

Reflectanks™

# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Reflectanks  
Product code : Reflectanks

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.3. Details of the supplier of the safety data sheet

Invisaflects LLC  
4516 Ozark St. NE  
Cedar Rapids, 52402 - U.S.A.  
T 319-929-9915  
[www.invisaflects.com](http://www.invisaflects.com)

#### 1.4. Emergency telephone number

Emergency number : 319-929-9915

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Liq. 3	H226
Muta. 1B	H340
Carc. 1B	H350

Full text of H-statements: see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS02

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H226 - Flammable liquid and vapour  
H340 - May cause genetic defects (Dermal, Inhalation, oral)  
H350 - May cause cancer (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking  
P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
P280 - Wear eye protection, protective gloves, protective clothing  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P370+P378 - In case of fire: Use dry extinguishing powder, carbon dioxide (CO<sub>2</sub>), foam to extinguish  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

#### 2.3. Other hazards

No additional information available

# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Aliphatic Hydrocarbon	(CAS No) 64742-48-9	25 - 35	Flam. Liq. 3, H226 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
Titanium Dioxide	(CAS No) 13463-67-7	25 - 30	Carc. 2, H351
Amorphous silica gel	(CAS No) 7631-86-9	1 - 5	Not classified
Aluminum Oxide	(CAS No) 21645-51-2	1 - 5	Not classified
Xylene	(CAS No) 1330-20-7	1 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Get immediate medical advice/attention.
- First-aid measures after ingestion : Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid and vapour.
- Reactivity : Flammable liquid and vapour.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

62017 White Silicone MR		
ACGIH	Not applicable	
OSHA	Not applicable	
Titanium Dioxide (13463-67-7)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (Titanium dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	LRT irr; A3
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
Amorphous silica gel (7631-86-9)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	20 mppcf
Aluminum Oxide (21645-51-2)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (Aluminium, insoluble compounds; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)
OSHA	Not applicable	
Xylene (1330-20-7)		
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	ACGIH STEL (ppm)	150 ppm
ACGIH	Remark (ACGIH)	URT & eye irr; CNS impair
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Aliphatic Hydrocarbon (64742-48-9)		
ACGIH	ACGIH TWA (ppm)	100 ppm As Stoddard Solvent
OSHA	OSHA PEL (TWA) (ppm)	500 ppm As Stoddard Solvent

# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Hand protection	: Protective gloves.
Eye protection	: Safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear respiratory protection.
Environmental exposure controls	: Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Mixture contains one or more component(s) which have the following colour(s): Pure substance: white Unpurified: coloured Colourless to white White Colourless to light yellow Colourless
Odour	: There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): Odourless Pleasant odour Aromatic odour Mild odour Petroleum-like odour
Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 103 (≥ 107) °F
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available
Density	: 10.13 lb/gal
Solubility	: Water: Solubility in water of component(s) of the mixture : • Titanium Dioxide: 0.15 g/100ml • Amorphous silica gel: 0.15 g/100ml • Aluminum Oxide: < 0.01 g/100ml • Xylene : < 0.02 g/100ml • Aliphatic Hydrocarbon: < 0.01 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: 82 - 88 m <sup>2</sup> /s
Viscosity, dynamic	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>Titanium Dioxide (13463-67-7)</b>	
LD50 oral rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	> 6.8 mg/l/4h (Rat; Experimental value)

<b>Amorphous silica gel (7631-86-9)</b>	
LD50 oral rat	> 10000 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)

<b>Aluminum Oxide (21645-51-2)</b>	
LD50 oral rat	> 5000 mg/kg (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Weight of evidence; >2000 mg/kg bodyweight; Rat; Experimental value)

<b>Xylene (1330-20-7)</b>	
LD50 oral rat	3523 - 8600 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 3523 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value; >4000 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 4200 mg/kg bodyweight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)
LC50 inhalation rat (mg/l)	29 mg/l/4h (Rat; Experimental value; 27.57 mg/l/4h; Rat; Experimental value)
ATE US (oral)	3523.000 mg/kg bodyweight
ATE US (dermal)	1100.000 mg/kg bodyweight
ATE US (vapours)	11.000 mg/l/4h
ATE US (dust,mist)	29.000 mg/l/4h

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : May cause genetic defects (Dermal, Inhalation, oral).  
Carcinogenicity : May cause cancer (Dermal, Inhalation, oral).

