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SECTION	1. IDENTIFICATION						
Prod	uct name	:	MasterFlow 648 F	PART A			
Prod	Product code		00000000055360926 00000000055360926				
Man	Manufacturer or supplier's details						
Com	Company name of supplier		Master Builders-Construction Systems US, LLC				
Addr	Address		23700 CHAGRIN BLVD Beachwood OH 44122				
Eme	Emergency telephone		ChemTel: +1-813-248-0585				
Reco	ommended use of the o	chemi	cal and restriction	ons on use			
Reco	ommended use	:	Product for const	ruction chemicals			
Restrictions on use		:	Reserved for indu	strial and professional use.			

### SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200					
Skin corrosion/irritation :	Category 2				
Serious eye damage/eye : irritation	Category 2A				
Skin sensitization :	Category 1				
Short-term (acute) aquatic : hazard	Category 2				
Long-term (chronic) aquatic : hazard	Category 2				
GHS label elements					
Hazard pictograms :					
Signal Word :	Warning				
Hazard Statements :	H319 Causes serious eye irritation. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H401 Toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.				

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Precautionary Statements		face protection P261 Avoid bre P273 Avoid rel P272 Contamir the workplace.	tective gloves/ protective clothing/ eye protection eathing dust/ fume/ gas/ mist/ vapours/ spray. ease to the environment. nated work clothing should not be allowed out of ce, hands and any exposed skin thoroughly after
		for several min to do. Continue P303 + P352 If and water. P333 + P311 If CENTER or do P332 + P313 If tion. P362 + P364 T reuse. P391 Collect sp	FON SKIN (or hair): Wash with plenty of soap skin irritation or rash occurs: Call a POISON ctor/physician. skin irritation occurs: Get medical advice/ atten- fake off contaminated clothing and wash it before pillage. eye irritation persists: Call a POISON CENTER
		<b>Disposal:</b> P501 Dispose waste collection	of contents/container to appropriate hazardous
•	<b>hazards</b> known.		. <b>F</b> 2
	3. COMPOSITION/IN	IFORMATION ON ING	

Components

Chemical name	CAS-No.	Concentration (% w/w)
Reaction product: bisphenol-A-	25068-38-6	>= 25 - <= 100
(epichlorhydrin)-Epoxy resin (number		
average molecular weight <= 700)		
1,4-bis(2,3-epoxypropoxy)butane	2425-79-8	>= 15 - < 20

#### SECTION 4. FIRST AID MEASURES

General advice : Remove contaminated clothing.

Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.

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If inhaled		:	Keep patient calm tion.	n, remove to fresh air, seek medical atten-	
					an after significant exposure. ace in recovery position and seek medical
	In case	of skin contact	:	Wash thoroughly	with soap and water
				If skin irritation pe If on skin, rinse w If on clothes, rem	
	In case	of eye contact	:		es for at least 15 minutes under running held open, consult an eye specialist.
				Remove contact I Protect unharmed Keep eye wide op	l eye.
	lf swalld	owed	:	Keep respiratory Do not give milk of Never give anythi If symptoms persi	nmediately and call a physician. tract clear. or alcoholic beverages. ng by mouth to an unconscious person. ist, call a physician. diately to hospital.
		nportant symptoms ects, both acute and d	:	Causes skin irrita May cause an alle Causes serious e	ergic skin reaction.
	Notes t	o physician	:	Treat symptomati	cally.

#### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Foam Dry powder Water spray Carbon dioxide (CO2)
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SAFETY DATA SHEET

