalation - Gas - Category 2
Skin Corrosion/Irritation - Category 1
Serious Eye Damage/Eye Irritation - Category 1
Specific Target Organ Toxicity - Single Exposure - Category 3
Simple Asphyxiant

GHS Label Elements
Symbol(s)

Signal Word
Danger

Hazard Statement(s)
May cause or intensify fire; oxidizer.
Contains gas under pressure; may explode if heated.
Fatal if inhaled.
Causes severe skin burns and eye damage.
May cause respiratory irritation.
May displace oxygen and cause rapid suffocation.

Precautionary Statement(s)
Prevention
Safety Data Sheet

Material Name: 9.77-<29.30% Chlorine and ≤23.5% Oxygen in Helium, Nitrogen, or Argon  

SDS ID: 00244897

Keep valves and fittings free from oil and grease.  
Keep/Store away from clothing/combustible materials.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
Wear respiratory protection.  
Wash thoroughly after handling.

Response  
In case of fire: stop leak if safe to do so.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

Storage  
Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.  
Protect from sunlight.

Disposal  
Dispose of contents/container in accordance with local/regional/national/international regulations.

Statement(s) of Unknown Acute Toxicity  
Inhalation 70.7001% of the mixture consists of ingredient(s) of unknown acute toxicity.

Other Hazards  
The rapid release of compressed gas may cause frostbite.

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-59-7</td>
<td>Helium</td>
<td>&lt;91</td>
</tr>
<tr>
<td>7727-37-9</td>
<td>Nitrogen</td>
<td>&lt;91</td>
</tr>
<tr>
<td>7440-37-1</td>
<td>Argon</td>
<td>&lt;91</td>
</tr>
<tr>
<td>7782-50-5</td>
<td>Chlorine</td>
<td>9.77-&lt;29.30</td>
</tr>
<tr>
<td>7782-44-7</td>
<td>Oxygen</td>
<td>0-23.5</td>
</tr>
</tbody>
</table>

Section 4 - FIRST AID MEASURES

Inhalation  
If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

Skin  
If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115°F; 41-46°C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.
Safety Data Sheet

Material Name: 9.77-%29.30% Chlorine and ≤23.5% Oxygen in Helium,
Nitrogen, or Argon

Eyes
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Then get immediate medical attention.

Ingestion
If swallowed, get medical attention.

Most Important Symptoms/Effects

Acute
Fatal if inhaled, frostbite, suffocation, skin burns, eye damage, respiratory tract irritation

Delayed
No information on significant adverse effects.

Note to Physicians
For inhalation, consider oxygen.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media
water spray or fog

Unsuitable Extinguishing Media
Do not use high-pressure water streams.

Special Hazards Arising from the Chemical
May intensify fire; oxidizer. Containers may rupture or explode if exposed to heat.

Hazardous Combustion Products
Chlorine, miscellaneous decomposition products

Fire Fighting Measures
Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Apply water from a protected location or from a safe distance. Do not direct water at source of leak or safety devices; icing may occur. Reduce vapors with water spray: Consider downwind evacuation if material is leaking. For tank, rail car or tank truck. Evacuation radius: 800 meters (1/2 mile). Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Special Protective Equipment and Precautions for Firefighters
Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up
Stop leak if possible without personal risk. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Eliminate all ignition sources if safe to do so. Take any precaution to avoid mixing with combustibles. Reduce vapors with water spray. Do not direct water at spill or source of leak. Isolate area until gas has dispersed. Stop leak if safe to do so. Prevent entry into waterways, drains, or confined areas. Do not touch spilled material. Eliminate all ignition sources if safe to do so. Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. Damaged cylinders should be handled only by specialists.

Environmental Precautions
Avoid release to the environment. Collect spillage.
Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Do not breathe gas. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear respiratory protection. Wear protective gloves/clothing and eye/face protection. Do not eat, drink, or smoke when using this product. Avoid release to the environment. Damaged cylinders should be handled only by specialists.

Conditions for Safe Storage, Including any Incompatibilities
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Protect from sunlight.
Store and handle in accordance with all current regulations and standards.

