

# **Safety Data Sheet**

Issue date 21-Sep-2018

Revision date 22-Jan-2020

**Revision Number** 3

## **1. IDENTIFICATION**

#### **Product identification**

Product identifier	Cronatron® 375 Mild and Carbon Steel Low Hydrogen Stick Rod Electrode
Other means of identification	CW1051
Recommended use	Brazing Alloy, Welding Alloy
Restrictions on use	For industrial use only, These items are only intended for normal welding purposes

#### Supplier

Corporate Headquarters: Cronatron, A Lawson Brand Lawson Products, Inc. 8770 W.Bryn Mawr Ave Suite 900 Chicago, IL 60631 1-866-529-7664	Canadian Distribution Center: Lawson Canada 7315 Rapistan Court Mississauga, ON L5N 5Z4 (800) 323-5922
24 Hour Emergency Phone Number	(888) 426-4851 (Prosar)
Website	https://www.lawsonproducts.com
	2. HAZARD(S) IDENTIFICATION

**Hazard Classification** 

This product is normally not considered hazardous as shipped. Avoid contact with eyes. Avoid inhalation of dust from the product. When this product is used in a welding process the most important hazards are: heat, radiation, electric shock and welding fumes.

Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1

### Symbol



Hazard statements

H317 - May cause an allergic skin reaction H351 - Suspected of causing cancer

H372 - Causes damage to organs through prolonged or repeated exposure

### **Precautionary statements**

General	P101 - If medical advice is needed, have product container or label at hand P102 - Keep out of reach of children P103 - Read label before use.
Prevention	<ul> <li>P201 - Obtain special instructions before use</li> <li>P202 - Do not handle until all safety precautions have been read and understood</li> <li>P260 - Do not breathe dust/fume/gas/mist/vapors/spray</li> <li>P264 - Wash face, hands and any exposed skin thoroughly after handling</li> <li>P270 - Do not eat, drink or smoke when using this product</li> <li>P272 - Contaminated work clothing should not be allowed out of the workplace</li> <li>P280 - Wear protective gloves/protective clothing and eye/face protection</li> <li>P281 - Use personal protective equipment as required</li> </ul>
Response	
General	P314 - Get medical advice/attention if you feel unwell. P308 + P313 - IF exposed or concerned: Get medical advice/attention
Eyes	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Skin	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention P363 - Wash contaminated clothing before reuse
Storage	P405 - Store locked up
Disposal	P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable
Hazard(s) Not Otherwise Classified (HNOC)	None known.
Physical Hazards Not Otherwise Classified (PHNOC)	None known.
Unknown acute toxicity	None known.
2	COMPOSITION/INFORMATION ON INGREDIENTS

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition

Mixture.

Chemical name	CAS-No	Weight %
Iron	7439-89-6	60-70
Calcium Fluoride	7789-75-5	1-11
Titanium dioxide	13463-67-7	1-11
Quartz (Crystalline Silica)	14808-60-7	1-11
Calcium Carbonate	1317-65-3	5-15
Nickel	7440-02-0	1-11
Sodium Silicate	1344-09-8	1-5
Potassium Silicate	1312-76-1	1-5
Manganese	7439-96-5	1-11

## 4. FIRST-AID MEASURES

Inhalation	Remove to fresh air immediately or administer oxygen. Get medical attention immediately.
Ingestion	Seek medical attention immediately. Rinse mouth.
Skin contact	Flush area with large quantities of water. Seek medical attention if irritation persists. Seek medical attention if irritation occurs.
Eye contact	Flush with plenty of water for at least 15 minutes. Get medical attention.
Most important symptoms (acute)	Electric shock can kill. For electric shock, disconnect and turn off the power. Use a nonconductive material to pull victim away from contact with live wire parts or wires. Immediately contact a physician.
Most important symptoms (over-exposure)	Not applicable.
Indication of any immediate medical attention and special treatment needed	Not applicable.
	5. FIRE-FIGHTING MEASURES
Suitable extinguishing media	Alcohol resistant foam. Water spray. Dry chemical. Carbon dioxide (CO2).
Unsuitable extinguishing media	Not applicable.
Specific hazards	Welding arcs and sparks can ignite combustible and flammable materials. Hazardous Thermal Decomposition Products:. silicon oxides. Sodium oxide. hydrogen fluoride. Manganese oxide. Calcium oxide. Iron Oxide. Oxides of nickel. Oxides of Aluminum.
Special protective equipment for fire-fighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus.
	6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective equipment and emergency procedures	Gloves should be worn when handling to prevent cuts. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8. For waste disposal, see section 13 of the SDS.
Methods and materials for containment and cleaning up	Solid objects may be picked up and placed in a container. Make sure the solid objects are at room temperature before handling. Liquids or pastes should be scooped up and placed into a container. Wear proper protective equipment while handling these materials. Do not discard as refuse. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
	7. HANDLING AND STORAGE
Precautions for safe handling	Handle with care to avoid stings or cuts. Wear gloves when handling welding consumables. Avoid exposure to dust and do not ingest. Some individuals may develop an allergic reaction to certain materials. Retain all warning and identity labels.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry and well-ventilated place. Keep separate from chemical substances like acids and strong bases, which could cause chemical reactions. Ground/bond container and receiving equipment.
8 FY	POSURE CONTROL S/PERSONAL PROTECTION