<b>Titanium Dioxide (13463-67-7)</b>	
IARC group	2B - Possibly carcinogenic to humans

<b>Amorphous silica gel (7631-86-9)</b>	
IARC group	3 - Not classifiable

<b>Xylene (1330-20-7)</b>	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified  
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<b>Titanium Dioxide (13463-67-7)</b>	
EC50 Daphnia 1	> 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Weight of evidence)
Threshold limit algae 1	61 mg/l (EC50; Other; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
<b>Amorphous silica gel (7631-86-9)</b>	
LC50 fish 1	> 10000 mg/l (LC50; 96 h)
EC50 Daphnia 1	> 10000 mg/l (EC50; 24 h)
<b>Aluminum Oxide (21645-51-2)</b>	
LC50 fish 1	> 10000 mg/l (LC50; 96 h; Pisces)
EC50 Daphnia 1	> 10000 mg/l (EC50; 48 h; Daphnia magna)
<b>Xylene (1330-20-7)</b>	
LC50 fish 1	2.6 - 8.4 mg/l (LC50)
EC50 Daphnia 1	1.4 - 7.4 mg/l (EC50; 48 h)

#### 12.2. Persistence and degradability

<b>Titanium Dioxide (13463-67-7)</b>	
Persistence and degradability	Biodegradability: not applicable. Low potential for mobility in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
<b>Amorphous silica gel (7631-86-9)</b>	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
<b>Aluminum Oxide (21645-51-2)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
ThOD	Not applicable (inorganic)
<b>Xylene (1330-20-7)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available. Photolysis in the air.
Biochemical oxygen demand (BOD)	1.40 - 2.53 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.56 - 2.91 g O <sub>2</sub> /g substance
ThOD	3.1 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.44 - 0.816
<b>Aliphatic Hydrocarbon (64742-48-9)</b>	
Persistence and degradability	Not readily biodegradable in water.

#### 12.3. Bioaccumulative potential

<b>Titanium Dioxide (13463-67-7)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>Amorphous silica gel (7631-86-9)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>Aluminum Oxide (21645-51-2)</b>	
Bioaccumulative potential	Not bioaccumulative.

# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>Xylene (1330-20-7)</b>	
BCF fish 1	14.1 - 24 (BCF)
BCF fish 2	7 - 26 (BCF; 8 weeks; Oncorhynchus mykiss; Flow-through system; Fresh water)
Log Pow	3.2 (Conclusion by analogy; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>Aliphatic Hydrocarbon (64742-48-9)</b>	
Log Pow	2.1 - 6.5 (Calculated)

### 12.4. Mobility in soil

<b>Xylene (1330-20-7)</b>	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1263 Paint (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base), 3, III

UN-No.(DOT) : UN1263

Proper Shipping Name (DOT) : Paint  
including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base

Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 173

DOT Packaging Bulk (49 CFR 173.xxx) : 242



# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102)	: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

### Additional information

Emergency Response Guide (ERG) Number	: 1-800-424-9300
Other information	: No supplementary information available.

### ADR

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>62017 White Silicone MR</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Titanium Dioxide (13463-67-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Amorphous silica gel (7631-86-9)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Aluminum Oxide (21645-51-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Xylene (1330-20-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
<b>Aliphatic Hydrocarbon (64742-48-9)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. International regulations

#### CANADA

No additional information available

# Invisaflects Reflectanks

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### EU-Regulations

No additional information available

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

### National regulations

#### Titanium Dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

### 15.3. US State regulations

#### Titanium Dioxide (13463-67-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

#### Xylene (1330-20-7)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Full text of H-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 1B	Germ cell mutagenicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H332	Harmful if inhaled
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*