Section 1: Identification

Trade Name: Titanium Dioxide
Company: Soapgoods Inc
Address: 1824 Willow Trail Pkwy, Ste 200. Norcross. GA 30093
Phone: (404) 924-9080
E-Mail: wecare@soapgoods.com
Emergency Phone: Chemtrec 1 800 424 9300
CAS: 13463-67-7
EC number: 236-675-5

Section 2: Hazard(s) Identification

2.1 Classification of the substance or mixture
Classification according to
Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.

Classification according to
Directive 67/548/EEC or
Directive 1999/45/EC not applicable
Information concerning
particular hazards for human
and environment: Dust load

2.2 Label elements
Labelling according to
Regulation (EC) No 1272/2008 not applicable
Hazard pictograms: not applicable
Signal word: not applicable
Hazard statements: not applicable

Section 3: Composition/Information on Ingredients

3.1 Chemical characterization: Substances
CAS No. Designation: 13463-67-7 titanium dioxide
Section 4: First-Aid Measures

4.1 Description of first aid measures
General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of symptoms.
After skin contact: Wash with water and soap and rinse thoroughly.
After eye contact: Rinse opened eye for several minutes under running water.
In case of persistent symptoms consult physician.
After swallowing: No special measures required.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

Section 5: Fire-Fighting Measures

5.1 Extinguishing media
Suitable extinguishing agents:
Use fire fighting measures that suit the environment.
The product is not inflammable.
5.2 Special hazards arising from the substance or mixture
None
5.3 Advice for firefighters
Protective equipment: Use protective measures that suit the hazard conditions

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Not required.
6.2 Environmental precautions: No special measures required.
6.3 Methods and material for containment and cleaning up: Collect mechanically.
6.4 Reference to other sections
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal

Section 7: Handling and Storage
Handling:

7.1 Precautions for safe handling
Provide vacuum dust collection if dust is formed.

Information about protection against explosions and fires:
The product is not inflammable.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and containers:
No special requirements.

Information about storage in one common storage facility:
Not required.

Further information about storage conditions:
Store under dry conditions.

7.3 Specific end use(s)
There are no further specific end uses than those named in section 1.2

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters
Components with critical values that require monitoring at the workplace:
13463-67-7 titanium dioxide
WEL Long-term value: 10* 4** mg/m³
*total inhalable **respirable

DNELs
Worker
13463-67-7 titanium dioxide
Inhalative (Worker): 10 mg/m³ (Local long-term effects)

Professional user
13463-67-7 titanium dioxide
Inhalative (Professional user): 10 mg/m³ (Local long-term effects)

Consumer
13463-67-7 titanium dioxide
Oral (Consumer): 700 mg/kg/d (Systemic long-term effects)

PNECs
Water
13463-67-7 titanium dioxide
PNEC 1 mg/l (marine waters)

0.127 mg/l (freshwater)

0.61 mg/l (intermittent release)

Sewage treatment plants (STP)
13463-67-7 titanium dioxide
PNEC 100 mg/l (STP)
Sediment
13463-67-7 titanium dioxide
PNEC 100 mg/kg dw (Sediment (marine waters))
1000 mg/kg dw (Sediment (freshwater))

Soil
13463-67-7 titanium dioxide
PNEC 100 mg/kg dw (soil)
Oral (food chain)
13463-67-7 titanium dioxide
Oral PNEC 1667 mg/kg (oral (food chain))

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures: The usual precautionary measures should be adhered to in handling the chemicals. Titanium dioxide pigments are not irritant but as with all fine powders can absorb moisture and natural oil from the surface of the skin during prolonged exposure. Prolonged exposure should be avoided by wearing suitable protective gloves and clothing.
Breathing equipment: Use breathing protection with high concentrations.
EN 149: FFP2
Protection of hands: Requirements according to EN 420
Check protective gloves prior to each use for their proper condition.
Preventive skin protection by use of skin-protecting agents is recommended.
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. If the product is used in a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Safety glasses
Body protection: Protective work clothing.
Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Powder
Form: Powder
Colour: White
Smell: Odourless
Odour threshold: Not relevant
pH-value (100 g/l) at 20 °C: 7

Melting point/Melting range: >1800 °C
Boiling point/Boiling range: Not relevant
Flash point: Not applicable
Flammability (solid, gaseous): Product is not inflammable.
Ignition temperature: Not applicable
Danger of explosion: Product is not explosive.
Density: 20 °C Anatase 3.9 g/cm³
Rutile 4.2 g/cm³
Apparent density at 20 °C: 500-900 kg/m³
Vapour density: Not applicable.
Evaporation rate: Not applicable.
Solubility in / Miscibility with Water: Insoluble
Partition coefficient (n-octanol/water): Not applicable
Viscosity: dynamic: Not applicable.