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Iron	-	-	-
Calcium Fluoride	2.5 mg/m <sup>3</sup> TWA	2.5 mg/m³ TWA	2.5 mg/m <sup>3</sup> TWA
Titanium dioxide	15 mg/m³ TWA	10 mg/m³ TWA	2.4 mg/m <sup>3</sup> TWA 0.3 mg/m <sup>3</sup> TWA
Quartz (Crystalline Silica)	50 µg/m³ TWA 50 µg/m³ TWA	0.025 mg/m <sup>3</sup> TWA	0.05 mg/m <sup>3</sup> TWA
Calcium Carbonate	15 mg/m³ TWA 5 mg/m³ TWA	-	10 mg/m³ TWA 5 mg/m³ TWA
Nickel	1 mg/m³ TWA	1.5 mg/m³ TWA	0.015 mg/m <sup>3</sup> TWA 0.015 mg/m <sup>3</sup> TWA
Sodium Silicate	-	-	-
Potassium Silicate	-	-	-
Manganese	5 mg/m <sup>3</sup> Ceiling	0.02 mg/m³ TWA 0.1 mg/m³ TWA	3 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA 1 mg/m <sup>3</sup> TWA

# Appropriate engineering controls

Avoid exposure to welding fumes, radiation, spatter, electric shock, heated materials and dust. Ensure sufficient ventilation, local exhaust, or both, to keep welding fumes and gases from breathing zone and general area. Keep workplace and protective clothing clean and dry. Train the welder not to touch live electrical parts and to insulate himself from work and ground. Check condition of protective clothing and equipment on a regular basis. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Processing may form hazardous compounds, refer to section 10.

#### Individual protection measures, such as personal protective equipment

Eye protection	Welder's helmet or face shield with color absorbing lenses. Shield and filter to provide protection from harmful UV radiation, infrared and molten metal approved to standard EN379. Filter shade to be a minimum of shade 9.
Skin and body protection	Heat-resistant protective clothing. Wear safety boots, apron, arm and shoulder protection. Keep protective clothing clean and dry. Clothing should be selected to suit the level, duration and purpose of the welding activity. Wear appropriate gloves to prevent skin contact. Wear welding gloves.
Respiratory protection	Use an air purifying dust respirator when welding or brazing in a confined space, or when local exhaust or ventilation is not sufficient to keep exposure values within safe limits.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

# Canadian Province Occupational Exposure Limits

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundl and & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatche wan - OEL
Iron	-	-	-	-	-	-	-	-	-	-
Calcium Fluoride	2.5 mg/m <sup>3</sup> TWA	2.5mg/m³T WA	2.5 mg/m <sup>3</sup> TWA	2.5 mg/m <sup>3</sup> TWA	2.5 mg/m <sup>3</sup> TWA	2.5 mg/m <sup>3</sup> TWA	2.5 mg/m <sup>3</sup> TWA	2.5 mg/m <sup>3</sup> TWA	2.5 mg/m <sup>3</sup> TWAEV	5 mg/m <sup>3</sup> STEL 2.5 mg/m <sup>3</sup> TWA
Titanium dioxide	10 mg/m³ TWA	10mg/m <sup>3</sup> T WA 3mg/m <sup>3</sup> TW A	10 mg/m³ TWA	10 mg/m³ TWA	10 mg/m³ TWA	10 mg/m³ TWA	10 mg/m³ TWA	10 mg/m³ TWA	10 mg/m³ TWAEV	20 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup> TWA
Quartz (Crystalline Silica)	0.025 mg/m <sup>3</sup> TWA	0.025mg/m <sup>3</sup> TWA	0.025 mg/m³ TWA	0.1 mg/m <sup>3</sup> TWA	0.025 mg/m <sup>3</sup> TWA		0.10 mg/m <sup>3</sup> TWA	0.025 mg/m³ TWA	0.1 mg/m <sup>3</sup> TWAEV	0.05 mg/m <sup>3</sup> TWA
Calcium Carbonate	10 mg/m <sup>3</sup> TWA	20mg/m³ST EL	-	10 mg/m <sup>3</sup> TWA	-	-	-	-	10 mg/m <sup>3</sup> TWAEV	20 mg/m <sup>3</sup> STEL

