# SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier		
Trade name or designation of the mixture	Phillyclad 620TS Hardener	
Registration number	-	
Synonyms	None.	
SKU#	DM017H	
Issue date	07-24-2019	
Version number	02	
Revision date	06-27-2022	
Supersedes date	07-24-2019	
1.2. Relevant identified uses of	he substance or mixture and u	ses advised against
Identified uses	Not available.	
Uses advised against	None known.	
1.3. Details of the supplier of the	e safety data sheet	
Supplier		
Company name	ITW Performance Polymers	
Address	130 Commerce Drive	
	Montgomeryville, PA 18936 US	
Division		
Telephone	Customer Service	215-855-8450
e-mail	Not available.	
Contact person	Not available.	
1.4. Emergency telephone number	CHEMTREC	800-424-9300
	International	703-527-3887

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

### Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards			
Acute toxicity, oral		Category 4	H302 - Harmful if swallowed.
Acute toxicity, dermal		Category 4	H312 - Harmful in contact with skin.
Skin corrosion/irritation		Category 1B	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye	irritation	Category 1	H318 - Causes serious eye damage.
Skin sensitization		Category 1	H317 - May cause an allergic skin reaction.
Environmental hazards			
Hazardous to the aquatic long-term aquatic hazard		Category 3	H412 - Harmful to aquatic life with long lasting effects.
Hazard summary			Harmful in contact with skin. Harmful if swallowed. ous for the environment if discharged into

#### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** 2,4,6-tris-(dimethylaminomethyl)-phenol, 3,6,9-triazaundecamethylenediamine, Amidoamine, Diethylenetriamine

Hazard pictograms



	· · · · · · · · · · · · · · · · · · ·	×			
Signal word	Danger				
Hazard statements					
H302 H312 H314 H317 H318 H412	May cause an alle Causes serious e	t with skin. kin burns and eye dar ergic skin reaction.	-		
Precautionary statements					
Prevention					
P260 P264 P270 P272 P273 P280	Contaminated wo Avoid release to t	after handling. or smoke when using ork clothing should no the environment.	this product. t be allowed out of the workp ing/eye protection/face prote		
Response					
P301 + P330 + P331 P303 + P361 + P353 P304 + P340 P305 + P351 + P338 P333 + P313 P362 + P364	IF ON SKIN (or h IF INHALED: Rer IF IN EYES: Rins and easy to do. C If skin irritation or	nove person to fresh e cautiously with wate Continue rinsing.	ately all contaminated clothin air and keep comfortable for er for several minutes. Rem dical advice/attention.	breathing.	
Storage					
P405	Store locked up.				
Disposal					
P501	Dispose of conter	nts/container in accor	dance with local/regional/nat	ional/internationa	l regulations.
Supplemental label information	mixture consists of compo	of component(s) of un onent(s) of unknown a	ponent(s) of unknown acute known acute inhalation toxic acute hazards to the aquatic known long-term hazards to	city. 99,99% of the environment. 95,	e mixture 14% of the
2.3. Other hazards	Not a PBT or vPv	B substance or mixtu	re.		
SECTION 3: Composition/	information or	n ingredients			
3.2. Mixtures					
General information					
Chemical name	%	CAS-No. / EC No.	<b>REACH Registration No.</b>	Index No.	Notes
Amidoamine	60 - 100	68953-36-6 273-201-6	-	-	
Classification: -					
3,6,9-triazaundecamethylened	diamine 10 - 30	112-57-2 203-986-2	-	612-060-00-0	
	ite Tox. 4;H302, Ac n. 1;H318, Aquatic		n Corr. 1B;H314, Skin Sens.	1;H317, Eye	
2,4,6-tris-(dimethylaminometh ol	yl)-phen 1 - 5	90-72-2 202-013-9	-	603-069-00-0	
Classification: Acu	te Tox. 4;H302, Sk	in Irrit. 2;H315, Eye Ir	rit. 2;H319		
Diethylenetriamine	1 - < 3	111-40-0 203-865-4	-	612-058-00-X	
<b>.</b>					

Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Corr. 1B;H314, Skin Sens. 1;H317, Eye

Dam. 1;H318 Other components below reportable 0,1 - 1 levels

**Classification:** 

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** 

The full text for all H-statements is displayed in section 16. SECTION A: First aid measures

SECTION 4: First aid measures		
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.	
4.1. Description of first aid meas	sures	
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.	
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Chemical burns must be treated by a physician. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.	
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.	
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.	
4.2. Most important symptoms and effects, both acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.	
4.3. Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.	

