

**MATERIAL SAFETY DATA SHEET**  
**Anodal MS-1-US**Substance key: SXR110718  
Version : 1 - 1 / CDNRevision Date: 12/04/2007  
Date of printing :01/07/2009**WHMIS controlled:** yes  
**Class:** D 2A**Section 01 - Product Information****Identification of the company:** Clariant (Canada) Inc.  
4600 Cousens Street  
St.Laurent, Q.C., H4S 1X3**Information of the substance/preparation:**ESHA  
Tel (514) 334-1117, Fax (514) 334-6232**Emergency tel. number:** +1 CANUTEC (613) 996-6666**Trade name:** **Anodal MS-1-US**  
**Material number:** 122972  
**Chemical family:** Nickel acetate in aqueous solution/organic solvents  
**Primary product use:** aluminium chemicals**Section 02 - Composition information on hazardous ingredients****Hazardous ingredients:**

<b>Component</b>	<b>CAS number</b>	<b>Concentration</b>
Nickel(II) acetate	373-02-4	10 - 30 %
Nickel, elemental	7440-02-0	3 - 7 %

**Component toxicity information:**

Nickel(II) acetate ( 373-02-4 )

**Acute oral toxicity:** LD50 350 mg/kg (rat)**Section 03 - Hazards identification****Health effects of exposure:**

Eye and skin contact may cause irritation. Inhalation of vapours or mists may irritate the respiratory tract.

Nickel and specific compounds of nickel: nickel and specific compounds of nickel have been reported to cause dermatitis in sensitive individuals. Ingestion of soluble salts can cause nausea, vomiting and diarrhea. Dust may irritate eyes, mucous membranes and skin. Nickel is an experimental carcinogen, equivocal tumorigenic agent, and has been shown to cause neoplastic effects. Nickel is a positive animal carcinogen (IARC), human carcinogen (ntp) and animal teratogen. Positive tests for mutagenicity have been reported for nickel and some specific compounds of nickel. Listed in IARC group 1 (carcinogenic agent to humans). Nickel acetate: reported as reproductive effector and mutagen in lab animals. See also nickel and its compounds.

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**Listed carcinogen:**

IARC: Yes
NTP: Yes
OSHA: No
Other: Yes

**Section 04 - First aid measures****After inhalation:**

Get victim to fresh air. Give artificial respiration or oxygen if breathing has stopped or is difficult. Get prompt medical attention. Do not give fluids if victim is unconscious.

**After contact with skin:**

Remove contaminated clothing and wash affected areas with soap and plenty of water for at least 15 minutes. If redness or skin irritation occurs, seek medical attention.

**After contact with eyes:**

Immediately wash the eyes with flowing water for at least 15 minutes. Insure proper irrigation by occasionally lifting upper and lower eyelids. Thereafter seek prompt medical attention.

**After ingestion:**

If ingested, do not induce vomiting. Get immediate medical assistance.

**Advice to doctor / Treatment:**

None known.

**Section 05 - Fire fighting measures**

<b>Flashpoint:</b>	not tested.
<b>Lower explosion limit:</b>	not tested.
<b>Upper explosion limit:</b>	not tested.
<b>Self ignition:</b>	Not applicable
<b>Ignition temperature:</b>	not tested.
<b>Extinguishing media:</b>	foam carbon dioxide dry powder water mist

**Special fire fighting procedure:**

Wear self-contained breathing apparatus (SCBA) and full protective clothing.

**Unusual fire and explosion hazards:** Toxic metal fumes are given off at high temperatures.

**Section 06 - Accidental release measures**

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### Steps to be taken in case of spill or leak:

Wear suitable protective equipment. Ensure adequate ventilation. Contain spill and pump into proper containers using compatible equipment. Smaller spills may be recovered using inert absorbent material (sand, sawdust) and collected into suitable containers. Wash spill area. Do not allow the product to enter sewers or waterways.

## Section 07 - Handling and storage

### Advice on safe handling:

Open and handle container with care.  
When filling, transferring, or emptying of containers, adequate suctioning close to work place necessary.

