

Safety Data Sheet

according to HPR, Schedule 1

Printing date 12/21/2022

Version 2.0

Reviewed on 12/19/2022

1 Identification

- **Product identifier**

- **Trade name:** *Resin solution X 150*

- **Article number:** 1001.5679

- **Application of the substance / the mixture** *Raw material for resins*

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

*Chemix GmbH
Chemixstraße 17
A-5020 Salzburg*

Tel.: 0043/662/21 22 23

- **Information department:** *Product safety department*

2 Hazard identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 3

H226 Flammable liquid and vapour.



GHS08 Health hazard

Carcinogenicity – Category 2

H351 Suspected of causing cancer. Route of exposure: Inhalation.

Reproductive Toxicity - Category 1B

H360 May damage fertility or the unborn child.

Specific Target Organ Toxicity - Repeated Exposure - Category 2

H373 May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard - Category 1

H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irritation - Category 2

H315 Causes skin irritation.

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Skin Sensitizer - Category 1

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure - Category 3

H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** *Danger*

- **Hazard-determining components of labeling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

toluene

nickel

ethyl acetate

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*bisphenol A***Hazard statements***Flammable liquid and vapour.**Causes skin irritation.**Causes serious eye irritation.**May cause an allergic skin reaction.**Suspected of causing cancer. Route of exposure: Inhalation.**May damage fertility or the unborn child.**May cause drowsiness or dizziness.**May cause damage to organs through prolonged or repeated exposure.**May be fatal if swallowed and enters airways.***Precautionary statements***If medical advice is needed, have product container or label at hand.**Keep out of reach of children.**Read label before use.**Obtain special instructions before use.**Do not handle until all safety precautions have been read and understood.**Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.**Ground and bond container and receiving equipment.**Use explosion-proof [electrical/ventilating/lighting] equipment.**Use non-sparking tools.**Take actions to prevent static discharges.**Do not breathe dust/fume/gas/mist/vapours/spray.**Wash thoroughly after handling.**Use only outdoors or in a well-ventilated area.**Contaminated work clothing should not be allowed out of the workplace.**Wear protective gloves/protective clothing/eye protection/face protection.**If swallowed: Immediately call a poison center/doctor.**Specific treatment (see on this label).**Do NOT induce vomiting.**IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.**Call a poison center/doctor if you feel unwell.**Get medical advice/attention if you feel unwell.**Take off contaminated clothing and wash it before reuse.**If skin irritation or rash occurs: Get medical advice/attention.**If eye irritation persists: Get medical advice/attention.**In case of fire: Use CO₂, powder or water spray to extinguish.**Store in a well-ventilated place. Keep container tightly closed.**Store in a well-ventilated place. Keep cool.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*

3 Composition/Information on ingredients

Chemical characterization: Mixtures**Description:** *Mixture of the substances listed below with nonhazardous additions.***Dangerous components:**

25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	30-60% w/w *
108-88-3	toluene	≥ 20 - ≤ 30 % w/w *
141-78-6	ethyl acetate	≥ 20 - ≤ 30 % w/w *
67-63-0	propan-2-ol	1-5% w/w *

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78-92-2	butanol	1-5% w/w *
7440-02-0	nickel	≥0.1-<1% w/w *
80-05-7	bisphenol A	≥0.1-<1% w/w *

* Actual concentration ranges are withheld as a trade secret.

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** *If symptoms persist consult doctor.*
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** *Water with full jet*
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** *Mouth respiratory protective device.*

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
*Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.
 Prevent formation of aerosols.*
- **Information about protection against explosions and fires:**
*Keep ignition sources away - Do not smoke.
 Protect against electrostatic charges.
 Keep respiratory protective device available.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:** *Keep receptacle tightly sealed.*
- **Specific end use(s)** *No further relevant information available.*

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** *No further data; see item 7.*
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

108-88-3 toluene

EL TWA: 20 ppm

R

EV TWA: 20 ppm

141-78-6 ethyl acetate

EL TWA: 150 ppm

EV TWA: 1,440 mg/m³, 400 ppm

67-63-0 propan-2-ol

EL STEL: 400 ppm

TWA: 200 ppm

EV STEL: 400 ppm

TWA: 200 ppm

78-92-2 butanol

EL TWA: 100 ppm

EV STEL: 150 ppm

TWA: 100 ppm

7440-02-0 nickel

EL TWA: 0.05 mg/m³

ACGIH A1, IARC 2B

EV TWA: 1 mg/m³

Inhalable fraction

- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
*Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.*

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Store protective clothing separately.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Fluid

Color:

According to product specification

· **Odor:**

Characteristic

· **Odor threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

77-78 °C

· **Flash point:**

25 °C

· **Flammability (solid, gaseous):**

Flammable.