9.2 Other information

No further relevant information available

Section 10: Stability and Reactivity

10.1 Reactivity
The substance is stable under normal use conditions.

10.2 Chemical stability
Thermal decomposition /Conditions to be avoided:
No decomposition under normal use conditions.

10.3 Possibility of hazardous reactions
No dangerous reactions known

10.4 Conditions to avoid
No further data; see item 7.

10.5 Incompatible materials:
No further data; see item 7.

10.6 Hazardous decomposition products:
No dangerous decomposition products known
Section 11: Toxicological Information

Acute toxicity
LD/LC50 values that are relevant for classification:
13463-67-7 titanium dioxide
Oral LD50 >5000 mg/kg (rat) (OECD 425)
Dermal LD50 >5000 mg/kg (rabbit)
Inhalative LC50/4h >6.8 mg/l (rat)

Primary irritant effect:
Skin corrosion/irritation OECD 404: No irritant effect
Serious eye damage/irritation OECD 405: No irritant effect
Like any foreign body, particles (dust) can cause mechanical irritation.

Respiratory or skin sensitisation OECD 406, OECD 429
No sensitizing effects

Subacute to chronic toxicity:
13463-67-7 titanium dioxide
Oral NOAEL 3500 mg/kg/d (rat) (90 d)
Dermal NOAEL (-)
Inhalative NOAEC 10 mg/m³ (rat) (90 d)

Toxicokinetics, metabolism and distribution
No substantial accumulation of titanium was observed in tissues following oral administration of titanium dioxide.
Dermal absorption can be considered negligible, as titanium dioxide has been shown not to penetrate human skin to any appreciable degree

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity There are no indications of CMR effects in humans.
Carcinogenicity There are no indications of CMR effects in humans.
Reproductive toxicity There are no indications of CMR effects in humans.
STOT-single exposure No specific target organ toxicity according to the criteria defined in Regulation (EC) No. 1272/2008.
Section 12: Ecological Information

12.1 Toxicity

Toxicity to fish
Titanium dioxide
Freshwater fish:
Pimephales promelas LC50 (96 h): > 1000 mg/l (static, EPA-540/9-85-006, Acute Toxicity Test for Freshwater Fish)
Oncorhynchus mykiss LC50 (96 h): > 100 mg/l (static, equivalent or similar to OECD 203)
Marine water fish: Cyprinodon variegatus LC50 (96 h): > 10000 mg/l (semi-static, OECD 203)

Toxicity to Daphnia and other aquatic invertebrates
Titanium dioxide
Freshwater:
Daphnia magna LC50 (48 h): > 100 mg/l (static, equivalent or similar to OECD 202)
Marine water: Acartia tonsa LC50 (48 h): > 10000 mg/l (ISO 14669 (1999); ISO 5667-16 (1998))

Toxicity to algae and aquatic plants
Titanium dioxide
Freshwater:
Pseudokirchnerella subcapitata EC50 (72 h): 16 mg/l (static, EPA-600-9/78-018; ASTM Annual Book of Standards E1218-90, Vol 11.04))
Marine water: Skeletonema costatum EC50 (72 h): > 10000 mg/l (ISO 10253)

Toxicity to micro-organisms
Titanium dioxide
Freshwater: Hyalella azteca NOEC(28 d): \( \frac{100000}{mg/kg\ sediment\ dw} \) (semi-static, ASTM 1706)
Marine water: Corophium volutator NOEC (10 d): \( \frac{14989}{mg/kg\ sediment\ dw} \) (semi-static, OSPARCOM guidelines (1995))
12.2 Persistence and degradability
Not relevant for inorganic substances.

12.3 Bioaccumulative potential
Does not accumulate in organisms

12.4 Mobility in soil
The substance is immobile in soil.

12.5 Results of PBT and vPvB assessment
   PBT: Not applicable.
   VpvB: Not applicable

12.6 Other adverse effects
No further relevant information available

Section 13: Disposal Considerations

13.1 Waste treatment methods
European waste catalogue
Waste code number according to origin of waste
Uncleaned packagings:
Recommendation: Disposal according to official regulations
Packaging can be reused or recycled after cleaning

Section 14: Transport Information

14.1 UN-Number
ADR, ADN, IMDG, IATA not applicable

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not applicable

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA not applicable

14.4 Packing group
ADR, IMDG, IATA not applicable

14.5 Environmental hazards
Not an environmentally hazardous substance.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not relevant

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations:
Water hazard class: not hazardous for water
15.2 Chemical Safety Assessment
Substances of very high concern (SVHC) according to REACH, Article 57
The product is not listed as SVHC, it does not contain any substances of very high concern.
Chemical safety assessment: A Chemical Safety Assessment has been carried out.

Section 16: Other Information

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Review Date: December 2015