

Revision Date: 08/05/2015

This is a kit that contains the following components: TremSEAL Pitch Pocket Sealer - Part A TremSEAL Pitch Pocket Sealer - Part B



Revision Date: 08/05/2015

SAFETY DATA SHEET

1. Identification

Product identifier: TremSEAL Pitch Pocket Sealer - Part A

Product Code: 876200 304

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco Incorporated 3735 Green Road BEACHWOOD OH 44122 US

Contact person:EH&S DepartmentTelephone:216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2B
Respiratory sensitizer	Category 1
Skin sensitizer	Category 1
Carcinogenicity	Category 2

Unknown toxicity - Health

Acute toxicity, oral	22.5 %
Acute toxicity, dermal	22.5 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	100 %

Unknown toxicity - Environment

Acute hazards to the aquatic	100 %
environment	
Chronic hazards to the aquatic	100 %
environment	

Label Elements

Hazard Symbol:





Revision Date: 08/05/2015

Signal Word: Danger

Hazard Statement: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction. Suspected of causing cancer. Causes skin and eye irritation.

Precautionary Statement

Prevention: Wash thoroughly after handling. Wear protective gloves/protective

clothing/eye protection/face protection. Avoid breathing

dust/fume/gas/mist/vapors/spray. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal

protective equipment as required.

Response: If inhaled: If breathing is difficult, remove person to fresh air and keep

comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. Specific treatment (see this label). Wash contaminated clothing before

reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Diisodecyl phthalate (mixed Is)	68515-49-1	15 - 40%
4,4'-Methylene bis(phenylisocyanate)	101-68-8	10 - 30%
Diphenylmethane diisocyanate	26447-40-5	10 - 30%
Polymethylene polyphenyl isocyanate	9016-87-9	7 - 13%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures



Revision Date: 08/05/2015

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.

Inhalation: Call a physician or poison control center immediately. If breathing stops,

provide artificial respiration. Move to fresh air. If breathing is difficult, give

oxygen.

Skin Contact: Get medical attention. Destroy or thoroughly clean contaminated shoes.

Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction

develops, get medical attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms: Prolonged or repeated contact with skin may cause redness, itching,

irritation and eczema/chapping.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

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

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep upwind. Keep unauthorized personnel away. Do not touch damaged containers or spilled

material unless wearing appropriate protective clothing.



Revision Date: 08/05/2015

Methods and material for containment and cleaning

up:

Collect spillage in containers, seal securely and deliver for disposal

according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:

Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes, skin, and clothing. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
4,4'-Methylene bis(phenylisocyanate)	TWA	0.005 ppm	US. ACGIH Threshold Limit Values (2011)
	Ceiling	0.02 ppm 0.2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Polymethylene polyphenyl isocyanate	TWA	0.005 ppm	US. ACGIH Threshold Limit Values (2011)
	Ceiling	0.02 ppm 0.2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	type	Exposure Limit Values	Source
4,4'-Methylene bis(phenylisocyanate)	CEILING	0.01 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.005 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)



Revision Date: 08/05/2015

4,4'-Methylene bis(phenylisocyanate)	TWAEV	0.005 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	CEV	0.02 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
4,4'-Methylene bis(phenylisocyanate)	TWA	0.005 ppm	0.051 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Diphenylmethane diisocyanate	TWA	0.005 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEILING	0.01 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Polymethylene polyphenyl isocyanate	TWA	0.005 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEILING	0.01 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.005 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEILING	0.01 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Polymethylene polyphenyl isocyanate	TWAEV	0.005 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	CEV	0.02 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Polymethylene polyphenyl isocyanate	TWA	0.005 ppm	0.051 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Appropriate Engineering Controls

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.



Revision Date: 08/05/2015

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general

ventilation (typically 10 air changes per hour) 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/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below

recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an

approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter,

cartridge or canister. Contact health and safety professional or

manufacturer for specific information.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be

allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state: solid
Form: Paste
Color: Amber
Odor: Mild

Odor threshold:

pH:

No data available.

No data available.

Melting point/freezing point:

No data available.

No data available.

No data available.

No data available.

Flash Point: > 93 °C > 199 °F(Pensky-Martens Closed Cup)

Evaporation rate: Slower than n-Butyl Acetate

Flammability (solid, gas):

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

No data available.

No data available.



Revision Date: 08/05/2015

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.1

Solubility(ies)

Solubility in water:
Solubility (other):
No data available.
Partition coefficient (n-octanol/water):
No data available.
No data available.
No data available.
Viscosity:
No data available.
No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous

Reactions:

No data available.