# **SECTION 5: Firefighting measures**

General fire hazards	No unusual fire or explosion hazards noted.
5.1. Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

## **SECTION 6: Accidental release measures**

6.1. Personal precautions, protect	ctive equipment and emergency procedures
For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

B. Methods and material for		5.		
ntainment and cleaning up	Prevent product from entering drains			
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.			
	Small Spills: Wipe up with absorben remove residual contamination.	t material (e.g. cloth, fleece). Clean surface thoroughly to		
	Never return spills to original contair	ers for re-use.		
l. Reference to other ctions	For personal protection, see section	8 of the SDS. For waste disposal, see section 13 of the SDS		
ECTION 7: Handling an	d storage			
. Precautions for safe ndling	Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.			
2. Conditions for safe prage, including any compatibilities	Store locked up. Store in tightly clos Section 10 of the SDS).	ed container. Store away from incompatible materials (see		
8. Specific end use(s)	Not available.			
ECTION 8: Exposure co	ontrols/personal protection			
. Control parameters	· ·			
cupational exposure limits				
-	dinance (GwV), BGBI. II, no. 184/2001			
Components	Туре	Value		
Diethylenetriamine (CAS 111-40-0)	МАК	4 mg/m3		
		1 ppm		
Belgium. Exposure Limit V				
Components	Туре	Value		
		Value 4,3 mg/m3		
Components Diethylenetriamine (CAS	Туре	Value		
<b>Components</b> Diethylenetriamine (CAS 111-40-0)	Type TWA	Value 4,3 mg/m3		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation	Type TWA n No 13 on protection of workers aga	Value 4,3 mg/m3 1 ppm inst risks of exposure to chemical agents at work		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa	Type         TWA         n No 13 on protection of workers aga         Type         TWA         TWA         TWA	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         porkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/05		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components	Type TWA n No 13 on protection of workers aga Type TWA ance Exposure Limit Values in the Wo Type	Value 4,3 mg/m3 1 ppm inst risks of exposure to chemical agents at work Value 4 mg/m3 prkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/05 Value		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa	Type         TWA         n No 13 on protection of workers aga         Type         TWA         TWA         TWA	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         porkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/05		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components Diethylenetriamine (CAS	Type TWA n No 13 on protection of workers aga Type TWA ance Exposure Limit Values in the Wo Type	Value 4,3 mg/m3 1 ppm inst risks of exposure to chemical agents at work Value 4 mg/m3 prkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/05 Value		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components Diethylenetriamine (CAS 111-40-0) Diethylenetriamine (CAS 111-40-0)	Type         TWA         n No 13 on protection of workers aga         Type         TWA         TWA         TWA         MAC	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         prkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/08         Value         4,3 mg/m3         1 ppm		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components Diethylenetriamine (CAS 111-40-0) Cyprus. OELs. Control of f	Type         TWA         n No 13 on protection of workers aga         Type         TWA         TWA         ance Exposure Limit Values in the Workers         Type         MAC         actory atmosphere and dangerous set	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/05         Value         4,3 mg/m3         1 ppm         ubstances in factories regulation, Pl 311/73, as amended		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components Diethylenetriamine (CAS 111-40-0) Cyprus. OELs. Control of f Components Diethylenetriamine (CAS	Type         TWA         n No 13 on protection of workers aga         Type         TWA         TWA         TWA         Ince Exposure Limit Values in the We         Type         MAC         actory atmosphere and dangerous su         Type	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         prkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/05         Value         4,3 