Incompatible Materials
combustible materials, bases, metals, halogens, metal salts, reducing agents, amines, metal carbide, metal oxides, oxidizing materials, halo carbons, acids

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure Limit</th>
</tr>
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<tbody>
<tr>
<td>Helium</td>
<td>7440-59-7</td>
</tr>
<tr>
<td>ACGIH:</td>
<td>(See Appendix F: Minimal Oxygen Content )</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>7727-37-9</td>
</tr>
<tr>
<td>ACGIH:</td>
<td>(See Appendix F: Minimal Oxygen Content )</td>
</tr>
<tr>
<td>Argon</td>
<td>7440-37-1</td>
</tr>
<tr>
<td>ACGIH:</td>
<td>(See Appendix F: Minimal Oxygen Content )</td>
</tr>
<tr>
<td>Chlorine</td>
<td>7782-50-5</td>
</tr>
<tr>
<td>ACGIH:</td>
<td>0.5 ppm TWA</td>
</tr>
<tr>
<td></td>
<td>1 ppm STEL</td>
</tr>
<tr>
<td>NIOSH:</td>
<td>0.5 ppm Ceiling 15 min ; 1.45 mg/m3 Ceiling 15 min</td>
</tr>
<tr>
<td></td>
<td>10 ppm IDLH</td>
</tr>
<tr>
<td>Europe:</td>
<td>0.5 ppm STEL ; 1.5 mg/m3 STEL</td>
</tr>
<tr>
<td>OSHA (US):</td>
<td>1 ppm Ceiling ; 3 mg/m3 Ceiling</td>
</tr>
<tr>
<td>Mexico:</td>
<td>1 ppm TWA VLE-PPT ; 3 mg/m3 TWA VLE-PPT</td>
</tr>
<tr>
<td></td>
<td>3 ppm STEL [PPT-CT ] ; 9 mg/m3 STEL [PPT-CT ]</td>
</tr>
</tbody>
</table>

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)
There are no biological limit values for any of this product's components.
Safety Data Sheet

Material Name: 9.77-%<29.30% Chlorine and ≤23.5% Oxygen in Helium, Nitrogen, or Argon

SDS ID: 00244897

Engineering Controls
Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment
Eye/face protection
Wear splash resistant safety goggles with a faceshield. Contact lenses should not be worn. Provide emergency eye wash supplies in the immediate work area.

Skin Protection
For the gas: Wear appropriate chemical resistant clothing. For the liquid: Wear appropriate protective, cold insulating clothing.

Respiratory Protection
Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use. For Unknown Concentrations or Immediately Dangerous to Life or Health - Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

Glove Recommendations
For the gas: Protective gloves are not required, but recommended. For the liquid: Wear chemical resistant, insulated gloves.

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>colorless gas</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
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</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>Not available</td>
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<tr>
<td><strong>Boiling Point</strong></td>
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</tr>
<tr>
<td><strong>Boiling Point Range</strong></td>
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</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>Not available</td>
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<tr>
<td><strong>Autoignition Temperature</strong></td>
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</tr>
<tr>
<td><strong>Lower Explosive Limit</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Upper Explosive Limit</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Density (air=1)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Water Solubility</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Solubility (Other)</strong></td>
<td>Not available</td>
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<tr>
<td><strong>Physical Form</strong></td>
<td>Compressed Gas</td>
</tr>
<tr>
<td><strong>Physical State</strong></td>
<td>gas</td>
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<tr>
<td><strong>Color</strong></td>
<td>colorless</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Freezing point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Non-flammable</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Specific Gravity (water=1)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Kinematic viscosity</strong></td>
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<tr>
<td><strong>Density</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Molecular Weight</strong></td>
<td>Not available</td>
</tr>
</tbody>
</table>

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Section 10 - STABILITY AND REACTIVITY

Reactivity
May intensify fire; oxidizer.

Chemical Stability
Stable at normal temperatures and pressure. May intensify fire; oxidizer.

Possibility of Hazardous Reactions
Will not polymerize.

Conditions to Avoid
Avoid heat, flames, sparks and other sources of ignition. Keep away from combustible material. Minimize contact with material. Protect from physical damage. Containers may rupture or explode if exposed to heat.