### Further info on storage conditions:

Keep container tightly closed in a cool, well-ventilated place

## Section 08 - Exposure controls / personal protection

### Occupational exposure limits:

Component	CAS number:	Regulatory list	Type of value	Value 1	Value 2
NICKEL, SOLUBLE COMPOUNDS, AS /NI/	6018-89-9	US OSHA Table Z-1 Data	PEL:		1 mg/m3
NICKEL, METAL AND INSOLUBLE COMPOUNDS, AS /NI/	6018-89-9	US OSHA Table Z-1 Data	PEL:		1 mg/m3

### Occupational exposure limits:

Component	CAS number:	Regulatory list	Type of value	Value 1	Value 2
NICKEL, SOLUBLE COMPOUNDS, AS /NI/	373-02-4	US OSHA Table Z-1 Data	PEL:		1 mg/m3
NICKEL, INSOLUBLE COMPOUNDS (NOS), AS NI, INHALABLE FRACTION	373-02-4	US ACGIH Threshold Limit Values Data	Time Weighted Average (TWA):		0.2 mg/m3
NICKEL, METAL AND INSOLUBLE COMPOUNDS, AS /NI/	7440-02-0	US OSHA Table Z-1 Data	PEL:		1 mg/m3
NICKEL, ELEMENTAL, INHALABLE FRACTION	7440-02-0	US ACGIH Threshold Limit Values Data	Time Weighted Average (TWA):		1.5 mg/m3

### Respiratory protection:

Wear an approved respirator if vapours or mists are generated when handling or processing this product. Use appropriate filters. Do not exceed filters limitations.

### Hand protection:

Rubber or Plastic

### Eye protection:

Wear safety glasses with side-shields.

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**Other protective equipment:** Disposable work suit should be worn during handling of product. Employees should shower at the end of the working day. Wash properly before eating.

**Section 09 - Physical and chemical properties**

<b>Form:</b>	Liquid
<b>Color:</b>	green
<b>Odor:</b>	not specified
<b>pH:</b>	6 - 7
<b>Solubility in water:</b>	miscible
<b>Soluble in ... :</b>	fat not tested.
<b>Density:</b>	not tested.
<b>Melting point :</b>	not determined
<b>Boiling temperature :</b>	approx. 100 °C
<b>Vapor pressure:</b>	not tested.
<b>Bulk density:</b>	Not applicable
<b>Relative vapor density:</b>	not tested.
<b>Partitioning coef. octanol/water:</b>	not tested.
<b>Viscosity / (kinematic):</b>	not tested.

**Section 10 - Stability and reactivity**

<b>Chemical stability:</b>	Stable.
<b>Hazardous Polymerization:</b>	Will not occur. Conditions to avoid: None known.
<b>Hazardous decomposition products</b>	No hazardous decomposition products known.

**Section 11 - Toxicological information**

<b>Acute oral toxicity:</b>	LD50 > 2,000 mg/kg (rat)
<b>Skin irritation:</b>	non-irritant (rabbit)
<b>Eye irritation:</b>	irritant (rabbit eye)
<b>Sensitization:</b>	sensitizing

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**Other relevant toxicity information:**

The product was classified on the basis of the calculation procedure of the Dangerous Preparations Directive (1999/45/EC).

**Section 12 - Ecological information****Remarks:**

Do not allow to enter soil, waterways or waste water  
Do not dispose of in the environment.  
The product was classified on the basis of the calculation procedure of the Dangerous Preparations Directive (1999/45/EC).

**Section 13 - Disposal considerations****Waste disposal information:**

Recommended disposal is by recovery of metals. Collect and send to metal salt recycle or heavy metals recovery unit. May be landfilled in permitted facilities. Follow local regulations.

**Section 14 - Transport information**

<b>TDG</b>	not restricted
<b>IATA</b>	not restricted
<b>IMDG</b>	not restricted

**Section 15 - Regulatory information**

<b>Registration status:</b>	yes
DSL:	yes
NDSL:	no

**CEPA**

Listed as priority substance:	no
Listed as toxic substance:	no

**TSCA Status:**

All components of this product are listed on the TSCA Inventory.

**Section 16 - Other information**

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**WHMIS**

MAY CAUSE SKIN, EYE OR RESPIRATORY TRACT IRRITATION

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