

8461

WHITE LITHIUM GREASE

# Safety Data Sheet

## Section 1: Identification

### Product Identifier and Other Means of Identification

**Product Name:** 8461**Other Means of Identification:** White Lithium Grease**Related Part #** 8461-85ML, 8461-1P

### Recommended Use and Restriction on Use

**Use:** Multi-purpose lubricant**Uses Advised Against:** Not applicable

### Details of Manufacturer or Importer

**Manufacturer**MG Chemicals  
1210 Corporate Drive  
Burlington, Ontario L7L 5R6  
CANADAMG Chemicals (Head Office)  
9347-193 Street  
Surrey, British Columbia V4N 4E7  
CANADA**☎** +1-800-340-0772**FAX** +1-800-340-0773**E-MAIL** [support@mgchemicals.com](mailto:support@mgchemicals.com)**WEB** [www.mgchemicals.com](http://www.mgchemicals.com)**☎** +1-905-331-1396**FAX** +1-905-331-2682**E-MAIL** [info@mgchemicals.com](mailto:info@mgchemicals.com)**E-MAIL** (Competent Person): [sds@mgchemicals.com](mailto:sds@mgchemicals.com)

### Emergency Phone Number


**For hazardous material incidents ONLY** (leaks, spills, fires, exposures or accidents)  
USA or CANADA—Call Verisk 3E at **+1-866-519-4752** or **+1-760-476-3962**  
(Service access code: 335388)**For emergencies involving the transport of dangerous goods;** 24/7 service  
CANADA—Call CANUTEC collect at **+1-613-996-6666** or **\*666** on cellular phones

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**Section 2: Hazards Identification**
**Classification of Hazardous Chemical**
**GHS Categories**

Criteria	Category	Signal Word	Pictograms
Hazardous to the Aquatic Environment Chronic	2	None	Environment

*Note:* The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

**Label Elements**

<b>Signal Word</b>	<i>No signal word</i>
<b>Pictograms</b>	<b>Hazard Statements</b>
	H411: Toxic to aquatic life with long lasting effects
<b>Prevention</b>	<b>Precautionary Statements</b>
P273	Avoid release to the environment.
<b>Response</b>	<b>Precautionary Statements</b>
P391	Collect spillage.
<b>Disposal</b>	<b>Precautionary Statements</b>
P501	Dispose of contents in accordance to local, regional, national, and international regulations.

**Hazards Not Otherwise Classified**

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
None	None	None	None

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**Section 3: Composition/Information on Ingredients**

CAS #	Chemical Name	%(weight)
64742-65-0	distillates (petroleum), solvent-dewaxed heavy paraffinic <sup>a)</sup>	62%
64742-62-7	residual oils (petroleum), solvent-dewaxed <sup>a)</sup>	27%
7620-77-1	lithium 12-hydroxystearate	5%
1314-13-2	zinc oxide	4%
13463-67-7	titanium dioxide	1%

a) Mineral oils

**Section 4: First-Aid Measures**
*Exposure Condition*
*GHS Code: Precautionary Statement*

<b>IF IN EYES</b>	P305 + P351 + P338, P337 + P313
<b>Immediate Symptoms</b>	<i>low toxicity—redness, mild irritation</i>
<b>Response</b>	Rinse cautiously with water for 15 minutes or more. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
<b>IF ON SKIN</b>	P302 + P352, P332 + P313
<b>Immediate Symptoms</b>	<i>low toxicity—redness, mild irritation</i>
<b>Response</b>	Wash with plenty of water. If skin irritation occurs: Get medical advice or attention.
<b>IF INHALED</b>	P304 + P340, P314
<b>Immediate Symptoms</b>	<i>low toxicity—without known symptoms or adverse effects</i>
<b>Response</b>	Remove person to fresh air and keep comfortable for breathing. If you feel unwell: Get medical advice or attention.
<b>IF SWALLOWED</b>	P301 + P330 + P331
<b>Immediate Symptoms</b>	<i>low toxicity: nausea, abdominal pain, diarrhea, vomiting</i>
<b>Response</b>	Rinse mouth. Do NOT induce vomiting.

