SAFETY DATA SHEET

1. Identification

Product identifier PLEXUS® H4110 Adhesive

Other means of identification None.

Recommended use Not available.
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name ITW Performance Polymers

Address 30 Endicott Street

Danvers, MA 01923

United States

Telephone Customer Service 978-777-1100

Website www.itwperformancepolymers.com

E-mail Not available.

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

Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1
Sensitization, skin Category 1A

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin

reaction. Causes serious eye damage.

Precautionary statement

Prevention Do not breathe mist/vapors. 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. 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. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated

clothing before reuse.

Storage Store locked up.

4103 Version #: 04 Revision date: 07-14-2021 Issue date: 01-24-2020

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Material name: PLEXUS® H4110 Adhesive

Supplemental information

4% of the mixture consists of component(s) of unknown acute oral toxicity. 2% of the mixture consists of component(s) of unknown acute dermal toxicity. 30.5% of the mixture consists of component(s) of unknown acute inhalation toxicity. 24% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 24% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

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Chemical name	Common name and synonyms	CAS number	%
2,4,6-tris-(dimethylaminomethyl)-phenol	l e e e e e e e e e e e e e e e e e e e	90-72-2	< 20
Isophoronediamine		2855-13-2	7 - 10
TRIMETHOXYVINYLSILANE		2768-02-7	1 - < 3
Bis[(dimethylamino)methyl]phenol		71074-89-0	< 2.5
NBETA(AMINOETHYL).GAMMA -AMINOPROPYLTRIMETHOXY SILANE	. .	1760-24-3	0.1 - 1
Other components below reportable	e levels		60 - 80

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

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

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). 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 General fire hazards Use standard firefighting procedures and consider the hazards of other involved materials.

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/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.

Material name: PLEXUS® H4110 Adhesive

4103 Version #: 04 Revision date: 07-14-2021 Issue date: 01-24-2020

Methods and materials for containment and cleaning up

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.

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

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

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. 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

This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

Biological limit values

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

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

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.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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

Appearance

Liquid. Liquid. Liquid.

Form Color

Physical state

White. Slight.

Odor threshold

Not available.

Melting point/freezing point
Initial boiling point and boiling

50 °F (10 °C) estimated 476.6 °F (247 °C) estimated

range

Flash point

Odor

> 392.0 °F (> 200.0 °C)

Evaporation rate Flammability (solid, gas)

Not available.

Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

4103 Version #: 04 Revision date: 07-14-2021 Issue date: 01-24-2020

(%)

Material name: PLEXUS® H4110 Adhesive

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

Vapor pressure 0.01 hPa estimated

Not available. Vapor density Not available. Relative density

Solubility(ies)

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

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature Viscosity** Not available.

Other information

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

Flammability class Combustible IIIB estimated

Oxidizing properties Not oxidizing.

1.02 Specific gravity

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. Chemical stability

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the decomposition temperature. 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 May cause irritation to the respiratory system.

Skin contact Causes severe skin burns. 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

Harmful if swallowed. Acute toxicity

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 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.

Not classifiable as to carcinogenicity to humans. Carcinogenicity

4103 Version #: 04 Revision date: 07-14-2021 Issue date: 01-24-2020

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

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 **Aspiration hazard**

Not classified.

Not an aspiration hazard.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

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

Bioaccumulative potential

No data available.

Other adverse effects

Mobility in soil

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

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. 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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN2735 **UN number**

UN proper shipping name Amines, liquid, corrosive, n.o.s, or Polyamines, liquid, corrosive, n.o.s., Limited Quantity

Transport hazard class(es)

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

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

IB3, T7, TP1, TP28 Special provisions

154 Packaging exceptions 203 Packaging non bulk Packaging bulk 241

IATA

UN number UN2735

UN proper shipping name Transport hazard class(es)

Amines, liquid, corrosive, n.o.s. (Isophoronediamine), Limited Quantity

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

Material name: PLEXUS® H4110 Adhesive

SDS US

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.

Not established.

Allowed with restrictions. Cargo aircraft only

IMDG

UN2735 **UN** number

AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. **UN** proper shipping name

(Isophoronediamine), Limited Quantity

Transport hazard class(es)

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

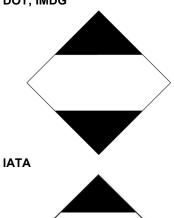
Marine pollutant No. F-A, S-B **EmS**

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

Transport in bulk according to

Annex II of MARPOL 73/78 and the IBC Code

DOT; IMDG



15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication US federal regulations

Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

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 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Yes

Classified hazard

Acute toxicity (any route of exposure)

Skin corrosion or irritation categories

Serious eye damage or eye irritation Respiratory or skin sensitization

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

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. For more information go to www.P65Warnings.ca.gov.

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)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}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

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

Issue date 01-24-2020 07-14-2021 **Revision date**

Version # 04

Health: 3 **HMIS®** ratings

Flammability: 1 Physical hazard: 0

Health: 3 NFPA ratings

Flammability: 1 Instability: 0

Material name: PLEXUS® H4110 Adhesive 4103 Version #: 04 Revision date: 07-14-2021 Issue date: 01-24-2020

country(s).

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.

