

MATERIAL SAFETY DATA SHEET

SECTION I

PRODUCT NAME OR NUMBER (as it appears on label) TOP, TOP 36, H 75, HT, HR Universal, Universal 60, Universal 75		COMMON CODE Steel rules	Rev. 1 #####
MANUFACTURER'S NAME BÖHLER UDDEHOLM Precision Strip		EMERGENCY TELEPHONE NO. 0043 7442-600-345 / Dr.Mayr	
ADDRESS (Number, Street, City, State and Zip Code) Waidhofner Straße 3, A-3333 Böhlerwerk / AUSTRIA		EDITOR TEL 0043 7442 600 800 Quality Department / DI.Daxelmueller	
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101)			
ADDITIONAL HAZARD CLASSES (as applicable)			
CHEMICAL FAMILY Iron Base Alloy		FORMULA not applicable	

SECTION II - INGREDIENTS

(list all ingredients)

CAS REGISTRY NO.	%W		CHEMICAL NAME(S)	OSHA PEL [mg/m ³]	ACGIH TLV [mg/m ³]
	min	max			
1309-37-1	Balance		IRON	10 Fume	5 Fume
7440-44-0	0,40	0,60	CARBON	15 Dust	10
7440-21-3	0,10	0,50	SILICON	15 Dust	10 Dust
7439-96-5	0,10	0,80	MANGANESE	5 Dust/Fume	5 Dust
					1 Fume
7723-14-0	0,00	0,03	PHOSPHORUS	0,1 Dust	0,1 Dust
7704-34-9	0,00	0,03	SULFUR	13 Dust	5 Dust
7440-47-3	0,00	0,40	CHROMIUM	1 Metal	0,5 Cr-Metal
7439-98-7	0,00	0,10	MOLYBDENUM	15	5
7440-02-0	0,00	0,20	NICKEL	1	1
7440-62-2	0,00	0,05	VANADIUM	0,1 V2O5-Fume	0,05
7429-90-5	0,00	0,10	ALUMINUM	15 Dust	10 Dust
7440-50-8	0,00	0,20	COPPER	1 Dust	1 Dust
				0,2 Fume	0,2 Fume

SECTION III - PHYSICAL DATA

BOILING POINT NA °F °C	SPECIFIC GRAVITY (H ₂ O=1) 7,8 - 7,9	MELTING POINT (RANGE) 1440-1530(2620-2780) °C (°F)
VAPOR PRESSURE NA °F °C <input type="checkbox"/> mm Hg <input type="checkbox"/> psi	PERCENT VOLATILE BY VOLUME (%) NA	
VAPOR DENSITY (AIR = 1) NA	EVAPORATION RATE (Butyl Acetate=1) NA	
SOLUBILITY IN WATER Insoluble	pH = NA	
APPEARANCE AND ODOR Solid, Gray, No specific Odor	IS MATERIAL: LIQUID SOLID GAS PASTE POWDER	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT NONE °F °C	method used NA	FLAMMABLE LIMITS NONE	LEL NA	UEL NA
EXTINGUISHING MEDIA NA				
SPECIAL FIRE FIGHTING PROCEDURES Steel Products in the solid state present no fire or explosion hazard				
UNUSUAL FIRE AND EXPLOSION HAZARDS Particulates generated may present a dust explosion hazard				