# MasterFlow 648 PART A

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	Special protective equipment for fire-fighters		: Wear self-contained breathing apparatus for firefighting if nec- essary.				
SECTION	6. ACCIDENTAL RELE	ASI	EMEASURES				
tive ec	nal precautions, protec- quipment and emer- procedures	:	Use personal pro Ensure adequate	etective equipment. e ventilation.			
Enviro	onmental precautions	:	Prevent further le	from entering drains. eakage or spillage if safe to do so. ntaminates rivers and lakes or drains inform rities.			
	ds and materials for nment and cleaning up	:	acid binder, univ	rt absorbent material (e.g. sand, silica gel, ersal binder, sawdust). closed containers for disposal.			
SECTION	7. HANDLING AND ST	OR/	AGE				
	e on protection against d explosion	:	Product is not ex	plosive.			
			Normal measure	s for preventive fire protection.			
Advice	e on safe handling	:	Avoid contact with For personal pro Smoking, eating plication area. Provide sufficient Dispose of rinse regulations. Persons suscept allergies, chronic	apors/dust. obtain special instructions before use.			
Condi	tions for safe storage	:	place. Containers which kept upright to pr Observe label pr Electrical installa				
	er information on stor- onditions	:		original container in a cool, dry, well- away from ignition sources, heat or flame. ct sunlight.			

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Recor peratu	nmended storage tem- ire	:	41 °F / 5 °C	
Furthe age st	er information on stor- ability	:	Minimum storag	e temperature:
ECTION	8. EXPOSURE CONTR	OL	S/PERSONAL PR	OTECTION
-	dients with workplace		-	e limit values.
Engin	eering measures	:	No applicable in	formation available.
Perso	onal protective equipm	ent		
Respi	ratory protection	:		re facing concentrations above the occupa- limits they must use appropriate certified
Hand	protection			
Re	marks	:		r a specific workplace should be discussed ers of the protective gloves.
Eye p	rotection	:	Eye wash bottle Tightly fitting saf Wear face-shield problems.	
Skin a	and body protection	:		ing otection according to the amount and con- dangerous substance at the work place.
Protec	ctive measures	:	Avoid contact wi Avoid exposure Handle in accord and safety pract	ises/vapours/aerosols. th the skin, eyes and clothing. - obtain special instructions before use. dance with good building materials hygiene ice. ed work clothing is recommended.
Hygiei	ne measures	:	When using do r When using do r Wash hands bef	

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: colourless to slightly yellow

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	Odor		:	alcohol-like	
	Odor T	hreshold	:	No data available	9
	рН		:	6.5 - 7.5 (77 °F /	25 °C)
	Melting	point	:	No applicable inf	ormation available.
	Boiling	point	:	> 340 °F / > 171	°C
	boiling	temperature		approx. 450 °F /	232 °C
	Flash p	point	:	> 212 °F / > 100	°C
				approx. 399.9 °F	/ 204.4 °C
				Method: Standar Closed Tester	d Method of Test for Flash Point by Setaflash
	Evapor	ation rate	:	No applicable inf	ormation available.
	Flamm	ability (solid, gas)	:	not flammable	
	Vapor p	oressure	:	Not applicable	
	Relative	e density	:	No applicable inf	ormation available.
	Density	/	:	approx. 1.15 g/cr	n3 (68 °F / 20 °C)
	Solubili Wat	ity(ies) er solubility	:	partly soluble, (fc °C)	or a component of this mixture) (68 °F / 20
	Solu	ubility in other solvents	:	No applicable inf	ormation available.
	Autoigr	nition temperature	:	not determined	
	Decom	position temperature	:	No decompositio scribed/indicated	n if stored and handled as pre-
	Explosi	ve properties	:	Not explosive Not explosive	
	Oxidiziı	ng properties	:	not fire-propagati	ng
	Self-he	ating substances	:	It is not a substar	nce capable of spontaneous heating.
	Sublim	ation point	:	No applicable inf	ormation available.
	Molecu	lar weight	:	No data available	

### SECTION 10. STABILITY AND REACTIVITY

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	Reactiv	vity	:	No decompositio	n if stored and applied as directed.
	Chemio	cal stability	:	No decompositio	n if stored and applied as directed.
	Possibi tions	lity of hazardous reac-	:	No decompositio	n if stored and applied as directed.
	Conditi	ons to avoid	:	See SDS section	7 - Handling and storage.
	Incomp	atible materials	:	Strong acids Strong bases Strong oxidizing Strong reducing	•
	Hazard produc	ous decomposition ts	:	No hazardous de as prescribed/inc	ecomposition products if stored and handled licated.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Not classified based on available information.