Incompatible Materials
combustible materials, bases, metals, halogens, metal salts, reducing agents, amines, metal carbide, metal oxides, oxidizing materials, halo carbons, Acids

Hazardous decomposition products
Chlorine, miscellaneous decomposition products

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation
burns, vomiting, chest pain, difficulty breathing, headache, dizziness, hyperactivity, emotional disturbances, bluish skin color, lung congestion, lung damage, death, lack of sense of smell, tooth decay

Skin Contact
frostbite, skin burns

Eye Contact
frostbite, eye damage

Ingestion
ingestion of a gas is unlikely

Acute and Chronic Toxicity

Component Analysis - LD50/LC50
The components of this material have been reviewed in various sources and the following selected endpoints are published:

Chlorine (7782-50-5)
Oral LD50 Rat 5800 mg/kg (females )
Inhalation LC50 Rat 293 ppm 1 h

Product Toxicity Data
Acute Toxicity Estimate

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation - Gas</td>
<td></td>
<td>146.5 ppm</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Immediate Effects
Fatal if inhaled, frostbite, suffocation, skin burns, eye damage, respiratory tract irritation

Delayed Effects
No information on significant adverse effects

Irritation/Corrosivity Data
skin burns, eye damage

Respiratory Sensitization
No data available.
Safety Data Sheet

Material Name: 9.77-<29.30% Chlorine and ≤23.5% Oxygen in Helium, Nitrogen, or Argon

Dermal Sensitization
No data available.

Component Carcinogenicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogenicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>A4 - Not Classifiable as a Human Carcinogen</td>
</tr>
</tbody>
</table>

Germ Cell Mutagenicity
No data available.

Tumorigenic Data
No data available

Reproductive Toxicity
No data available.

Specific Target Organ Toxicity - Single Exposure
respiratory tract

Specific Target Organ Toxicity - Repeated Exposure
No target organs identified

Aspiration hazard
Not applicable

Medical Conditions Aggravated by Exposure
No data available.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Aquatic Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine 7782-50-5</td>
<td>LC50 96 h Lepomis macrochirus 0.44 mg/L [flow-through ]; LC50 96 h Oncorhynchus mykiss 0.014 mg/L [flow-through ]; LC50 96 h Oncorhynchus mykiss 0.014 mg/L; LC50 96 h Oncorhynchus mykiss 0.104 - 0.168 mg/L [static ]; LC50 96 h Pimephales promelas 0.08 mg/L [flow-through ]; LC50 96 h Pimephales promelas 0.1 mg/L</td>
</tr>
</tbody>
</table>

Invertebrate: LC50 48 h Daphnia magna 0.017 mg/L IUCLID

Persistence and Degradability
No data available for the mixture.

Bioaccumulative Potential
No data available for the mixture.

Mobility
No data available for the mixture.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose in accordance with all applicable regulations.

Component Waste Numbers
The U.S. EPA has not published waste numbers for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information:
Shipping Name: COMPRESSED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S. , (Contains: Chlorine ,
Safety Data Sheet

Material Name: 9.77-%29.30% Chlorine and ≤23.5% Oxygen in Helium, Nitrogen, or Argon

second highest concentration component

Hazard Class: 2.3
UN/NA #: UN3306
Required Label(s): 2.3, 5.1, 8
Further information: Inhalation Hazard Zone B

IMDG Information:
Shipping Name: COMPRESSED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S., (Contains: Chlorine, second highest concentration component)
Hazard Class: 2.3
UN#: UN3306
Required Label(s): 2.3, 5.1, 8
International Bulk Chemical Code
This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations
This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Chlorine 7782-50-5
SARA 302: 100 lb TPQ
SARA 313: 1% de minimis concentration
CERCLA: 10 lb final RQ; 4.54 kg final RQ
OSHA (safety): 1500 lb TQ
SARA 304: 10 lb EPCRA RQ

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories
Gas Under Pressure; Oxidizer; Acute toxicity; Skin Corrosion/Irritation; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity; Simple Asphyxiant