mg/m3         1 ppm         ubstances in factories regulation, PI 311/73, as amended Value		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components Diethylenetriamine (CAS 111-40-0) Cyprus. OELs. Control of f Components Diethylenetriamine (CAS	Type         TWA         n No 13 on protection of workers aga         Type         TWA         Ince Exposure Limit Values in the Workers         MAC         MAC         Type         Type         Type         TYPE         TYPE         TYPE         TYPE         TYPE         TYPE         TWA	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/05         Value         4,3 mg/m3         1 ppm         ubstances in factories regulation, Pl 311/73, as amended         Value         4 mg/m3		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components Diethylenetriamine (CAS 111-40-0) Cyprus. OELs. Control of f Components Diethylenetriamine (CAS 111-40-0) Czech Republic. OELs. Go Components Diethylenetriamine (CAS 111-40-0) Czech Republic. OELs. Go Components Diethylenetriamine (CAS	Type         TWA         n No 13 on protection of workers aga         Type         TWA         Ince Exposure Limit Values in the Workers         MAC         MAC         actory atmosphere and dangerous su         Type         TWA         Vernment Decree 361	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/08         Value         4,3 mg/m3         1 ppm         ubstances in factories regulation, Pl 311/73, as amended         Value         4 mg/m3         1 ppm		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components Diethylenetriamine (CAS 111-40-0) Cyprus. OELs. Control of f Components Diethylenetriamine (CAS 111-40-0) Cyprus. OELs. Control of f Components Diethylenetriamine (CAS 111-40-0) Czech Republic. OELs. Go Components	Type         TWA         n No 13 on protection of workers aga         Type         TWA         Ince Exposure Limit Values in the We         Type         MAC         actory atmosphere and dangerous su         Type         TWA         vernment Decree 361         Type	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         ppm         orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/08         Value         4,3 mg/m3         1 ppm         ubstances in factories regulation, PI 311/73, as amended         Value         4 mg/m3         1 ppm         Value         Value         Value         Value		
ComponentsDiethylenetriamine (CAS 111-40-0)Bulgaria. OELs. Regulation ComponentsDiethylenetriamine (CAS 111-40-0)Croatia. Dangerous Substat ComponentsDiethylenetriamine (CAS 111-40-0)Cyprus. OELs. Control of f ComponentsDiethylenetriamine (CAS 111-40-0)Cyprus. OELs. Control of f ComponentsDiethylenetriamine (CAS 111-40-0)Czech Republic. OELs. Go ComponentsDiethylenetriamine (CAS 111-40-0)Citethylenetriamine (CAS 111-40-0)	Type         TWA         n No 13 on protection of workers aga         Type         TWA         Ince Exposure Limit Values in the Wa         Type         MAC         actory atmosphere and dangerous su         Type         TWA         vernment Decree 361         Type         Ceiling         TWA	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         porkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/08         Value         4,3 mg/m3         1 ppm         ubstances in factories regulation, Pl 311/73, as amended         Value         4 mg/m3         1 ppm         Value         8 mg/m3		
Components Diethylenetriamine (CAS 111-40-0) Bulgaria. OELs. Regulation Components Diethylenetriamine (CAS 111-40-0) Croatia. Dangerous Substa Components Diethylenetriamine (CAS 111-40-0) Cyprus. OELs. Control of f Components Diethylenetriamine (CAS 111-40-0) Czech Republic. OELs. Go Components Diethylenetriamine (CAS 111-40-0) Czech Republic. OELs. Go Components Diethylenetriamine (CAS	Type         TWA         n No 13 on protection of workers aga         Type         TWA         Ince Exposure Limit Values in the Wa         Type         MAC         actory atmosphere and dangerous su         Type         TWA         vernment Decree 361         Type         Ceiling         TWA	Value         4,3 mg/m3         1 ppm         inst risks of exposure to chemical agents at work         Value         4 mg/m3         orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/03         Value         4,3 mg/m3         1 ppm         ubstances in factories regulation, Pl 311/73, as amended         Value         4 mg/m3         1 ppm         Value         8 mg/m3		

