SAFETY DATA SHEET

1. Identification

Product identifier	Chockfast Orange Hardener		
Other means of identification			
SKU#	GP101H		
Recommended use	Not available.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/I	Distributor information		
Manufacturer			
Company name	ITW Engineered Polymers		
Address	130 Commerce Drive		
	Montgomeryville, PA 18936		
	United States		
Telephone	Customer Service	215-855-8450)
Website	www.itwcoatings.com		
E-mail	orders@itwcoatings.com		
Contact person	EHS Department		
Emergency phone number	CHEMTREC	800-424-9300	
	International	703-527-3887	
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Acute toxicity, oral		Category 4
	Acute toxicity, dermal		Category 4
	Skin corrosion/irritation		Category 1
	Serious eye damage/eye irritati	on	Category 1
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Environmental hazards Sensitization, skin Hazardous to the aquatic environment, long-term hazard

OSHA defined hazards

Label elements



Not classified.

Signal word	Danger
Hazard statement	Harmful if swallowed. Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Category 1

Category 3

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Triethylenetetramine (TETA)		112-24-3	60 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures	
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. Take off immediately all contaminated clothing. 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 immediately.
Ingestion	Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, 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.
Indication of 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.
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.
5. Fire-fighting measures	
Suitable extinguishing media	Alcohol resistant foam. Water spray. Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	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.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. 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.

Methods and materials for	This product is miscible in water.	
containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.	
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.	
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.	
Environmental precautions	Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.	
7. Handling and storage		
Precautions for safe handling	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. 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. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains.	
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).	
8. Exposure controls/personal protection		

Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Туре	Value
Triethylenetetramine (TETA) (CAS 112-24-3)	TWA	6 mg/m3
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Biological limit values	No biological exposure lin	its noted for the ingredient(s).
Exposure guidelines		
US WEEL Guides: Skin de	esignation	
Triethylenetetraamine	(TETA) (CAS 112-24-3)	Can be absorbed through the skin.
Appropriate engineering controls	should be matched to con or other engineering contr exposure limits have not b	typically 10 air changes per hour) should be used. Ventilation rates ditions. If applicable, use process enclosures, local exhaust ventilation ols to maintain airborne levels below recommended exposure limits. If een established, maintain airborne levels to an acceptable level. Eye ency shower must be available when handling this product.
Individual protection measure	es, such as personal protecti	ve equipment
Eye/face protection	Wear safety glasses with	side shields (or goggles) and a face shield.
Skin protection		
Hand protection	Wear appropriate chemica	I resistant gloves.
Other	Wear appropriate chemic	Il resistant clothing.
Respiratory protection	In case of insufficient vent	ilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal	protective clothing, when necessary.
General hygiene considerations	washing after handling the	drink. Always observe good personal hygiene measures, such as material and before eating, drinking, and/or smoking. Routinely wash re equipment to remove contaminants. Contaminated work clothing of the workplace

9. Physical and chemical properties

Liquid.
Liquid.
Liquid.
Colourless to light yellow.
Ammoniacal.

Odor threshold	Not available.
рН	11.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	530.6 °F (277 °C)
Flash point	251.6 °F (122.0 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	1 % estimated
Flammability limit - upper (%)	9.5 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.001 kPa
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	miscible with water
Auto-ignition temperature	635 °F (335 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.98 g/cm3
Specific gravity	0.98
10 Stability and reactivity	

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Peroxides. Phenols.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful. 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 related to the physical, chemical and toxicological characteristics	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.
Information on toxicological effects	

Acute toxicity	Harmful in contact with skin. Harmful if swallowed. May cause an allergic skin reaction.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

	d Substances (29 CFR 1910.1001-1050)
Not listed.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.
Persistence and degradability	Not available.
Bioaccumulative potential	Not available.
Mobility in soil	No data available.
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.

13. Disposal considerations

Disposal instructions	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.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	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	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	
UN number	UN2259
UN proper shipping name	Triethylenetetramine
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	B2, IB2, T7, TP2
Packaging exceptions	154
Packaging non bulk	202
Packaging bulk	242
ΙΑΤΑ	
UN number	UN2259
UN proper shipping name	Triethylenetetramine
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II

Environmental hazards ERG Code	No. 8L
Special precautions for user Other information	Read safety instructions, SDS and emergency procedures before handling.
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.
IMDG	
UN number	UN2259
UN proper shipping name	TRIETHYLENETETRAMINE
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	11
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Read safety instructions, SDS and emergency procedures before handling. This substance/mixture is not intended to be transported in bulk.





IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard	categories	
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Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

US state regulations

- US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100) Not listed.
- **US. Massachusetts RTK Substance List**

Triethylenetetramine (TETA) (CAS 112-24-3)

- US. New Jersey Worker and Community Right-to-Know Act Triethylenetetramine (TETA) (CAS 112-24-3)
- US. Pennsylvania Worker and Community Right-to-Know Law

Triethylenetetramine (TETA) (CAS 112-24-3)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	08-28-2013
Revision date	12-08-2014
Version #	05

HMIS® ratings	Health: 3 Flammability: 1 Physical hazard: 0 Personal protection: B
NFPA ratings	Health: 3 Flammability: 1 Instability: 0
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
Revision Information	Product and Company Identification: Product and Company Identification Physical & Chemical Properties: Multiple Properties