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**Section 5: Fire-Fighting Measures**

<b>Response</b>	In case of fire: Use extinguishing media suitable for surrounding materials.
<b>Specific Hazards</b>	In a fire, this product can release zinc oxide fumes. Zinc oxide fumes exposure may lead to metal fume fever. The metal fume fever symptoms may occur 4 to 12 hours after initial exposure. Water may cause frothing.
<b>Combustion Products</b>	Combustion produces carbon oxides (CO, CO <sub>2</sub> ) and zinc oxide fumes.
<b>Fire-Fighter</b>	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

**Section 6: Accidental Release Measures**

<b>Personal Protection</b>	See personal protection equipment in Section 8.
<b>Precautions for Response</b>	Remove or keep away all sources of ignition or extreme heat. Avoid breathing fumes.
<b>Environmental Precautions</b>	Avoid release to the environment. Prevent spill from entering drains and waterways.
<b>Containment Methods</b>	Not applicable—not readily flowable
<b>Cleaning Methods</b>	Collect the spilled material in a waste container. Wipe off residues with paper towels and place the used towels in the waste container. Use water to remove the last traces of residue.
<b>Disposal Methods</b>	Dispose of spill waste according to Section 13.

**Section 7: Handling and Storage**

<b>Prevention</b>	Keep out of reach of children. Keep away from open flames and hot surfaces. Avoid breathing fumes.
<b>Handling</b>	Wear protective gloves and eye protection. Wash hands thoroughly after handling.
<b>Storage</b>	<b>RECOMMENDATION:</b> Keep in a dry and clean area, away from incompatible substances.

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**Section 8: Exposure Controls/Personal Protection**
**Substances with Occupational Exposure Limit Values**

<b>Chemical Name</b>	<b>Country</b>	<b>Long Term Exposure Limits (PEL)</b>	<b>Short Term Exposure Limits (STEL)</b>
distillates (petroleum), solvent-dewaxed heavy paraffinic	ACGIH	5 mg/m <sup>3</sup>	Not established
	U.S.A. OSHA PEL	5 mg/m <sup>3</sup>	Not established
	Canada AB	5 mg/m <sup>3</sup>	Not established
	Canada BC	5 mg/m <sup>3</sup>	Not established
	Canada ON	5 mg/m <sup>3</sup>	Not established
	Canada QC	5 mg/m <sup>3</sup>	Not established
residual oils (petroleum), solvent-dewaxed	ACGIH	5 mg/m <sup>3</sup>	Not established
	U.S.A. OSHA PEL	5 mg/m <sup>3</sup>	Not established
	Canada AB	5 mg/m <sup>3</sup>	Not established
	Canada BC	5 mg/m <sup>3</sup>	Not established
	Canada ON	5 mg/m <sup>3</sup>	Not established
	Canada QC	5 mg/m <sup>3</sup>	Not established
zinc oxide (dust/mist)	ACGIH	2 mg/m <sup>3</sup>	Not established
	U.S.A. OSHA PEL	2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
	Canada AB	2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
	Canada BC	2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
	Canada ON	2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
	Canada QC	2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
fumes			
titanium dioxide	ACGIH	10 mg/m <sup>3</sup>	Not established
	U.S.A. OSHA PEL	15 mg/m <sup>3</sup>	Not established
	Canada AB	10 mg/m <sup>3</sup>	Not established
	Canada BC	10 mg/m <sup>3</sup>	Not established
	Canada ON	10 mg/m <sup>3</sup>	Not established
	Canada QC	10 mg/m <sup>3</sup>	Not established

*Note:* Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH<sup>1</sup>, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from the RTECS database<sup>2</sup> and from suppliers' SDS were also consulted. Short term exposure limits (STEL) are usually for 15 min and long term permissible exposure limits (PEL) for 8 h.

*Section continued on the next page*

**8461****WHITE LITHIUM GREASE****Engineering Controls****Ventilation**

Keep airborne concentrations below the occupational exposure limits (OEL).

Because titanium dioxide is bound to the grease matrix, it does not present an airborne hazard under normal use. Ensure adequate ventilation if the product is mechanically misted or aerosolized.

**Personal Protective Equipment****Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles.

**RECOMMENDATION:** Use safety glasses with lateral protection (side shields).

**Skin Protection**

For likely contacts, use of protective nitrile, neoprene, polyethylene gloves or other chemically resistant gloves.

For incidental contacts, use disposable nitrile or neoprene gloves, or other chemically resistant gloves.

**Respiratory Protection**

Not normally required for routine operations, but if exposed to high levels of mist or vapors, wear respirator such as a half-mask respirator with suitable organic vapor cartridge and particulate filter.

If exposed to thermal degradation products from extreme heat or combustion conditions, wear a NIOSH approved self-contained breathing apparatus (SCBA) or supplied air respirator.

**RECOMMENDATION:** Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

**General Hygiene Considerations**

Wash hands thoroughly with water and soap after handling.