Conditions to Avoid: Avoid heat or contamination.

Incompatible Materials: Alcohols. Amines. Strong acids. Avoid contact with oxidizing agents (e.g.

nitric acid, peroxides and chromates). Strong bases. Water, moisture.

Hazardous Decomposition

Products:

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Eye contact: Causes eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 36,425 mg/kg

Dermal

Product: No data available.

Inhalation

Product: No data available.

Specified substance(s):



Revision Date: 08/05/2015

Diisodecyl phthalate

(mixed Is)

LC 50 (Guinea pig, Mouse, Rat, 6 h): > 0.13 mg/l

4,4'-Methylene

bis(phenylisocyanate)

LC 50 (Rat, 4 h): 0.49 mg/l

Repeated dose toxicity

Product:

No data available.

Skin Corrosion/Irritation

Product:

No data available.

Serious Eye Damage/Eye Irritation

Product:

No data available.

Specified substance(s):

Diisodecyl phthalate

(mixed Is)

in vivo (Rabbit, 24 - 48 hrs): Slightly irritating

4,4'-Methylene

bis(phenylisocyanate)

in vivo (Rabbit, 24 - 72 hrs): Not irritating

Respiratory or Skin Sensitization

Product:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause sensitization by inhalation.

Carcinogenicity

Product:

Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product:

No data available.

In vivo

Product:

No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.



Revision Date: 08/05/2015

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.



Revision Date: 08/05/2015

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u> <u>Reportable quantity</u>

4,4'-Methylene

5000 lbs.

bis(phenylisocyanate)

Polymethylene 5000 lbs.

polyphenyl isocyanate

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.



Revision Date: 08/05/2015

SARA 304 Emergency Release Notification

<u>Chemical Identity</u> <u>Reportable quantity</u>

Diisodecyl phthalate

(mixed Is)

4,4'-Methylene 5000 lbs.

bis(phenylisocyanate)

Polymethylene 5000 lbs.

polyphenyl isocyanate

SARA 311/312 Hazardous Chemical

Chemical Identity Threshold Planning Quantity

Diisodecyl phthalate 500 lbs

(mixed Is)

4,4'-Methylene 500 lbs

bis(phenylisocyanate)

Diphenylmethane 500 lbs

diisocyanate

Polymethylene polyphenyl 500 lbs

isocyanate

SARA 313 (TRI Reporting)

Chemical Identity

4,4'-Methylene

bis(phenylisocyanate)

Polymethylene

polyphenyl isocyanate

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

4,4'-Methylene bis(phenylisocyanate)

Diphenylmethane diisocyanate

Polymethylene polyphenyl isocyanate

US. Massachusetts RTK - Substance List

Chemical Identity

4,4'-Methylene bis(phenylisocyanate)

Polymethylene polyphenyl isocyanate

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Diisodecyl phthalate (mixed Is)

4,4'-Methylene bis(phenylisocyanate)

Polymethylene polyphenyl isocyanate



Revision Date: 08/05/2015

US. Rhode Island RTK

Chemical Identity

Diisodecyl phthalate (mixed Is) 4,4'-Methylene bis(phenylisocyanate) Polymethylene polyphenyl isocyanate

Other Regulations:

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 0 g/l

Inventory Status:

Australia AICS: One or more components in this product are

not listed on or exempt from the Inventory.

Canada DSL Inventory List: All components in this product are listed on or

exempt from the Inventory.

EINECS, ELINCS or NLP: One or more components in this product are

not listed on or exempt from the Inventory.

Japan (ENCS) List: One or more components in this product are

not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances:

One or more components in this product are

not listed on or exempt from the inventory.

Korea Existing Chemicals Inv. (KECI): One or more components in this product are

not listed on or exempt from the Inventory.

Canada NDSL Inventory: One or more components in this product are

not listed on or exempt from the Inventory.

Philippines PICCS: One or more components in this product are

not listed on or exempt from the Inventory.

US TSCA Inventory:

All components in this product are listed on or

exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan ISHL Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing:

One or more components in this product are

not listed on or exempt from the Inventory.



Revision Date: 08/05/2015

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

Revision Date: 08/05/2015

Version #: 1.0

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.



