

PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

SECTION 1. IDENTIFICATION

Product name : PROPYLENE GLYCOL INDUSTRIAL

Manufacturer or supplier's details

Company name of supplier : Indorama Ventures Oxides LLC

Address : 24 Waterway Ave., Suite 1100

The Woodlands, Texas 77380

United States of America (USA)

Telephone : (256) 3405200

Manufacturer or supplier's details

E-mail address of person responsible for the SDS

: SDSHUN@indorama.net

Emergency telephone number : CHEMTREC - USA (English)

Local Number (National): +1 703-741-5970

Toll-Free Number: 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Solvent

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

THIS PRODUCT IS NOT TO BE USED TO PRODUCE FOGS OR MISTS IN THEATRICAL, MUSICAL, OR OTHER ENTERTAINMENT PERFORMANCES. THIS PRODUCT IS NOT TO BE USED AS A COMPONENT OF THE LIQUID USED IN ELECTRONIC CIGARETTE (E-CIGARETTE) PRODUCTS.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

General advice : Treat symptomatically.

Get medical attention if symptoms occur.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact : Wash with water and soap as a precaution.

Get medical attention if irritation develops and persists.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and

delayed

None known.

Notes to physician

: Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

High volume water jet

Specific hazards during

firefighting

No information available.

Hazardous combustion

products

Carbon oxides

Specific extinguishing

methods

: Standard procedure for chemical fires.

Further information : No action shall be taken involving any personal risk or without

suitable training.

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if

necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Refer to protective measures listed in sections 7 and 8.



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

Environmental precautions : No special environmental precautions required.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

: Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against :

fire and explosion

Normal measures for preventive fire protection.

Advice on safe handling : For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Conditions for safe storage : No special storage conditions required.

Keep in properly labelled containers.

Materials to avoid : For incompatible materials please refer to Section 10 of this

SDS.

Further information on

storage stability

Stable under normal conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

Hand protection

Material : PVC or other plastic material gloves

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Tightly fitting safety goggles

Skin and body protection : Choose body protection according to the amount and

concentration of the dangerous substance at the work place.

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

Colour : colourless, Clear

Odour : odourless

Odour Threshold : No data is available on the product itself.

pH : ca. 7

neutral

Freezing point : ca. -76 °F / -60 °C

Boiling point : ca. 370 °F / 188 °C

(ca. 1,013.08 hPa)

Flash point : ca. 228 °F / 109 °C

Method: closed cup

Evaporation rate : 0.01

Flammability (solid, gas) : No data is available on the product itself.

Flammability (liquids) : No data is available on the product itself.

Upper explosion limit / Upper

flammability limit

: ca. 12.5 %(V)

Lower explosion limit / Lower

flammability limit

: ca. 2.6 %(V)

Vapour pressure : < 0.1333 hPa (77 °F / 25 °C)

Relative vapour density : ca. 2.6 (59 - 90 °F / 15 - 32 °C)

Relative density : $1.04 (77 \degree F / 25 \degree C)$

Density : 1.04 g/cm3 (68 °F / 20 °C)

Solubility(ies)

Water solubility : No data is available on the product itself.

Solubility in other solvents : No data is available on the product itself.

Partition coefficient: n-

octanol/water

: log Pow: -1

log Pow: -0.92

Auto-ignition temperature : ca.700 °F / 371 °C

Thermal decomposition : No data is available on the product itself.

Self-Accelerating

decomposition temperature

(SADT)

No data is available on the product itself.

Viscosity



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: Date of last issue: -SDS Number:

12/08/2019 1.0 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

: ca. 46 mPa.s (77 °F / 25 °C) Viscosity, dynamic

Viscosity, kinematic : < 20 mm2/s (104 °F / 40 °C)

Explosive properties : No data is available on the product itself.

Oxidizing properties None.

Particle size : No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

: No dangerous reaction known under conditions of normal use. Reactivity

Chemical stability Stable under normal conditions.

Possibility of hazardous

reactions

: No hazards to be specially mentioned.

Conditions to avoid : None known.

Incompatible materials : None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : No data is available on the product itself.

exposure

Acute toxicity

Acute oral toxicity : No data available

Acute inhalation toxicity : No data available

: No data available Acute dermal toxicity

Acute toxicity (other routes of : No data available

administration)

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

No data available Assessment:

Germ cell mutagenicity

Genotoxicity in vitro : No data available

Genotoxicity in vivo : No data available



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

Germ cell mutagenicity-

Assessment

: No data available

Carcinogenicity

No data available

Carcinogenicity - Assessment : No data available

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

ACGIH No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Reproductive toxicity

Effects on fertility : No data available

Effects on foetal development

: No data available

Reproductive toxicity -

Assessment

: No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity

No data available

Repeated dose toxicity -

Assessment

: No data available

Aspiration toxicity

No data available

Experience with human exposure

General Information: No data available



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Ingestion: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to fish : No data available

Toxicity to daphnia and other

aquatic invertebrates

: No data available

Toxicity to algae/aquatic

plants

: No data available

M-Factor (Acute aquatic

toxicity)

: No data available

Toxicity to fish (Chronic

toxicity)

: No data available

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: No data available

M-Factor (Chronic aquatic

toxicity)

: No data available

Toxicity to microorganisms : No data available

Toxicity to soil dwelling

organisms

: No data available

Plant toxicity : No data available



PROPYLENE GLYCOL INDUSTRIAL

Version Date of last issue: -Revision Date: SDS Number:

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

: No data available Sediment toxicity

Toxicity to terrestrial

organisms

: No data available

Ecotoxicology Assessment

Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Toxicity Data on Soil : No data available

Other organisms relevant to

the environment

: No data available

Persistence and degradability

: No data available Biodegradability

Biochemical Oxygen

Demand (BOD)

: No data available

Chemical Oxygen Demand

(COD)

: No data available

BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon

(DOC)

: No data available

Physico-chemical

removability

: No data available

Stability in water : No data available

Photodegradation : No data available

Impact on Sewage

Treatment

: No data available

Bioaccumulative potential

Bioaccumulation : No data available

Partition coefficient: n-

octanol/water - Product

: log Pow: -1

log Pow: -0.92

Mobility in soil



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

Mobility : No data available

Distribution among

environmental compartments

: No data available

Stability in soil : No data available

Other adverse effects

Environmental fate and

pathways

: No data available

Results of PBT and vPvB

assessment

: No data available

Endocrine disrupting

potential

: No data available

Adsorbed organic bound

halogens (AOX)

: No data available

Hazardous to the ozone layer

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82

Protection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was

manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +

В).

Additional ecological

information

: No data available

Global warming potential

(GWP)

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of as hazardous waste in compliance with local and

national regulations.

Dispose of contents/ container to an approved waste disposal

plant.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA

Not regulated as dangerous goods



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

IMDG

Not regulated as dangerous goods

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

Not applicable for product as supplied.

National Regulations

DOT Classification

Not regulated as dangerous goods

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

CH INV : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

TSCA - 5(a) Significant New Use Rule List of Chemicals

No substances are subject to a Significant New Use Rule.

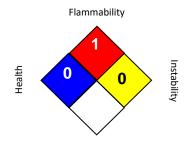
US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



Special hazard

HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard

Revision Date : 12/08/2019

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

The trademarks above are the property of Indorama Ventures Oxides LLC or an affiliate thereof.



PROPYLENE GLYCOL INDUSTRIAL

Version Revision Date: SDS Number: Date of last issue: -

1.0 12/08/2019 400041020103 Date of first issue: 12/08/2019

Print Date 08/11/2020

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED INDORAMA VENTURES EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR INDORAMA VENTURES PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE.