

## QUALIPUR 1030

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## PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** QUALIPUR 1030  
**Revision Date:** 6/12/2018  
**Version:** 2,4  
**Supplier Details:** Advanced Polymer Technology  
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**Classification of Substance****GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):**

Health, Respiratory or skin sensitization, 1 Respiratory  
Health, Specific target organ toxicity - Repeated exposure, 2  
Health, Skin corrosion/irritation, 2  
Health, Serious Eye Damage/Eye Irritation, 2 A  
Health, Respiratory or skin sensitization, 1 Skin  
Health, Specific target organ toxicity - Single exposure, 3  
Physical, Flammable Liquids, 4

**GHS Label Elements, Including Precautionary Statements**

**GHS Signal Word: DANGER**

**GHS Hazard Pictograms:****GHS Hazard Statements:**

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H373 - May cause damage to organs through prolonged or repeated exposure  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H317 - May cause an allergic skin reaction  
H335 - May cause respiratory irritation  
H227 - Combustible liquid

**GHS Precautionary Statements:**

P285 - In case of inadequate ventilation wear respiratory protection.  
P264 - Wash hands thoroughly after handling.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P342+311 - Call a POISON CENTER or doctor/physician.  
P314 - Get Medical advice/attention if you feel unwell.  
P302+352 - IF ON SKIN: Wash with soap and water.

**Hazards not Otherwise Classified (HNOC) or not Covered by GHS**

The following Hazard Statements are applicable only to the general GHS regulations and not the specific CLP regulation:  
H227: Combustible Liquid. (General GHS and USA only)

Contains isocyanates. May produce an allergic reaction.  
Contains 4,4'-methylenediphenyl diisocyanate, methylenediphenyl diisocyanate, polymethylene polyphenylene isocyanate, polymethylene diisocyanate polymer. May produce an allergic reaction.

| Chemical Ingredients: |         |                                                                                                                                                  |
|-----------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| CAS#                  | %       | Chemical Name:                                                                                                                                   |
| 9051-58-5             | 50-100% | Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[[[(3-isocyanatomethylphenyl)amino]carbonyl]-.omega.-[[[(3-isocyanatomethylphenyl)amino]carbonyl]oxy]- |
| 101-68-8              | 10-25%  | 4,4'-Methylenediphenyl diisocyanate                                                                                                              |
| 64742-95-6            | <10%    | Aromatic hydrocarbon                                                                                                                             |
| 26447-40-5            | <10%    | Benzene, 1,1'-methylenebis[isocyanato-                                                                                                           |
| 9016-87-9             | <10%    | Isocyanic acid, polymethylenepolyphenylene ester                                                                                                 |
| 108-88-3              | <1%     | Toluene                                                                                                                                          |
| 71-43-2               | <0.01%  | Benzene                                                                                                                                          |

**General information:**

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Take affected persons out into the fresh air.

**After inhalation:**

Supply fresh air.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Seek immediate medical advice.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

**After eye contact:**

Immediately remove contact lenses if possible.

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

**Most important symptoms and effects, both acute and delayed**

Asthma attacks

Breathing difficulty

Allergic reactions

Nausea

Cramp

Dizziness

Headache

Profuse sweating

Cyanosis

Disorientation

**Hazards**

Danger of impaired breathing.

Danger of pulmonary oedema.

Danger of pneumonia.

Danger of disturbed cardiac rhythm.

Danger of convulsion.

**Indication of any immediate medical attention and special treatment needed**

If swallowed, gastric irrigation with added, activated carbon.

Contains isocyanates.

Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary oedema.

Medical supervision for at least 48 hours.

If blue colouring appears (lips, ear-lobes, finger-nails), give oxygen treatment as quickly as possible.

If swallowed or in case of vomiting, danger of entering the lungs.

Monitor circulation, possible shock treatment.

**Flash Point:** 199 °F / 93 °C

Suitable extinguishing agents:

Alcohol resistant foam

Fire-extinguishing powder

Carbon dioxide

Gaseous extinguishing agents

Water haze or fog

For safety reasons 5.2 Special hazards arising from the substance or mixture  
During heating or in case of fire poisonous gases are produced.

Advice for firefighters

\Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Eliminate all ignition sources if safe to do so.

Cool endangered receptacles with water fog or haze. unsuitable extinguishing agents: Water with full jet

**Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Isolate area and prevent access.

Protect from heat.

Keep away from ignition sources.

Ensure adequate ventilation

**Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

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.

Additional Spill Procedures/Neutralization: Neutralization solutions:

(1) Colorimetric Laboratories Inc. (CLI) decontamination solution.

(2) A mixture of 75% water, 20% non-ionic surfactant (e.g. Plurafac SL-62, Tergitol TMN-10) and 5% npropanol.

(3) A mixture of 80% water, 20% non-ionic surfactant (e.g. Plurafac SL-62, Tergitol TMN-10).

(4) A mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent.

