

Health	1
Flammability	4
Reactivity	0
Personal Protection	

HMIS Ratings

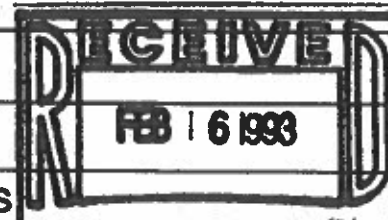
BOWMAN DISTRIBUTION MATERIAL SAFETY DATA SHEET

Health	3
Flammability	4
Reactivity	1
Specific Hazard	

NFPA Ratings

SECTION I

PRODUCT NAME STAINLESS STEEL CLEANER		BOWMAN PART NO. 21996 (page 1 of 2)
SUPPLIER Bowman Distribution, Barnes Group Inc.		EMERGENCY TELEPHONE NO. (216) 391-7200
ADDRESS 850 East 72nd Street, Cleveland, OH 44103		DATE 7/27/90
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101)		
ADDITIONAL HAZARD CLASSES (as applicable)		
CHEMICAL FAMILY	FORMULA TM-2149	



SECTION II - HAZARDOUS INGREDIENTS

CAS REGISTRY NUMBER	%W	%V	CHEMICAL NAME(S)	OSHA PEL	ACGIH TLV	STEL Other Limits	Listed as Carcinogen NTP, IARC or OSHA 1910(z) (specify)
71-55-6	30		*1,1,1 Trichloroethane	350	350	450	No
64742-65-0	11		Paraffinic Oil	5mg/m ³	5mg/m ³	10mg/m ³	No
1336-21-6	<1		Aqua Ammonia	35	25	N.E.	No
74-98-6	6		Propane	1000	1000	Asphyxiant	No
N.A.	50		Non-Hazardous	N.A.	N.A.	N.A.	No
106-97-8	<2		n-Butane	800 (TWA)	800 (TWA)	N.E.	No
75-28-5	<1		Isobutane	None	None	N.E.	No

ALL CHEMICAL COMPOUNDS MARKED WITH AN ASTERISK () ARE TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

SECTION III - PHYSICAL DATA

BOILING POINT -40°F to 212 °F _____ °C	SPECIFIC GRAVITY (H ₂ O = 1)	1.0	
VAPOR PRESSURE @ 70 °F _____ °C _____ mm Hg <input checked="" type="checkbox"/> psi 42	PERCENT VOLATILE BY VOLUME (%)	88	PERCENT SOLID BY WEIGHT (%) 12
VAPOR DENSITY (AIR = 1)	4.0	EVAPORATION RATE (= 1) Butyl Acetate	<1
SOLUBILITY IN WATER	Soluble	PH =	N.E.
APPEARANCE AND ODOR White/Lemon odor	MATERIAL IS: LIQUID		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT -40° °F _____ °C	method used T.C.C.	FLAMMABLE LIMITS	LEL 1.8	UEL 12.0
EXTINGUISHING MEDIA Use water fog, dry chemical or carbon dioxide.				
SPECIAL FIRE FIGHTING PROCEDURES Aerosol cans may rupture when heated				
UNUSUAL FIRE AND EXPLOSION HAZARDS Heated cans may burst				

SECTION V - HEALTH HAZARD DATA

HEALTH HAZARDS (ACUTE AND CHRONIC - INCLUDE TARGET ORGAN EFFECTS)
 May cause dizziness or narcosis in high vapor concentrations and will cause defatting of skin, effects are reversible, long term exposure (years) to vapor may cause lung, liver or kidney damage. The solvents listed have been reported to affect the central nervous system.

CONDITIONS TO AVOID
 See above

SIGNS AND SYMPTOMS OF OVEREXPOSURE
 Inhalation - difficulty in breathing. Skin - redness. Ingestion - vomiting.

PRIMARY ROUTES OF ENTRY Inhalation Skin Contact Other (specify)
 Ingestion

EMERGENCY AND FIRST AID PROCEDURES
 Give oxygen - do not induce vomiting, gastric lavage. Wash eyes and skin with water.

HEALTH EFFECTS BY EXPOSURE
 Irritation, dizziness, respiratory disc

SECTION VI - REACTIVITY DATA

REACTIVITY DATA

	UNSTABLE	CONDITIONS TO AVOID	
	STABLE	<input checked="" type="checkbox"/> High temperatures	

INCOMPATIBILITY (materials to avoid)
 The above solvents are incompatible with strong oxidizers. Not compatible with active metals.

HAZARDOUS DECOMPOSITION PRODUCTS:
 In fire will decompose to carbon dioxide, water, halogen acids and phosgene.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	<input checked="" type="checkbox"/>	None

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 Use absorbent sweeping compound to soak up material. Put into container. Dispose as hazardous waste.

WASTE DISPOSAL METHOD
 Dispose as hazardous waste in accordance with EPA RCRA.

CERCLA (Superfund) REPORTABLE QUANTITY (in lbs.)
 1000

RCRA HAZARDOUS WASTE NO. (40 CFR 261.33)
 E002

VOLATILE ORGANIC COMPOUND (VOC) as packaged, minus water 8	<input checked="" type="checkbox"/>	Theoretical 8.26 lb/gal
	<input type="checkbox"/>	Analytical _____ lb/gal

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify above type)
 Self contained breathing apparatus if above TLV limit.

VENTILATION	LOCAL EXHAUST (specify rate) Yes	SPECIAL None
	MECHANICAL (general) (specify rate) None	OTHER None

PROTECTIVE GLOVES (specify type) None required if spraying	EYE PROTECTION (specify type) Wear eye protection
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OTHER PROTECTIVE EQUIPMENT
 Long sleeves and long pants

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 Keep away from heat, sparks or open flame. Store at temperatures below 120°F.

OTHER PRECAUTIONS
 When using more than one half can continuously or more than one can consecutively, use NIOSH approved respirator.