Revision Date: 08/05/2015

SAFETY DATA SHEET

1. Identification

Product identifier: TremSEAL Pitch Pocket Sealer - Part B

Product Code: 876200 304

Recommended use and restriction on use

Recommended use: Curative Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco Incorporated 3735 Green Road BEACHWOOD OH 44122 US

Contact person: **EH&S** Department Telephone: 216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Inhalation - dust and Category 4 mist) Serious Eye Damage/Eye Irritation Category 2B Carcinogenicity Category 2

Acute toxicity, oral 5 % Acute toxicity, dermal 7 % Acute toxicity, inhalation, vapor 100 % Acute toxicity, inhalation, dust or mist 53.4 %

53.9 % Acute hazards to the aquatic environment Chronic hazards to the aquatic 100 % environment

Label Elements

Hazard Symbol:





Revision Date: 08/05/2015

Signal Word: Warning

Hazard Statement: Harmful if inhaled.

Causes eye irritation.

Suspected of causing cancer.

Precautionary Statement

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a

well-ventilated area. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: 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 eye

irritation persists: Get medical advice/attention. Call a POISON

CENTER/doctor if you feel unwell.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Polypropylene glycol	25322-69-4	40 - 70%
Low acid filtered neutral oil	8001-79-4	1 - 5%
Carbon Black	1333-86-4	1 - 5%
Amorphous silica	7631-86-9	0.1 - 1%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Wash skin thoroughly with soap and water. If skin irritation occurs: Get

medical advice/attention.

Eye contact: Any material that contacts the eye should be washed out immediately with

water. If easy to do, remove contact lenses. If eye irritation persists: Get

medical advice/attention.



Revision Date: 08/05/2015

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

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

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

No data available.

Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so.



Revision Date: 08/05/2015

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood.

Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after handling. Provide adequate ventilation. Wear appropriate personal

protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities:

Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Carbon Black - Inhalable fraction.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values (2011)
Carbon Black	PEL	3.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Amorphous silica	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)

Chemical name	type	Exposure Limit Values	Source
Carbon Black - Inhalable	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Carbon Black	TWAEV	3.5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Carbon Black	TWA	3.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.



Revision Date: 08/05/2015

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists,

mechanical generation of dusts, drying of solids, etc.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: Black
Odor: Slight odor

Odor threshold:

pH:

No data available.

No data available.

Melting point/freezing point:

No data available.

No data available.

No data available.

No data available.

Flash Point: > 177 °C > 351 °F(Pensky-Martens Closed Cup)

Evaporation rate: Slower than Ether

Flammability (solid, gas): No Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

Vapor pressure:

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.02

Solubility(ies)

Solubility in water: Dispersible

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

No data available.

No data available.

No data available.

No data available.



Revision Date: 08/05/2015

Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous

Reactions:

Products:

No data available.

Conditions to Avoid: Avoid heat or contamination.

Incompatible Materials: Strong acids. Strong bases.

Hazardous Decomposition

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: Causes mild skin irritation.

Eye contact: Causes eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: No data available.

Inhalation

Product: ATEmix: 2.37 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.



Revision Date: 08/05/2015

Specified substance(s):

Polypropylene glycol in vivo (Rabbit, 1 - 48 hrs): Moderately irritating

Low acid filtered neutral (Human): Irritating

oil

Carbon Black in vivo (Rabbit, 24 - 72 hrs): Not irritating

Amorphous silica in vivo (Rabbit, 24 hrs): Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Carbon Black Overall evaluation: Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.



Revision Date: 08/05/2015

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Polypropylene glycol LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): >

10,000 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Carbon Black NOAEL (Salmo sp., 30 d): 17 mg/l QSAR

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.



Revision Date: 08/05/2015

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.



Revision Date: 08/05/2015

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

Polypropylene glycol 500 lbs Low acid filtered neutral oil 500 lbs Carbon Black 500 lbs Amorphous silica 500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Carbon Black

US. Massachusetts RTK - Substance List

Chemical Identity

Carbon Black

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Carbon Black

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations:

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:

0 g/l

Inventory Status:

Australia AICS:

One or more components in this product are

not listed on or exempt from the Inventory.

Canada DSL Inventory List: All components in this product are listed on or

exempt from the Inventory.

EINECS, ELINCS or NLP: One or more components in this product are

not listed on or exempt from the inventory.

Japan (ENCS) List:

One or more components in this product are



Revision Date: 08/05/2015

not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances:

One or more components in this product are

not listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): One or more components in this product are

not listed on or exempt from the Inventory.

Canada NDSL Inventory: One or more components in this product are

not listed on or exempt from the Inventory.

Philippines PICCS: One or more components in this product are

not listed on or exempt from the Inventory.

US TSCA Inventory:

All components in this product are listed on or

exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan ISHL Listing: One or more components in this product are

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

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

Revision Date: 08/05/2015

Version #: 1.0

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.