Do not flush with water or aqueous cleansing agents

**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.

**Handling Precautions:**

Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.  
Open and handle receptacle with care.  
Take note of emission threshold.

Information about fire - and explosion protection:  
Keep respiratory protective device available.  
Protect from heat.  
Keep ignition sources away - Do not smoke.

**Storage Requirements:**

Requirements to be met by storerooms and receptacles:  
Store in a cool location.  
Avoid storage near extreme heat, ignition sources or open flame.  
Provide ventilation for receptacles.

Information about storage in one common storage facility:  
Store away from foodstuffs.  
Do not store together with acids.  
Store away from oxidizing agents.  
Do not store together with alkalis (caustic solutions).

Further information about storage conditions:  
Store in cool, dry conditions in well sealed receptacles.  
Store receptacle in a well ventilated area.  
Keep container tightly sealed.

**Engineering Controls:**

Educate and train employees in safe use of this product. Follow all label instruction. Local exhaust should be used to maintain levels below the TLV whenever this product is processed, heated or spray applied. For spray applications, an air-supplied respirator must be worn. All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).

**Personal Protective Equipment:**

General protective and hygienic measures:

Personal protective equipment must be selected to prevent inhalation of vapors and contact with skin and eyes. At a bare minimum, safety glasses, gloves, apron, and combination particle/vapor respirator should be worn. In some cases, supplied air, full body suits and boots will be needed.

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Respiratory protection:

Combined Organic Vapor and Particulate Respirator is recommended for use during all processing activities.

Protection of hands:

Protective gloves

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

For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR

Neoprene gloves

Nitrile rubber, NBR

Eye protection:

Contact lenses should not be worn.

Safety glasses

Body protection:

Boots

Apron

Full head, face and neck protection

Impervious protective clothing

Limitation and supervision of exposure into the environment

No further relevant information available.

Risk management measures

See Section 7 for additional information.

No further relevant information available.

**Ingredients with limit values that require monitoring at the workplace:****101-68-8 4,4'-methylenediphenyl diisocyanate**

PEL (USA) Short-term value: C 0,2 mg/m<sup>3</sup>, C 0,02 ppm

REL (USA) Short-term value: C 0,2\* mg/m<sup>3</sup>, C 0,02\* ppm / Long-term value: 0,05 mg/m<sup>3</sup>, 0,005 ppm / \*10-min

TLV (USA) 0,051 mg/m<sup>3</sup>, 0,005 ppm

EL (Canada) Short-term value: C 0,01 ppm / Long-term value: 0,005 ppm / Skin; S

EV (Canada) 0,005 ppm

**DNELs** No further relevant information available.

**PNECs** No further relevant information available.

|   |                                  |
|---|----------------------------------|
| 9 | PHYSICAL AND CHEMICAL PROPERTIES |
|---|----------------------------------|

|                                     |                        |                                   |                |
|-------------------------------------|------------------------|-----------------------------------|----------------|
| <b>Appearance:</b>                  | Clear yellow Liquid    | <b>Flash Point:</b>               | 199 °F / 93 °C |
| <b>Physical State:</b>              | Liquid                 | <b>Volatile organic compound:</b> | 98 g/L         |
| <b>Specific Gravity or Density:</b> | 1,06 g/cm <sup>3</sup> |                                   |                |
| <b>Boiling Point:</b>               | 406 °F / 208 °C        |                                   |                |

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| 10 | STABILITY AND REACTIVITY |
|----|--------------------------|

|                                  |                                                                                                                                   |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Chemical Stability:</b>       | No decomposition if used and stored according to specifications.                                                                  |
| <b>Conditions to Avoid:</b>      | Keep ignition sources away - Do not smoke.                                                                                        |
| <b>Identification:</b>           | Store away from oxidizing agents.                                                                                                 |
| <b>Materials to Avoid:</b>       | No further relevant information available.                                                                                        |
| <b>Hazardous Decomposition:</b>  | Poisonous gases/vapours<br>Nitrogen oxides<br>Hydrogen cyanide (prussic acid)<br>Isocyanate<br>Carbon monoxide and carbon dioxide |
| <b>Hazardous Polymerization:</b> | Reacts with water.                                                                                                                |

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| 11 | TOXICOLOGICAL INFORMATION |
|----|---------------------------|

**LD/LC50 values relevant for classification:**

**101-68-8 4,4'-methylenediphenyl diisocyanate**

Oral LD50 2200 mg/kg (mouse)

**64742-95-6 Solvent naphtha (petroleum), light arom.**

Oral LD50 >6800 mg/kg (rat)

Dermal LD50 >3400 mg/kg (rab)

Inhalative LC50/4 h >10,2 mg/l (rat)

**Primary irritant effect:**

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

**on the eye:** Irritating effect.

**Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

**Subacute to chronic toxicity:**

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

Danger through skin adsorption.

Toxic and/or corrosive effects may be delayed up to 24 hours.