Product:							
Acute oral toxicity	:	Remarks: No applicable information available.					
Acute inhalation toxicity	:	Remarks: No applicable information available.					
Acute dermal toxicity	:	Remarks: No applicable information available.					
Skin corrosion/irritation Causes skin irritation.							
Product:							
Remarks	:	May cause skin irritation and/or dermatitis.					
Serious eye damage/eye irritation Causes serious eye irritation.							
Product:							
Remarks	:	May cause irreversible eye damage.					
Respiratory or skin sensitiz	atio	on					
Skin sensitization							
May cause an allergic skin rea	acti	on.					
Respiratory sensitization	Respiratory sensitization						
Not classified based on availa	able	information.					
Product:							
Remarks	:	Causes sensitization.					

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Germ	n cell mutagenicity		
Not c	lassified based on av	ailable information.	
Carci	inogenicity		
Not c	lassified based on av	ailable information.	
Repr	oductive toxicity		
Not c	lassified based on av	ailable information.	
STO	Γ-single exposure		
Not c	lassified based on av	ailable information.	
STO	<b>F</b> -repeated exposure	•	
Not c	lassified based on av	ailable information.	
Aspir	ration toxicity		
Not c	lassified based on av	ailable information.	
Furth	er information		
Prod	uct:		
Rema	arks	•	s not been tested. The statement has been e properties of the individual components.
Rema	arks	: No data availat	le
ECTION	12. ECOLOGICAL I		

<b>Ecotoxicity</b> No data available	
<b>Persistence and degradability</b> No data available	
Bioaccumulative potential	
<b>Product:</b> Bioaccumulation :	Remarks: Because of the product's consistency and low water solubility, bioavailability is improbable.
Mobility in soil No data available Other adverse effects	
<b>Product:</b> Additional ecological infor- : mation	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

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SECTION 13. DISPOSAL CONSIDERATIONS					
Disp	osal methods				
Waste from residues		tions. Do not contami cal or used con	Dispose of in accordance with national, state and local regula- tions. Do not contaminate ponds, waterways or ditches with chemi- cal or used container. Do not discharge into drains/surface waters/groundwater.		
Contaminated packaging			minated packaging should be emptied as far as possible isposed of in the same manner as the sub- e/product.		

### **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

<b>UNRTDG</b> UN number Proper shipping name	:	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class Subsidiary risk Packing group Labels	: : :	(BISPHENOL-A-EPICHLORHYDRIN RESINS M <=700) 9 EHSM III 9 (EHSM)
<b>IATA-DGR</b> UN/ID No. Proper shipping name	:	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL-A-EPICHLORHYDRIN RESINS M <=700)
Class Subsidiary risk Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passen-	:	9 EHSM III Miscellaneous, Environmentally hazardous 964
ger aircraft) IMDG-Code UN number Proper shipping name	:	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class Subsidiary risk Packing group Labels EmS Code Marine pollutant		(BISPHENOL-A-EPICHLORHYDRIN RESINS M <=700) 9 EHSM III 9 (EHSM) F-A, S-F yes

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#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### **Domestic regulation**

#### 49 CFR

Not regulated as a dangerous good

#### Special precautions for user

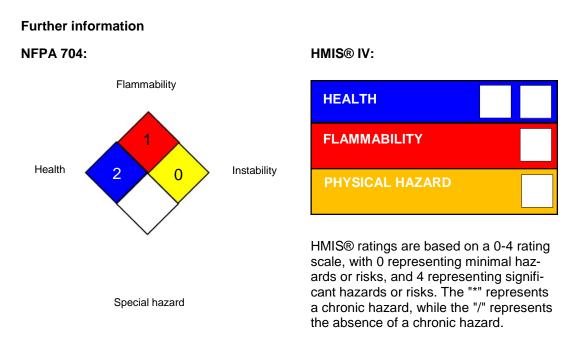
The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

#### The ingredients of this product are reported in the following inventories:

TSCA	: On the inventory, or in compliance with the inventory	,
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#### **SECTION 16. OTHER INFORMATION**



#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated

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ciated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System: IARC - International Agency for Research on Cancer; IATA - International Air Transport Association: IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB -Very Persistent and Very Bioaccumulative

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