Denmark. Exposure Limit Values Components	Туре	Value
		1 ppm
Estonia. OELs. Occupational Exp 2001)	osure Limits of Hazardous Su	bstances. (Annex of Regulation No. 293 of 18 Septembe
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	STEL	10 mg/m3
		2 ppm
	TWA	4,5 mg/m3
		1 ppm
Finland. Workplace Exposure Lin		
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	STEL	13 mg/m3
		3 ppm
	TWA	4,3 mg/m3
		1 ppm
France. Threshold Limit Values (\ Components	/LEP) for Occupational Expos Type	ure to Chemicals in France, INRS ED 984 Value
Diethylenetriamine (CAS	VME	4 mg/m3
111-40-0)	- l' (+ () (1 )	
Regulatory status: Indicativ	e limit (VL)	1 ppm
Regulatory status: Indicativ	e limit (VL)	тррп
Greece. OELs (Decree No. 90/199 Components	9, as amended) Type	Value
Diethylenetriamine (CAS	TWA	4 mg/m3
111-40-0)		4 mg/m3
		1 ppm
Hungary. OELs. Joint Decree on ( Components	Chemical Safety of Workplace Type	s Value
Diethylenetriamine (CAS	STEL	4 mg/m3
111-40-0)		
	TWA	4 mg/m3
Iceland. OELs. Regulation 154/19		
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	TWA	4,5 mg/m3
111-40-0)		1 ppm
		i ppin
Ireland. Occupational Exposure L Components	imits Type	Value
-	-	
Diethylenetriamine (CAS 111-40-0)	TWA	4 mg/m3
		1 ppm
Italy. Occupational Exposure Lim	its	
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	TWA	1 ppm
Lithuania. OELs. Limit Values for	· Chemical Substances, Gener	ral Requirements
Components	Туре	Value
Diethylenetriamine (CAS	STEL	10 mg/m3
111-40-0)		-
		2 ppm

Components	lues for Chemical Substances, Gene Type	Value
	TWA	4,5 mg/m3
		1 ppm
Norway, Administrative N	orms for Contaminants in the Workpl	ace
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	TLV	4 mg/m3
)		1 ppm
Poland. Ordinance of the	Minister of Labour and Social Policy	on 6 June 2014 on the maximum permissible
		work environment, Journal of Laws 2014, item 817
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	STEL	12 mg/m3
	TWA	4 mg/m3
-	occupational exposure to chemical a	gents (NP 1796)
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	TWA	1 ppm
Romania. OELs. Protectio	n of workers from exposure to chem	ical agents at the workplace
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	STEL	4 mg/m3
		1 ppm
	TWA	2 mg/m3
		0,5 ppm
Spain. Occupational Expo	sure Limits	
Components	Туре	Value
Diethylenetriamine (CAS	TWA	4,3 mg/m3
111-40-0)		
		1 ppm
	• • • •	al Exposure Limit Values (AFS 2015:7)
Components	Туре	Value
Diethylenetriamine (CAS 111-40-0)	STEL	10 mg/m3
		2 ppm
	TWA	4,5 mg/m3
		1 ppm
Switzerland. SUVA Grenzy	vorto am Arhoitsnlatz	
Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	4 mg/m3
		1 ppm
UK. EH40 Workplace Expo	acura Limita (WELa)	
Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	4,3 mg/m3
		1 ppm
	No biological exposure limits noted	
ogical limit values		
-		Ires.
ogical limit values ommended monitoring cedures ved no effect levels	Follow standard monitoring procedu	ures.

Predicted no effect concentrations (PNECs)	Not available.
8.2. Exposure controls	
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.
Individual protection measures,	such as personal protective equipment
General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Color	Amber
Odor	Amine-like.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	644,54 °F (340,3 °C) estimated
Flash point	> 200,0 °F (> 93,3 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	1,33 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	610 °F (321,11 °C) estimated
Decomposition temperature	Not available.