U.S. State Regulations
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helium</td>
<td>7440-59-7</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>7727-37-9</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Argon</td>
<td>7440-37-1</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Chlorine</td>
<td>7782-50-5</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Safety Data Sheet

Material Name: 9.77-%2C.30% Chlorine and ≤23.5% Oxygen in Helium, Nitrogen, or Argon

| Oxygen  | 7782-44-7 | No | Yes | No | Yes | Yes |

Not listed under California Proposition 65

Canada Regulations

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL.

| Chlorine  | 7782-50-5 | 1 % |

Component Analysis - Inventory

Helium (7440-59-7)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
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<td>Yes</td>
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<td>Yes</td>
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</table>

Nitrogen (7727-37-9)

<table>
<thead>
<tr>
<th></th>
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Argon (7440-37-1)

<table>
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</thead>
<tbody>
<tr>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Chlorine (7782-50-5)
## Section 16 - OTHER INFORMATION

### NFPA Ratings
Health: 3 Fire: 0 Reactivity: 0 Other: OX, SA

<table>
<thead>
<tr>
<th>Hazard Scale:</th>
<th>Minimal 1</th>
<th>Slight 2</th>
<th>Moderate 3</th>
<th>Serious 4</th>
<th>Severe</th>
</tr>
</thead>
</table>

### Summary of Changes
New SDS: 04/04/2017

### Key / Legend
- ACGIH - American Conference of Governmental Industrial Hygienists
- ADR - European Road Transport
- AU - Australia
- BOD - Biochemical Oxygen Demand
- C - Celsius
- CA - Canada
- CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania
- CAS - Chemical Abstracts Service
- CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
- CFR - Code of Federal Regulations (US)
- CLP - Classification, Labelling, and Packaging
- CN - China
- CPR - Controlled Products Regulations
- DFG - Deutsche Forschungsgemeinschaft
- DOT - Department of Transportation
- DSD - Dangerous Substance Directive
- ENCS - Japan Existing and New Chemical Substance Inventory
- EC - European Commission
- EEC - European Economic Community
- EINECS - European Inventory of Existing Chemical Substances
- EU - European Union
- F - Fahrenheit
- F - Background (for Venezuela Biological Exposure Indices)
- IARC - International Agency for Research on Cancer
- IATA - International Air Transport Association
- ICAO - International Civil Aviation Organization
- IDL - Ingredient Disclosure List
- IDLH - Immediately Dangerous to Life and Health
- IMDG - International Maritime Dangerous Goods
- ISHL - Japan Industrial Safety and Health Law
- IUCLID - International Uniform Chemical Information Database
- JP - Japan
- Kow - Octanol/water partition coefficient
- KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI)
- KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI)
- LD50/LC50 - Lethal Dose/ Lethal Concentration
- LOLI - List Of Lists™
- MAK - Maximum Concentration Value in the Workplace
- MEL - Maximum Exposure Limits
- MX - Mexico
- Ne - Non-specific
- NFPA - National Fire Protection Agency
- NIOSH - National Institute for Occupational Safety and Health
- NILM - Notification of International Limitation of Materials
- OLCI - Organic Local Chem and/or Drug Index
- OMG - Office of Management and Budget
- OA - Oxygen Amperometric
- OEL - Occupational Exposure Limit
- OSHA - Occupational Safety and Health Administration
- OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limit
- PEL - Permissible Exposure Limit
- PH - Philippines
- RID - Recommendations for the International Transport of Dangerous Goods
- S - Sump
- SDI - Safe Delivery Instructions
- SLC - Solvent Lower Explosive Limit
- SLV - Solvent Limit Value
- SMAR - Standard Method of Analysis and Rating
- SNI - Standard Norma Indonesia
- SRB - Schedule of Refining Products
- TTH - Typical Thickness
- VLS - Volumetric Lower Explosive Limit
- W - Working
- WHO - World Health Organization
- VN (Draft) - Vietnam (Draft)
Safety Data Sheet

Material Name: 9.77-%29.30% Chlorine and ≤23.5% Oxygen in Helium, Nitrogen, or Argon

NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL – Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL - Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

Other Information

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