**Sensitisation:**

Sensitization possible by skin contact.

Sensitization possible by inhalation and/or dermal contact.

**Repeated dose toxicity:**

May cause damage to organs through prolonged or repeated exposure .

Repeated exposures may result in skin and/or respiratory sensitivity.



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| 12 | ECOLOGICAL INFORMATION |
|----|------------------------|

**Aquatic toxicity:** The material is harmful to the environment.

**Persistence and degradability** Not easily biodegradable

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

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

**Ecotoxical effects:**

**Remark:**

Harmful to fish

Due to mechanical actions of the product (e.g. agglutinations) damages may occur.

The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen.

**Additional ecological information:**

**General notes:**

This statement was deduced from products with a similar structure or composition.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

Water hazard class 2 (German Regulation) (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.

Harmful to aquatic organisms

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

· **12.6 Other adverse effects**

|    |                         |
|----|-------------------------|
| 13 | DISPOSAL CONSIDERATIONS |
|----|-------------------------|

Recommendation

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

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

|    |                       |
|----|-----------------------|
| 14 | TRANSPORT INFORMATION |
|----|-----------------------|

UN-Number DOT, ADR, ADN, IMDG, IATA

N/A

UN proper shipping name DOT, ADR, ADN, IMDG, IATA

N/A

Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class

N/A

Packing group DOT, ADR, IMDG, IATA

N/A

Marine pollutant

No

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

UN "Model Regulation"

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Component (CAS#) [%] - CODES

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-[[[(3-isocyanatomethylphenyl)amino]carbonyl]-.omega.-[[[(3-isocyanatomethylphenyl)amino]carbonyl]oxy]- (9051-58-5) [50-100%] TSCA

4,4'-Methylenediphenyl diisocyanate (101-68-8) [10-25%] CERCLA, HAP, MASS, NJHS, OSHAWAC, PA, SARA313, TSCA, TXAIR

Aromatic hydrocarbon (64742-95-6) [<10%] TSCA

Benzene, 1,1'-methylenebis[isocyanato- (26447-40-5) [<10%] TSCA

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9) [<10%] SARA313, TSCA

RQ(1000LBS), Toluene (108-88-3) [<1%] CERCLA, CSWHS, EPCRAWPC, GADSL, HAP, MASS, NJHS, OSHAWAC, PA, PRIPOL, PROP65, SARA313, TOXICPOL, TOXICRCRA, TSCA, TXAIR, TXHWL

Benzene (71-43-2) [<0.01%] CERCLA, CSWHS, EPCRAWPC, GADSL, HAP, HWRCRA, MASS, NJHS, NRC, OSHAHTS, OSHAWAC, PA, PRIPOL, PROP65, SARA313, TOXICPOL, TOXICRCRA, TSCA, TXAIR, TXHWL



## WARNING

This product can expose you to chemicals including Toluene, 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](http://www.P65Warnings.ca.gov).

This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## Regulatory CODE Descriptions

RQ = Reportable Quantity

TSCA = Toxic Substances Control Act

CERCLA = Superfund Cleanup Substances

HAP = Hazardous Air Pollutants

MASS = MA Massachusetts Hazardous Substances List

NJHS = NJ Right-to-Know Hazardous Substances

OSHAAC = OSHA Workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

SARA313 = SARA 313 Title III Toxic Chemicals

TXAIR = TX Air Contaminants with Health Effects Screening Level

CSWHS = Clean Water Act Hazardous Substances

EPCRAWPC = EPCRA Water Priority Chemicals

GADSL = Global Automotive Declarable Substance List (GADSL)

PRIPOL = Clean Water Act Priority Pollutants

PROP65 = CA Prop 65

TOXICPOL = Clean Water Act Toxic Pollutants

TOXICRCRA = RCRA Toxic Hazardous Wastes (U-List)

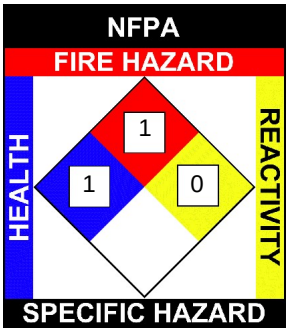
TXHWL = TX Hazardous Waste List

HWRCRA = RCRA Hazardous Wastes

NRC = Nationally Recognized Carcinogens

OSHAHTS = OSHA Hazardous and Toxic Substances

**NFPA:** Health = 1, Fire = 1, Reactivity = 0, Specific Hazard = n/a  
**HMIS III:** Health = 1(Chronic), Fire = 1, Physical Hazard = 0



| HMIS                |                                     |   |
|---------------------|-------------------------------------|---|
| HEALTH              | <input checked="" type="checkbox"/> | 1 |
| FLAMMABILITY        |                                     | 1 |
| PHYSICAL HAZARD     |                                     | 0 |
| PERSONAL PROTECTION | <input type="checkbox"/>            |   |

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.

Revision Date: 6/12/2018