· **Ignition temperature:**

390 °C

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not selfigniting.

· **Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

Lower:

1.2 Vol %

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Upper:	11.5 Vol %
· Vapor pressure at 20 °C:	97 hPa
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	49.0 %
Solids content:	50.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:

108-88-3 toluene

Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	5,320 mg/l (mouse)

141-78-6 ethyl acetate

Oral	LD50	5,620 mg/kg (rabbit)
Inhalative	LC50/4 h	1,600 mg/l (rat)

67-63-0 propan-2-ol

Oral	LD50	5,045 mg/kg (rat)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

78-92-2 butanol

Oral	LD50	6,480 mg/kg (rat)
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80-05-7 bisphenol A

Oral	LD50	3,250 mg/kg (rat)
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Dermal	LD50	3,000 mg/kg (rabbit)
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- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Irritating effect.

- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

108-88-3	toluene	3
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67-63-0	propan-2-ol	3
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7440-02-0	nickel	2B
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- **NTP (National Toxicology Program)**

7440-02-0	nickel	R
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12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

- **DOT/TDG, ADR, IMDG, IATA** UN1993

- **UN proper shipping name**

- **DOT/TDG** Flammable liquids, n.o.s. (Ethyl acetate, Toluene)

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· ADR	<i>Flammable liquids, n.o.s. (Ethyl acetate, Toluene), ENVIRONMENTALLY HAZARDOUS</i>
· IMDG	<i>FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, TOLUENE), MARINE POLLUTANT</i>
· IATA	<i>FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, TOLUENE)</i>

· **Transport hazard class(es)**
 · **DOT/TDG (Transport dangerous goods):**



· **Class** *3 Flammable liquids*
 · **Label** *3*

· **ADR, IMDG**

· **Class** *3 Flammable liquids*
 · **Label** *3*

· **IATA**

· **Class** *3 Flammable liquids*
 · **Label** *3*

· **Packing group**
 · **DOT/TDG, ADR, IMDG, IATA** *III*

· **Environmental hazards:** *Product contains environmentally hazardous substances: 2-methyl-2H-isothiazol-3-one*
 · **Marine pollutant:** *Symbol (fish and tree)*
 · **Special marking (ADR):** *Symbol (fish and tree)*

· **Special precautions for user** *Warning: Flammable liquids*
 · **Hazard identification number (Kemler code):** *30*
 · **EMS Number:** *F-E, S-E*
 · **Stowage Category** *A*

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** *Not applicable.*

· **Transport/Additional information:**

· **ADR**
 · **Excepted quantities (EQ)** *Code: E1*
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· **IMDG**
 · **Limited quantities (LQ)** *5L*

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- | | |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> · Excepted quantities (EQ) | <p><i>Code: E1</i></p> <p><i>Maximum net quantity per inner packaging: 30 ml</i></p> <p><i>Maximum net quantity per outer packaging: 1000 ml</i></p> |
| <ul style="list-style-type: none"> · UN "Model Regulation": | <p><i>UN 1993 FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, TOLUENE), 3, III, ENVIRONMENTALLY HAZARDOUS</i></p> |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

<i>108-88-3</i>	<i>toluene</i>
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<i>67-63-0</i>	<i>propan-2-ol</i>
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<i>78-92-2</i>	<i>butanol</i>
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<i>7440-02-0</i>	<i>nickel</i>
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<i>80-05-7</i>	<i>bisphenol A</i>
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- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

- **TLV (Threshold Limit Value)**

<i>108-88-3</i>	<i>toluene</i>		
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A4

<i>67-63-0</i>	<i>propan-2-ol</i>		
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A4

<i>7440-02-0</i>	<i>nickel</i>		
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A5

- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Canadian Non-Domestic Substances List (NDSL)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

<i>7440-02-0</i>	<i>nickel</i>
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- **Canadian Ingredient Disclosure list (limit 1%)**

<i>108-88-3</i>	<i>toluene</i>
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<i>141-78-6</i>	<i>ethyl acetate</i>
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<i>67-63-0</i>	<i>propan-2-ol</i>
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<i>78-92-2</i>	<i>butanol</i>
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- **Chemical safety assessment:** *A Chemical Safety Assessment has been carried out.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** *Environment protection department.*
- **Contact:** *Dr. Peter Mayer*
- **Date of the latest revision of the safety data sheet** *12/21/2022*
- **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods

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*DOT: US Department of Transportation**IATA: International Air Transport Association**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative***· * Data compared to the previous version altered.**

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