# SAFETY DATA SHEET

## 1. Identification

**Product identifier Chockfast Blue Hardener** 

Other means of identification

SKU# GP106H Recommended use Not available. **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

ITW Performance Polymers Company name 130 Commerce Drive **Address** Montgomeryville, PA 18936

**United States** 

**Telephone Customer Service** 215-855-8450

Website www.itwperformancepolymers.com

E-mail Not available. **EHS** Department **Contact person** 

**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 irritation Category 1 Sensitization, skin Category 1 Reproductive toxicity Category 2

**Environmental hazards** Hazardous to the aquatic environment, acute Category 3

hazard

Category 2 Hazardous to the aquatic environment,

long-term hazard

**OSHA** defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** 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. Suspected of damaging fertility

or the unborn child. Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

**Precautionary statement** 

Obtain special instructions before use. Do not handle until all safety precautions have been read Prevention

and understood. Do not breathe mist or vapor. Wash thoroughly after handling. 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 exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Take off

contaminated clothing and wash before reuse. Collect spillage.

Storage Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

**Supplemental information** 91.21% of the mixture consists of component(s) of unknown acute inhalation toxicity. 82.41% of

the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

## 3. Composition/information on ingredients

## **Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Fatty Acids, Tall Oil Polymers With Linoleic Acid Dimers And Tetraethylenepentamine		68605-86-7	60- 100
TRIETHYLENETETRAMINE		112-24-3	10 - 30
2,4,6-tris-(dimethylaminomethyl)-ph enol		90-72-2	5 - 10
3,6,9-triazaundecamethylenediamin e		112-57-2	5 - 10
4,4'-Isopropylidenediphenol		80-05-7	5 - 10

<sup>\*</sup>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. Call a physician

or poison control center immediately. Chemical burns must be treated by a physician. 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. Call a physician or poison control center immediately.

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.

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** 

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). 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. 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.

equipment/instructions 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. 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 containment and cleaning up

Use water spray to reduce vapors or divert vapor cloud drift. 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 absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions** 

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. 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.

## 7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. 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.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

#### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Туре	Value	Form
3,6,9-triazaundecamethylen ediamine (CAS 112-57-2)	TWA	5 mg/m3	Aerosol.
		1 ppm	Aerosol.
TRIETHYLENETETRAMIN E (CAS 112-24-3)	TWA	6 mg/m3	
		1 ppm	

**Biological limit values** 

No biological exposure limits noted for the ingredient(s).

**Exposure guidelines** 

**US WEEL Guides: Skin designation** 

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

TRIETHYLENETETRAMINE (CAS 112-24-3)

Can be absorbed through the skin.

Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece.

Material name: Chockfast Blue Hardener

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. 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.

# 9. Physical and chemical properties

Liquid. **Appearance** Physical state Liquid. Liquid. **Form** Amber Color

Odor Ammoniacal. Odor threshold Not available.

11 pН

Melting point/freezing point Not available.

Initial boiling point and boiling

range

399.2 °F (204 °C) estimated

Flash point > 201.0 °F (> 93.9 °C) Setaflash

**Evaporation rate** < 1

Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. < 1 mm Hg Vapor pressure

Vapor density > 1

Not available. Relative density

Solubility(ies)

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water)

561.2 °F (294 °C) estimated **Auto-ignition temperature** 

**Decomposition temperature** Not available. Not available. **Viscosity** 

Other information

1.01 g/cm3 Density Not explosive. **Explosive properties** 

Combustible IIIB estimated Flammability class

Oxidizing properties Not oxidizing.

Specific gravity 1.01

# 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 Hazardous polymerization does not occur.

reactions

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid Conditions to avoid

temperatures exceeding the flash point. Contact with incompatible materials.

Alkaline metals. Peroxides. Phenols. Incompatible materials

Hazardous decomposition

products

No hazardous decomposition products are known.

## 11. Toxicological information

#### Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Material name: Chockfast Blue Hardener GP106H Version #: 05 Revision date: 09-24-2018 Issue date: 02-09-2014 Skin contact Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.

**Eve contact** Causes serious eye damage.

Causes digestive tract burns. Harmful if swallowed. Ingestion

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

Harmful in contact with skin. Harmful if swallowed. Acute toxicity

**Species Test Results** Components

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

**Acute Dermal** 

Rabbit LD50 0.66 g/kg

Oral

LD50 Rat 2.1 g/kg

4,4'-Isopropylidenediphenol (CAS 80-05-7)

**Acute** Oral

LD50 Rat 3300 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

Causes serious eye damage.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

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 Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Suspected of damaging fertility or the unborn child. Reproductive toxicity

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Not an aspiration hazard. **Aspiration hazard** 

**Chronic effects** Prolonged inhalation may be harmful.

12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

No data is available on the degradability of any ingredients in the mixture. Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

3,6,9-triazaundecamethylenediamine 1.503 4,4'-Isopropylidenediphenol 3.32

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.

Material name: Chockfast Blue Hardener

SDS US

## 13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the **Disposal instructions** 

material under controlled conditions in an approved incinerator. 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

D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]

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

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.

## 14. Transport information

DOT

UN2735 **UN number** 

Amines, liquid, corrosive, n.o.s. (Fatty Acids, Tall Oil Polymers With Linoleic Acid Dimers And **UN proper shipping name** 

Tetraethylenepentamine, TRIETHYLENETETRAMINE)

Transport hazard class(es)

8 Class Subsidiary risk 8 Label(s) Ш Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IB3, T7, TP1, TP28 Special provisions

154 Packaging exceptions Packaging non bulk 203 Packaging bulk 241

**IATA** 

UN2735 **UN number** 

Amines, liquid, corrosive, n.o.s. (Fatty Acids, Tall Oil Polymers With Linoleic Acid Dimers And **UN proper shipping name** 

Tetraethylenepentamine, TRIETHYLENETETRAMINE)

Transport hazard class(es)

8 Class Subsidiary risk Ш Packing group **Environmental hazards** No. **ERG Code** 8L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

Allowed with restrictions. Cargo aircraft only

**IMDG** 

**UN number** UN2735

**UN proper shipping name** Amines, liquid, corrosive, n.o.s. (Fatty Acids, Tall Oil Polymers With Linoleic Acid Dimers And

Tetraethylenepentamine, TRIETHYLENETETRAMINE)

Transport hazard class(es)

8 **Class** Subsidiary risk Ш Packing group **Environmental hazards** 

Marine pollutant No. F-A. S-B **EmS** 

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Material name: Chockfast Blue Hardener

SDS US

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

Not established.

DOT



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.

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

Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

4,4'-Isopropylidenediphenol (CAS 80-05-7) Bisphenol A Action Plan

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

4,4'-Isopropylidenediphenol (CAS 80-05-7) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

4,4'-Isopropylidenediphenol (CAS 80-05-7) % 1.0

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

4,4'-Isopropylidenediphenol (CAS 80-05-7) Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard Acute toxicity (any route of exposure)

categories Skin corrosion or irritation

Serious eye damage or eye irritation Respiratory or skin sensitization

Reproductive toxicity

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.4,4'-Isopropylidenediphenol80-05-75 - 10

GP106H Version #: 05 Revision date: 09-24-2018 Issue date: 02-09-2014

## Other federal regulations

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

4,4'-Isopropylidenediphenol (CAS 80-05-7)

## 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

#### California Proposition 65



WARNING: This product can expose you to 4,4'-Isopropylidenediphenol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go

to www.P65Warnings.ca.gov.

#### California Proposition 65 - CRT: Listed date/Female reproductive toxin

Inventory name

4.4'-Isopropylidenediphenol (CAS 80-05-7) Listed: May 11, 2015

Domestic Substances List (DSL)

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Australian Inventory of Chemical Substances (AICS)

4,4'-Isopropylidenediphenol (CAS 80-05-7)

#### International Inventories

Australia

Canada

Country(s) or region

Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes

(PICCS)

Taiwan Chemical Substance Inventory (TCSI) Taiwan Yes Toxic Substances Control Act (TSCA) Inventory Yes United States & Puerto Rico

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

02-09-2014 Issue date **Revision date** 09-24-2018

Version # 05

**HMIS®** ratings Health: 3

> Flammability: 1 Physical hazard: 0

NFPA ratings Health: 3

> Flammability: 1 Instability: 0

ITW Performance Polymers cannot anticipate all conditions under which this information and its Disclaimer

> 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.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.

Material name: Chockfast Blue Hardener

On inventory (yes/no)\*

No

No

<sup>\*</sup>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).