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Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundl and & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatche wan - OEL
		10mg/m <sup>3</sup> T WA 3mg/m <sup>3</sup> TW A								10 mg/m³ TWA
Nickel	1.5 mg/m <sup>3</sup> TWA	0.05mg/m³T WA	1.5 mg/m <sup>3</sup> TWA	1 mg/m³ TWA	1.5 mg/m <sup>3</sup> TWA	1.5 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	1.5 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWAEV	3 mg/m <sup>3</sup> STEL 1.5 mg/m <sup>3</sup> TWA
Sodium Silicate	-	-	-	-	-	-	-	-	-	-
Potassium Silicate	-	-	-	-	-	-	-	-	-	-
Manganese	0.2 mg/m <sup>3</sup> TWA	0.2mg/m <sup>3</sup> T WA 0.02mg/m <sup>3</sup>	0.02 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup> TWA	TWĂ	0.02 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup> TWA 0.02 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup> TWA	TWĂ 0.1 mg/m³ TWA	TWA 0.02 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup>	0.02 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup> TWA 0.02 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup> TWA	0.2 mg/m <sup>3</sup> TWAEV 0.2 mg/m <sup>3</sup> TWAEV	0.6 mg/m <sup>3</sup> STEL 0.2 mg/m <sup>3</sup> TWA 0.2 mg/m <sup>3</sup> TWA

	9. PHYSICAL AND CHEMICAL PROPERTIES
Physical state	Solid
Color	Metallic
Odor	Odorless
Odor threshold	Not applicable
рН	Not applicable
Melting point/range °C	850-1100 °C
Melting point/range °F	1560-2000 °F
Boiling point/range °C	Not available
Boiling point/range °F	Not available
Flash point °C / °F	Not applicable
Evaporation rate	Not applicable
Flammability (Solid, Gas)	Not available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	6-9
Solubility	Insoluble in water
Partition coefficient (n-octanol/water)	Not applicable

Autoignition temperature °C	Not applicable
Autoignition temperature °F	Not applicable
Decomposition temperature °C	Not available
Decomposition temperature °F	Not available
Viscosity	Not available
	10. STABILITY AND REACTIVITY
Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Contact with chemical substances like acids or strong bases could cause generation of gas.
Conditions to avoid	Stable under normal conditions.
Incompatible materials	Incompatible with acids.
Hazardous decomposition products	When this product is used in a welding process, hazardous decomposition products would include those from volatilization, reaction or oxidation of the materials listed in section 3 and those from the base metal and coating. The amount of fumes generated from this product varies with welding parameters and dimensions. Refer to applicable national exposure limits for the fume compounds. Manganese also has a low exposure limit in the USA. Reasonably expected gaseous products would include:. carbon oxides. Nitrogen oxides (NOx). Ozone. Air contaminants around the welding area can be affected by the welding process and influence the composition and quality of fumes and gases produced.
	11. TOXICOLOGICAL INFORMATION
Information on likely routes of exposure	Dermal. Inhalation.
Symptoms	Prolonged inhalation may be harmful. Welding fumes cannot be classified simply. Their composition and quantity are dependent upon the metal being welded, the process, procedures and electrodes being used. The International Agency for Research on Cancer has classified welding fumes as possibly carcinogenic to humans (group 2B). Overexposure to welding fumes may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat or eyes. May cause sensitization by skin contact.
Delayed and immediate effects as well as chronic effects from short and long-term exposure	Overexposure to welding fumes may affect pulmonary function and eyes. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait. Prolonged inhalation of nickel above safe exposure limits can cause cancer. Prolonged inhalation of titanium dioxide above safe exposure limits can cause cancer.

## Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Iron	-	-	= 30 g/kg (Rat)
Calcium Fluoride	-	-	= 4250 mg/kg (Rat)
Titanium dioxide	-	-	> 10000 mg/kg (Rat)
Quartz (Crystalline Silica)	-	-	-
Calcium Carbonate	-	-	-

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Nickel	> 10.2 mg/L (Rat)1 h	-	> 9000 mg/kg (Rat)
Sodium Silicate	-	> 4640 mg/kg (Rabbit)	= 1960 mg/kg (Rat)
Potassium Silicate	-	-	= 5700 mg/kg (Rat)
Manganese	-	-	= 9 g/kg (Rat)

ATEmix (dermal)	Not available
ATEmix (oral)	Not available
ATEmix (inhalation-gas)	Not available
ATEmix (inhalation-vapor)	Not available
ATEmix (inhalation-dust/mist)	Not available

## Carcinogenicity

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Iron	-	-	-	-
Calcium Fluoride	A4	Group 3	-	-
Titanium dioxide	A4	Group 2B	Listed	-
Quartz (Crystalline Silica)	A2	Group 1	Listed	Known Carcinogen
Calcium Carbonate	-	-	-	-
Nickel	-	Group 1 Group 2B	Listed	Known Carcinogen Reasonably Anticipated Carcinogen
Sodium Silicate	-	-	-	-
Potassium Silicate	-	-	-	-
Manganese	A4	-	-	-

# Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Iron	-	-	-	-	-	-
Calcium Fluoride	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Titanium dioxide	-	IARC 2B	ACGIH A4	ACGIH A4	ACGIH A4	-
Quartz (Crystalline Silica)	A2 - Suspected Human Carcinogen	IARC 1 ACGIH A2	ACGIH A2	-	ACGIH A2	C2 carcinogen
Calcium Carbonate	-	-	-	-	-	-
Nickel	-	IARC 2B	ACGIH A5	-	ACGIH A5	-
Sodium Silicate	-	-	-	-	-	-
Potassium Silicate	-	-	-	-	-	-
Manganese	-	-	ACGIH A4	-	ACGIH A4	-

## **12. ECOLOGICAL INFORMATION**

Ecotoxicity

Very toxic to aquatic life

# CW1051 Cronatron® 375 Mild and Carbon Steel Low Hydrogen Stick Rod Electrode

Chemical name	Algae/aquatic plants	Fish
Iron	-	13.6: 96 h Morone saxatilis mg/L LC50 static
Calcium Fluoride	-	-
Titanium dioxide	-	-
Quartz (Crystalline Silica)	-	-
Calcium Carbonate	-	-
Nickel	0.18: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.174 - 0.311: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	100: 96 h Brachydanio rerio mg/L LC50 10.4: 96 h Cyprinus carpio mg/L LC50 static 1.3: 96 h Cyprinus carpio mg/L LC50 semi-static
Sodium Silicate	-	301 - 478: 96 h Lepomis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi-static
Potassium Silicate	-	301 - 478: 96 h Lepomis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi-static
Manganese	-	-

#### Persistence and degradability

Not readily biodegradable. The welding rods consist of elements that cannot degrade any further in the environment.

## **Bioaccumulation**

Chemical name	CAS-No	Partition coefficient (log Kow)
Iron 7439-89-6	7439-89-6	-
Calcium Fluoride 7789-75-5	7789-75-5	-
Titanium dioxide 13463-67-7	13463-67-7	-
Quartz (Crystalline Silica) 14808-60-7	14808-60-7	-
Calcium Carbonate 1317-65-3	1317-65-3	-
Nickel 7440-02-0	7440-02-0	-
Sodium Silicate 1344-09-8	1344-09-8	-
Potassium Silicate 1312-76-1	1312-76-1	-
Manganese 7439-96-5	7439-96-5	-

Mobility in soil	Welding rods are not soluble in water or soil. Particles formed by working welding rods can be transported in the air.
Other adverse effects	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment In massive form, welding rods present no hazards to the aquatic environment. Welding consumables and materials can degrade into the components used to manufacture the product. Avoid exposure to conditions that could lead to accumulation in soils and groundwater.
	13. DISPOSAL CONSIDERATIONS
Disposal information	Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures. Discard container or liner in accordance with federal, state, and local

accumulate in soils and groundwater.

regulations. Residue from welding consumables and processes could degrade and

Contaminated packaging

Dispose in accordance with local, state and federal regulations.

