SAFETY DATA SHEET

1. Identification

Product identifier PLEXUS® H4110 Adhesive

Other means of identification

SKU# 41101

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.

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

Hazard(s) not otherwise

classified (HNOC)

None known.

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

M	lis	/tı	ır	es

Chemical name	Common name and synonyms	CAS number	%
2,4,6-tris-(dimethylaminomethyl)-p enol	1	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 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.

and precautions for firefight Fire fighting

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/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

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

Liquid. Appearance Liquid. Physical state Form Liquid. White. Color

Odor threshold Not available. Not available.

Melting point/freezing point 50 °F (10 °C) estimated Initial boiling point and boiling 476.6 °F (247 °C) estimated

Slight.

range

Odor

> 392.0 °F (> 200.0 °C) Flash point

Evaporation rate Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

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Flammability limit - upper

(%)

Not available.

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

Vapor pressure 0.01 hPa estimated

Not available. Vapor density Relative density Not available.

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.

Combustible IIIB estimated Flammability class

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.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid 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.

Causes severe skin burns. May cause an allergic skin reaction. Skin contact

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 if swallowed.

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 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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

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OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

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

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

No data available. 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).

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**

UN proper shipping name Transport hazard class(es) Amines, liquid, corrosive, n.o.s, or Polyamines, liquid, corrosive, n.o.s. (Isophoronediamine)

Class 8 Subsidiary risk 8 Label(s) 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 Packaging non bulk 203 Packaging bulk 241

IATA

UN number

UN proper shipping name Amines, liquid, corrosive, n.o.s. (Isophoronediamine)

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.

Material name: PLEXUS® H4110 Adhesive

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only

Allowed with restrictions.

IMDG

UN number UN2735

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

(Isophoronediamine)

Transport hazard class(es)

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

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

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 Not established.

the IBC Code

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.

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)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

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SARA 311/312 Hazardous

chemical

Yes

Classified hazard

categories

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eve damage or eve 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)	No
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)

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

Issue date 01-24-2020 **Revision date** 03-26-2020

Version # 03 **HMIS®** ratings

Health: 3 Flammability: 1

Physical hazard: 0

NFPA ratings Health: 3

Flammability: 1 Instability: 0

Material name: PLEXUS® H4110 Adhesive

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).

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.