Revision information

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

SDS US

4103 Version #: 04 Revision date: 07-14-2021 Issue date: 01-24-2020

SAFETY DATA SHEET

1. Identification

Product identifier PLEXUS® H4110 Activator

Other means of identification None.

Recommended use Not available.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name ITW Performance Polymers

Address 30 Endicott Street

Danvers, MA 01923

United States

Telephone Customer Service 978-777-1100

Website www.itwperformancepolymers.com

E-mail Not available.

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 Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A Sensitization, skin Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the

workplace. Wear eye protection/face protection. Wear protective gloves.

Response If on skin: Wash with plenty of water. 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. If eye irritation persists: Get medical advice/attention. Take

off contaminated clothing and wash it before reuse.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information 52% of the mixture consists of component(s) of unknown acute oral toxicity. 52% of the mixture

consists of component(s) of unknown acute dermal toxicity. 52% of the mixture consists of component(s) of unknown acute inhalation toxicity. 52% of the mixture consists of component(s)

of unknown acute hazards to the aquatic environment. 2% of the mixture consists of

component(s) of unknown long-term hazards to the aquatic environment.

Material name: PLEXUS® H4110 Activator 4105 Version #: 01 Issue date: 01-24-2020

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Epoxy Resin:reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)	EPOXY RESIN	25068-38-6	40 - 60
3-(trimethoxysilyl)propyl Glycidyl Ether		2530-83-8	1 - 2.5
DIBUTYLTIN DI(ACETATE)		1067-33-0	0.1 - 1
Other components below reportable	elevels		40 - 60

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. 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.

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis.

Rinse mouth. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and delayed

Indication of immediate medical attention and special

Provide general supportive measures and treat symptomatically. Keep victim under observation.

Symptoms may be delayed.

Rash.

General informationEnsure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

illeula

Ingestion

Specific hazards arising from the chemical

Special protective equipment

treatment needed

and precautions for firefighters

Fire fighting equipment/instructions

Specific methods
General fire hazards

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

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. Avoid breathing 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.

Methods and materials for containment and cleaning up

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.

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

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged

exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe

good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

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. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
DIBUTYLTIN DI(ACETATE)	PEL	0.1 mg/m3	
(CAS 1067-33-0)			

US. ACGIH Threshold Limit Values

US. ACGIH Inresnoid Limit values	8		
Components	Туре	Value	
DIBUTYLTIN DI(ACETATE) (CAS 1067-33-0)	STEL	0.2 mg/m3	
	TWA	0.1 mg/m3	
US. NIOSH: Pocket Guide to Chem	nical Hazards		
Components	Туре	Value	
DIBUTYLTIN DI(ACETATE) (CAS 1067-33-0)	TWA	0.1 mg/m3	

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

DIBUTYLTIN DI(ACETATE) (CAS 1067-33-0)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

DIBUTYLTIN DI(ACETATE) (CAS 1067-33-0) Skin designation applies.

US - Tennessee OELs: Skin designation

DIBUTYLTIN DI(ACETATE) (CAS 1067-33-0)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

DIBUTYLTIN DI(ACETATE) (CAS 1067-33-0)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

DIBUTYLTIN DI(ACETATE) (CAS 1067-33-0)

Can be absorbed through the skin.

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. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). 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.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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

Appearance Liquid.

Physical state Liquid.
Form Liquid.
Color Dark grey
Odor Slight.

Odor threshold Not available.

PH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Flash point > 392.0 °F (> 200.0 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available.
Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 1.55 g/cm3 **Explosive properties** Not explosive.

Flammability class Combustible IIIB estimated

Oxidizing properties Not oxidizing.

Specific gravity 1.55

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

No dangerous reaction known under conditions of normal use.

Conditions to avoidContact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition No ha

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Ingestion Knowledge about health hazard is incomplete.

Material name: PLEXUS® H4110 Activator 4105 Version #: 01 Issue date: 01-24-2020

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction.

Dermatitis. Rash.

Information on toxicological effects

Not known. Acute toxicity

Components **Test Results Species**

DIBUTYLTIN DI(ACETATE) (CAS 1067-33-0)

<u>Acute</u> Oral

LD50 Rat 32 mg/kg

Causes serious eve irritation.

Skin corrosion/irritation Causes skin irritation.

Serious eve damage/eve

irritation

Respiratory or skin sensitization

Due to partial or complete lack of data the classification is not possible. Respiratory sensitization

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.

IARC Monographs. Overall Evaluation of Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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.

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**

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

DIBUTYLTIN DI(ACETATE) 1.27

No data available. Mobility in soil

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

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

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 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.

Material name: PLEXUS® H4110 Activator 4105 Version #: 01 Issue date: 01-24-2020

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

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 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Yes

Classified hazard

Skin corrosion or irritation

categories

Serious eye damage or eye irritation Respiratory or skin sensitization

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

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. For more information go to www.P65Warnings.ca.gov.

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

Country(s) or regionInventory nameOn inventory (yes/no)*JapanInventory 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)

Taiwan Taiwan Chemical Substance Inventory (TCSI)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

*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 01-24-2020

Version # 01

HMIS® ratings Health: 2 Flammability: 1

Physical hazard: 0

NFPA ratings Health: 2

Flammability: 1 Instability: 0

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.

Material name: PLEXUS® H4110 Activator 4105 Version #: 01 Issue date: 01-24-2020 Yes