Viscosity	Not available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
9.2. Other information	
Density	0,95 g/cm3
Specific gravity	0,95
VOC	0 Mixed components
SECTION 10: Stability and	l reactivity
10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Peroxides. Phenols.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.
SECTION 11: Toxicologic	al information
General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of e	xposure
Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
11.1. Information on toxicologica	al effects
Acute toxicity	Harmful in contact with skin. Harmful if swallowed.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.
(as amended)	nance on protection against and preventing risk relating to exposure to carcinogens at work
Not listed.	Due to partial as complete look of data the classification is not as a situa
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	No information available.
Other information	Not available.
SECTION 12: Ecological i	nformation
12.1. Toxicity	Harmful to aquatic life with long lasting effects. Due to partial or complete lack of data the classification for hazardous to the aquatic environment, acute hazard, is not possible.
12.2. Persistence and degradability 12.3. Bioaccumulative potential	No data is available on the degradability of any ingredients in the mixture.

Partition coefficient n-octanol/water (log Kow) 3,6,9-triazaundecamethylened	diamine 1,503
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

# **SECTION 13: Disposal considerations**

13.1. Waste treatment methods	
Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

**SECTION 14: Transport information** 

Α	D	R

ADR	
14.1. UN number	UN1760
14.2. UN proper shipping	CORROSIVE LIQUID, N.O.S. (Amidoamine)
name	
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
Hazard No. (ADR)	80
Tunnel restriction code	E
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions	Read safety instructions, SDS and emergency procedures before handling.
for user	
RID	
14.1. UN number	UN1760
14.2. UN proper shipping	CORROSIVE LIQUID, N.O.S. (Amidoamine)
name	
14.3. Transport hazard class	(es)
Class	8
Subsidiary risk	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	
14.6. Special precautions	Read safety instructions, SDS and emergency procedures before handling.
for user	
ADN	
14.1. UN number	UN1760
14.2. UN proper shipping	Corrosive Liquid, N.o.s. (Amidoamine)
name	
14.3. Transport hazard class	
Class	8
Subsidiary risk	-
Label(s)	8
14.4. Packing group	
14.5. Environmental hazards	
14.6. Special precautions	Read safety instructions, SDS and emergency procedures before handling.
for user	

ΙΑΤΑ	
14.1. UN number	UN1760
14.2. UN proper shipping name	Corrosive liquid, n.o.s. (Amidoamine)
14.3. Transport hazard class	(es)
Class	8
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	s No.
ERG Code	8L
14.6. Special precautions	Read safety instructions, SDS and emergency procedures before handling.
for user	
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
IMDG	
14.1. UN number	UN1760
14.2. UN proper shipping	CORROSIVE LIQUID, N.O.S. (Amidoamine)
name	
14.3. Transport hazard class	(es)
Class	8
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
14.7. Transport in bulk	Not established.
according to Annex II of Marpol 73/78 and the IBC Code	
ADN; ADR; IATA; IMDG; RID	
^	



# **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended Not listed.

- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

### Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

### Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed.

### Other EU regulations

#### Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

3,6,9-triazaundecamethylenediamine (CAS 112-57-2)

•,•,• •••=•••••••••••••••••••••••••••••	
Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

# **SECTION 16: Other information**

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under	
Sections 2 to 15	H302 Harmful if swallowed.
	H312 Harmful in contact with skin.
	H314 Causes severe skin burns and eye damage.
	H315 Causes skin irritation.
	H317 May cause an allergic skin reaction.
	H318 Causes serious eye damage.
	H319 Causes serious eye irritation.
	H411 Toxic to aquatic life with long lasting effects.
Revision information	Physical & Chemical Properties: Multiple Properties
Training information	Follow training instructions when handling this material.
Disclaimer	ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance

for safe handling, use, processing, storage, transportation, disposal and release.