## **14. TRANSPORTATION INFORMATION**

Shipping Descriptions	
DOT Proper shipping name	Not regulated
TDG Proper shipping name	Not regulated
IATA Proper shipping name	Not regulated
IMDG/IMO Proper shipping name	Not regulated

## **Marine Pollutants**

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Iron	7439-89-6	-	-	-
Calcium Fluoride	7789-75-5	-	-	-
Titanium dioxide	13463-67-7	-	-	-
Quartz (Crystalline Silica)	14808-60-7	-	-	-
Calcium Carbonate	1317-65-3	-	-	-
Nickel	7440-02-0	-	-	-
Sodium Silicate	1344-09-8	-	-	-
Potassium Silicate	1312-76-1	-	-	-
Manganese	7439-96-5	-	-	-

#### **Special Precautions**

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## 15. REGULATORY INFORMATION

#### State regulations

## U.S. state Right-to-Know regulations

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
Iron	7439-89-6	-	-	-
Calcium Fluoride	7789-75-5	-	Х	-
Titanium dioxide	13463-67-7	Х	Х	Х
Quartz (Crystalline Silica)	14808-60-7	X	Х	Х
Calcium Carbonate	1317-65-3	Х	Х	Х
Nickel	7440-02-0	X	Х	Х
Sodium Silicate	1344-09-8	-	-	-
Potassium Silicate	1312-76-1	-	-	-
Manganese	7439-96-5	Х	X	X

Chemical name	CAS-No	California Prop. 65
Iron	7439-89-6	-
Calcium Fluoride	7789-75-5	-
Titanium dioxide	13463-67-7	Carcinogen
Quartz (Crystalline Silica)	14808-60-7	Carcinogen
Calcium Carbonate	1317-65-3	-
Nickel	7440-02-0	Carcinogen
Sodium Silicate	1344-09-8	-
Potassium Silicate	1312-76-1	-
Manganese	7439-96-5	-

### U.S. Federal Regulations

### US EPA SARA 313

Chemical name	CAS-No	CERCLA/SARA	SARA 313 - Threshold Values
		Hazardous Substances RQ	
Iron	7439-89-6	-	-
Calcium Fluoride	7789-75-5	-	-
Titanium dioxide	13463-67-7	-	-
Quartz (Crystalline Silica)	14808-60-7	-	-
Calcium Carbonate	1317-65-3	-	-
Nickel	7440-02-0	100 lb	0.1 %
		45.4 kg	
Sodium Silicate	1344-09-8	-	-
Potassium Silicate	1312-76-1	-	-
Manganese	7439-96-5	-	1.0 %

#### US EPA SARA 311/312 hazardous categorization

Not applicable

Chemical name	DSL/NDSL	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification
Iron	Х	Х	-
Calcium Fluoride	X	X	-
Titanium dioxide	X	X	-
Quartz (Crystalline Silica)	X	X	-
Calcium Carbonate	X	X	-
Nickel	X	X	-
Sodium Silicate	X	X	-
Potassium Silicate	Х	X	-
Manganese	Х	Х	-

Legend X - Listed

## **16. OTHER INFORMATION**

Health

#### HMIS

Health	Not available
Flammability	Not available
Physical hazards	Not available

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

Prepared by	Regulatory Affairs
Issue date	21-Sep-2018
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#### **Revision note**

#### Key to abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists) ATE (Average Toxicity Estimate) DSL/NDSL (Domestic Substance List/Non-Domestic Substance List) HMIS (Hazardous Materials Identification System) IARC (International Agency for Research on Cancer) IATA (International Agency for Research on Cancer) IATA (International Air Transport Association) IMDG/IMO (International Maritime Dangerous Goods/International Maritime Orgnaization) NFPA (National Fire Protection Association) NTP (National Toxicology Program) OEL (Occupational Exposure Level) OSHA (Occupational Safety and Health Administration of the US Department of Labor) PEL (Permissible Exposure Limit) TSCA (Toxic Substance Control Act) USEPA (United States Environmental Protection Agency)

#### <u>Disclaimer</u>

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

End of Safety Data Sheet