

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME DE NEEF CHEMIE		EMERGENCY TELEPHONE NO. (517) 681-5791
ADDRESS (Number, Street, City, State, and ZIP Code) Industriepark 8 - B 3100 Heist o/d Berg, Belgium		
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS FLEX 44	
CHEMICAL FAMILY Polyurethanes/Polyisocyanates	FORMULA	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Polyurethanes containing free isocyanate groups				100	

SECTION III - PHYSICAL DATA

BOILING POINT (°F.) Decomp.	266°C	SPECIFIC GRAVITY (H ₂ O=1)	1.05
VAPOR PRESSURE (mm Hg.)	150°C	PERCENT, VOLATILE BY VOLUME (%)	0
VAPOR DENSITY (AIR=1)	8.5	EVAPORATION RATE (_____ =1)	< 1
SOLUBILITY IN WATER	insoluble		
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	C.O.C. 140°C	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA	Waterfog "CO2" dry chemical			
SPECIAL FIRE FIGHTING PROCEDURES				
UNUSUAL FIRE AND EXPLOSION HAZARDS				

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	Not established
EFFECTS OF OVEREXPOSURE	Liquid irritating to skin and eyes
	Vapour irritating to eyes and lungs
EMERGENCY AND FIRST AID PROCEDURES	
Eye contact: immediately flush with plenty of water, obtain medical care	
Skin contact: wash with soap and water	
Inhalation: provide fresh air, discard contaminated clothing	

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Spills can be absorbed in absorbent earth, the absorbent can be swept up and transferred to an open drum filled with water and allow to stand in a ventilated location for 48 hours	
WASTE DISPOSAL METHOD	
Decontaminated waste is harmless and should be disposed according to local regulations.	

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES	X	EYE PROTECTION
OTHER PROTECTIVE EQUIPMENT	boiler suit/overall	

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Keep from water and moisture, use only with adequate ventilation, avoid eye contact, avoid prolonged breathing of vapor and prolonged or repeated skin contact.	
OTHER PRECAUTIONS	
Keep container closed when not in use.	