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**Section 9: Physical and Chemical Properties**

<b>Physical State</b>	Solid	<b>Lower Flammability Limit</b>	Not available
<b>Appearance</b>	Off white	<b>Upper Flammability Limit</b>	Not available
<b>Odor</b>	Odorless	<b>Vapor Pressure @20 °C</b>	Not available
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	Not available
<b>pH</b>	Not available	<b>Relative Density @25 °C</b>	0.89
<b>Freezing/Melting Point</b>	185 °C [365 °F]	<b>Solubility in Water</b>	Insoluble
<b>Initial Boiling Point</b>	371 °C [700 °F]	<b>Partition Coefficient n-octanol/water</b>	Not available
<b>Flash Point</b>	185 °C [365 °F]	<b>Auto-ignition Temperature</b>	254 °C [490 °F]
<b>Evaporation Rate</b>	Not available	<b>Decomposition Temperature</b>	Not available
<b>Flammability</b>	Non Flammable	<b>Viscosity @40 °C</b>	>20.5 mm <sup>2</sup> /s

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	<p>When the product is exposed to very high heat such as welding or when mechanically aerosolized, this may cause harmful zinc oxide fumes.</p> <p>Inhalation of fumes may cause metal fever and irritate the respiratory tract. The flu-like symptoms of metal fume fever may be delayed, occurring 4–12 hours after exposure.</p>
<b>Chemical Stability</b>	Chemically stable at normal temperatures and pressures
<b>Conditions to Avoid</b>	Avoid open flames, very high heat (such as soldering and welding temperatures), and incompatible substances.
<b>Incompatibilities</b>	Strong oxidizing agents
<b>Polymerization</b>	Will not occur
<b>Decomposition</b>	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

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**Section 11: Toxicological Information**
**Summary of Effects and Symptoms by Routes of Exposure**

<b>Eyes</b>	Low toxicity—May cause redness and mild eye irritation.
<b>Skin</b>	Low toxicity—May cause redness and mild skin irritation.
<b>Inhalation</b>	No known harmful effects expected under normal use. Under extreme heat, inhalation of fumes may lead to metal fume fever.
<b>Ingestion</b>	Low toxicity—May cause nausea, abdominal pain, diarrhea, and vomiting.
<b>Chronic</b>	Not available

**Acute Toxicity (Lethal Exposure Concentrations)**

<b>Chemical Name</b>	<b>LD50 oral</b>	<b>LD50 dermal</b>	<b>LC50 inhalation</b>
distillates (petroleum), solvent-dewaxed heavy paraffinic	>5 000 mg/kg Rat	>2 000 mg/kg Rat	>5.53 mg/L Rat (mist)
residual oils (petroleum), solvent-dewaxed	>5 000 mg/kg Rat	>5 000 mg/kg Rat	>5.53 mg/L Rat (mist)
lithium 12-hydroxystearate	>2 000 mg/kg Rat	>2 000 mg/kg Rat	Not available
zinc oxide	7 950 mg/kg Rat	>2 000 mg/kg Rat	2 500 mg/m <sup>3</sup> Mouse
titanium dioxide	5 000 mg/kg Rat	Not available	4.99 mg/L Rat

*Note:* Toxicity data from the RTECS<sup>2</sup> and ECHA databases were consulted. The data from supplier SDSs' were also consulted.

*Section continued on the next page*



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**Other Toxicological Effects**

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/irritation</b>	Based on available data, the classification criteria are not met.
<b>Sensitization</b> (allergic reactions)	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b> (risk of cancer)	<p>The mineral oils (CAS# 64742-65-0 and 64742-62-7) are not classified as a carcinogen as it contains &lt;3% DMSO extract measured according to IP 346.</p> <p>The titanium dioxide [13463-67-7] is possibly carcinogenic by airborne routes of exposures. Because the titanium is bound in grease mixture, it is not available as an airborne hazard under normal use.</p> <p><b>Titanium Dioxide [13463-67-7]</b></p> <p>IARC Group 2B: Possibly carcinogenic to humans</p> <p>ACGIH A4: Not classified as a human carcinogen</p> <p>CA Prop 65: Listed as a carcinogen (airborne, as unbound particles of respirable size)</p> <p>NTP: Not listed</p>
<b>Mutagenicity</b> (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.
<b>Reproductive Toxicity</b> (risk to sex functions)	Based on available data, the classification criteria are not met.
<b>Teratogenicity</b> (risk of fetus malformation)	Based on available data, the classification criteria are not met.
<b>STOT-single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met. The mixture contains over 80% Cat 1 aspiration hazard components; however, the viscosity at 40 °C is >20.5 mm <sup>2</sup> /s.

**8461****WHITE LITHIUM GREASE****Section 12: Ecological Information**

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<http://echa.europa.eu>), and other reliable sources.

Contains zinc oxide which is an acute and chronic category 1 solid (non-biodegradable, minimal LC50 of 0.042 mg/L) that is harmful to the environment.

