



A Milacron Company

Dear Customer:

Enclosed is the **REVISED** Material Safety Data Sheet for our product:

Jiffy Latch Lok Assemblies

The products we distribute are not normally hazardous in their natural state. However, steel does contain elements deemed by OSHA to be hazardous when released by manufacturing, such as brazing, burning, grinding, sawing or welding, etc. Failure to control dust and fumes can result in chronic health problems.

We believe the information, supplied by the Manufacturer, on the enclosed MSDS to be accurate; however, D-M-E makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability for the information so presented.

Should you require additional information, please call or write the Manufacturer listed on the MSDS.

Sincerely yours,

D-M-E Company
Director of Operations
Ken Jasina

Revised: March 1, 2001

PREPARED BY DISTRIBUTOR:



A. M. Castle & Co.
3400 N. Wolf Road
Franklin Park, IL 60131

MATERIAL SAFETY DATA SHEET

(This product contains one or more toxic chemicals subject to the reporting requirements of section 313 of the EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT of 1986 and of 40CFR72).

ISSUE DATE

November 25, 1985

REVISED

March 1, 2001

For Information or In An Emergency
Call: (847) 455-7111

Manufacturer's Name Various	
Product Name / Trade Name Alloy Steel - HR & CR Alloy Leaded Steel	Common Name / Grade Alloy Steel i.e. 4130, 4140, 4340, 8620 Alloy Leaded i.e. 86L20

NOTE: Products Under Normal Conditions Do Not Represent An Inhalation, Ingestion or Contact Health Hazard.

Base Metal, Alloying Elements And Metallic Coatings	CAS#	WT % (1)	OSHA PEL (mg/g) ⁽³⁾	ACGIH TLV TWA (Unless Noted Otherwise) (mg/m ³) (2)
Base Metal				
Iron (Fe)	7439-89-6	86-99	10	5 (As Iron Oxide)
Alloying Elements				
Nickel (Ni)	7440-02-0	<5	1	0.5
Chromium (Cr)	7440-47-3	<5	0.5	.5
Silicon (Si)	7740-21-3	<5	15	10 (Total Dust)
Manganese (Mn)	7439-96-5	<2	5	0.2
Carbon (C)	7440-44-0	<2	N.E.	3.5 (As Carbon Black)
Molybdenum (Mo)	7439-98-7	<2	15	10 (Insoluble Compound)
Vanadium (V)	7440-62-2	<2	0.5	.05 (Respirable Dust)
Aluminum (Al)	7429-90-5	<2	15	10 (Total Dust)
Sulfur (S)	7704-34-9	<2	13	5 (As SO ₂)
Phosphorus (P)	7723-14-0	<1	.1	.1 (Yellow)
Bismuth (Bi)	7440-69-9	<1	N.E.	N.E.
Copper (Cu)	7440-50-8	<1	1	1 (Dust & Mist)
Leaded Alloy				
Lead (Pb)	7439-92-1	<1	.05	0.05

(1) % Of Alloying Material Varies With Grade Of Material. (2) 1996 ACGIH Threshold Limit Value.
(3) 1993 OSHA Permissible Exposure Limit.

Material is (At Normal Conditions) Solid	Appearance and Odor Gray-Black, Odorless
Melting Point (Base Metal) >2500° F	Specific Gravity Approximately 7

Extinguishing Media
NA

Special Firefighting Procedures
Steel products in the solid state present no fire or explosion hazard.

Unusual Fire and Explosion Hazards
NA

Stability Stable	Incompatibility (Materials to Avoid) Reacts with strong acids to produce hydrogen gas.
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Conditions to Avoid
NA

Hazardous Decomposition Products
Metallic dust or fumes may be produced during welding, burning, grinding and possibly machining.
Refer to ANSI Z49.1

NOTE: STEEL PRODUCTS IN THE NATURAL STATE DO NOT PRESENT AN INHALATION, INGESTION OR CONTACT HAZARD. HOWEVER, OPERATIONS SUCH AS BURNING, WELDING, SAWING, BRAZING AND GRINDING MAY RELEASE FUMES AND/OR DUSTS WHICH MAY PRESENT HEALTH HAZARDS IF TLV'S ARE EXCEEDED

MAJOR EXPOSURE HAZARD

 Inhalation Skin Contact Skin Absorption Eye Contact Ingestion

Effects of Overexposure

Short term exposure to fumes/dust may produce irritation of eyes and respiratory system. Inhalation of high concentrations of freshly formed oxide fumes of iron, manganese, copper and lead may cause metal fume fever, characterized by a metallic taste in the mouth, dryness and irritation of the throat and influenzalike symptoms.

Chronic inhalation of high concentrations of iron oxide fumes or dust may lead to a benign pneumoconiosis (siderosis). Inhalation of high concentrations of ferric oxide may possibly enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens.

Inhalation or ingestion of lead particles may result in lead induced systemic toxicity. Symptoms of lead poisoning include abdominal cramps, anemia, muscle weakness and headache. Prolonged exposure can cause behavioral changes, kidney damage, CNS damage and reproductive effects.

Chromium and nickel and their compounds are listed in the 3rd Annual Report on Carcinogens, as prepared by the National Toxicology Program (NTP). Exposure to high concentrations of dust and fumes can cause sensitization dermatitis, inflammation and/or ulceration of upper respiratory tract and possibly cancer of nasal passages and lungs.

Recent epidemiological studies of workers melting and working alloys containing nickel/chromium have found no increased risk of cancer.

Suspected Cancer Agent? NO: This product's ingredients are not found in the lists below.

YES: Federal OSHA NTP IARC

Emergency and First Aid Procedures

If exposed to excessive levels of metal fumes, remove to fresh air, seek medical aid immediately.

Eyes - Flush with water for at least 15 minutes.

Spill or Leak Procedures

NA

Waste Disposal Methods

According to local, state and federal regulations

Respiratory

NIOSH/MSHA - Approved dust and fume, respirator should be used to avoid excessive inhalation of particulates when exposure exceeds TLV's.

Ventilation

Local exhaust ventilation should be utilized when welding, burning, sawing, brazing, grinding or machining when exposure exceeds TLV's.

Eye Protection and Protective Clothing

Safety glasses or goggles should be utilized as required by exposure. Other protective equipment should be utilized as required by the welding standards.

In welding, precautions should be taken for airborne contaminants which may originate from components of the welding rod.

Arc or spark generated when welding or burning could be a source of ignition for combustible and flammable materials.

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

Data sheets of individual manufacturers may be obtained by contacting A. M. Castle & Co., 3400 N. Wolf Road, Franklin Park, IL 60131 Attn: Corp. Safety Mgr.