Based on available data, lithium 12-hydroxystearate, distillates (petroleum) solvent-dewaxed heavy paraffinic, residual oils (petroleum) solvent-dewaxed, and titanium dioxide is not classified as environmental hazards according to GHS criteria.

**Acute Ecotoxicity**

See chronic ecotoxicity.

**Chronic Ecotoxicity**

Category 2

Toxic to aquatic life with long lasting effects.

Avoid release to the environment. Collect spillage.

**Biodegradability**

Not available

**Other Effects**

Not available

**Section 13: Disposal Information**

Dispose of contents in accordance with all local, regional, national, and international regulations.

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**Section 14: Transport Information**

**Ground**

**Refer to TDG regulations** (Canadian Transportation of Dangerous Goods regulations); **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Sizes under 450 kg  
8461-85ML, 8461-1P  
**NOT REGULATED** in TDG  
per Special Provisions 99

Sizes 5 kg and under:  
8461-85ML, 8461-1P  
**NOT REGULATED** in 49 CFR  
per exception 171.4 (c)(2)

Sizes greater to 5 kg (U.S.)

*FOR REFERENCE ONLY*

**UN number:** UN3077

**Shipping Name:** ENVIRONMENTALLY  
HAZARDOUS SUBSTANCE, SOLID,  
N.O.S. (zinc oxide)

**Class:** 9

**Packing Group:** III

**Marine Pollutant:** Yes



**Special Provision 99 (2):** These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering for transport or transporting of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety.

**171.4 (c) Exceptions:** Single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other requirements of this subchapter provided the packagings meet the general requirements in §§ 173.24 and 173.24a. This exception does not apply to marine pollutants that are a hazardous waste or a hazardous substance. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class, all provisions of this subchapter relevant to any additional hazards continue to apply.

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**8461****WHITE LITHIUM GREASE****Air****Refer to ICAO-IATA regulations.**

Sizes 5 kg and under

*8461-85ML, 8461-1P***NOT REGULATED**

On the air waybill, write

"Not Restricted, as per Special Provisions A197"

**Special Provision A197:** These substances when transported in single or combination packagings containing net quantity per single or inner packaging of less than 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general provisions 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

**Sea****Refer to IMDG Regulation.**

Sizes 5 kg and under

*8461-85ML, 8461-1P***NOT REGULATED**

per 2.10.2.7

**2.10.2.7:** Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provision of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class, all provisions of this Code relevant to any additional hazards continue to apply.

**Note: Shipper must be appropriately trained and certified before involvement with the transport of dangerous goods.**

**Section 15: Regulatory Information**

**Canada**

**Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL.

**Hazardous Products Act (R.S.C., 1985, c. H-3)**

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

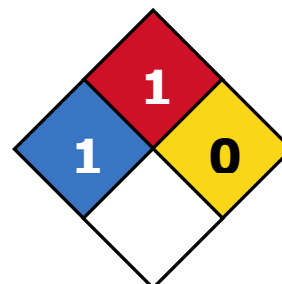
**USA**

**Other Classifications**

**HMIS® RATING**

<b>HEALTH:</b>	<b>1</b>
<b>FLAMMABILITY:</b>	<b>1</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	

**NFPA® 704 CODES**



*Approximate HMIS and NFPA Risk Ratings Legend:*

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

**CAA** (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

**EPCRA** (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains a zinc compound (CAS # 1314-13-2) that is subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372 under certain conditions.

**TSCA** (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

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**8461****WHITE LITHIUM GREASE**

**California Proposition 65** (Chemicals known to cause cancer or reproductive toxicity, USA)

This product contains titanium dioxide, but it is bound and exposures during normal conditions of uses are below the Safe Harbor Threshold.

## Europe

**RoHS** (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

**WEEE** (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment and is therefore not governed by this regulation.

## Section 16: Other Information

<b>Prepared by the</b>	Regulatory Affairs Department
<b>Date of Revision</b>	05 March 2020
<b>Supersedes</b>	10 September 2019
<b>Reason for Changes:</b>	Change to emergency phone numbers and of the transport section.

### Reference

- 1) ACGIH 2017 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2017).
- 2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

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**8461****WHITE LITHIUM GREASE****Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
ECHA	European Chemicals Agency
EU	European Union
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
IARC	International Agency for Research on Cancer
NOELR	No observable effect loading ratio
NTP	National Toxicology Program
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

**Technical Queries** Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at [www.mgchemicals.com](http://www.mgchemicals.com).

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**Disclaimer**

This safety data sheet is provided as an information resource only. *M.G. Chemicals, Ltd.* believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional, national, and international regulations.