

SAFETY DATA SHEET

Twist and Spray Radiator Satin White

According to Regulation (EC) No 1907/2006, Annex II, as amended., COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name Twist and Spray Radiator Satin White

Product number 433.0026102.076.26012015

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

Identified uses Paint.

Uses advised againstNo specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier PlastiKote Ltd.

675 Eskdale Road,

Winnersh,

Wokingham, Berkshire,

RG41 5TS

UK

T: +44 (0) 844 736 2235 sds@plasti-kote.co.uk

1.4. Emergency telephone number

Emergency telephone +44(0) 844 736 2235

08:00 - 17:00 h (UK)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Not Classified

2.2. Label elements

Pictogram





Signal word

Danger

Twist and Spray Radiator Satin White

Hazard statements H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

EUH208 Contains Cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P271 Use only outdoors or in a well-ventilated area.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER/ doctor if you feel unwell.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label

information

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains Acetone, n-Butyl acetate

Supplementary precautionary

P261 Avoid breathing vapour/ spray.

statements

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P337+P313 If eye irritation persists: Get medical advice/ attention.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

CAS number: 67-64-1 EC number: 200-662-2

Classification

Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336

Propane 10-30%

CAS number: 74-98-6 EC number: 200-827-9

Classification

Flam. Gas 1 - H220

Press. Gas, Liquefied - H280

Butane 5-10%

CAS number: 106-97-8 EC number: 203-448-7

Classification

Flam. Gas 1 - H220

Press. Gas, Liquefied - H280

Twist and Spray Radiator Satin White

Isobutyl methyl ketone 5-10%

CAS number: 108-10-1 EC number: 203-550-1

Classification

Flam. Liq. 2 - H225 Acute Tox. 4 - H332 Eye Irrit. 2 - H319 STOT SE 3 - H335

n-Butyl acetate 5-10%

CAS number: 123-86-4 EC number: 204-658-1

Classification

Flam. Liq. 3 - H226 STOT SE 3 - H336

Titanium dioxide 5-10%

CAS number: 13463-67-7 EC number: 236-675-5

Substance with National workplace exposure limits.

Classification

Not Classified

Amorphous silica 1-5%

CAS number: 112926-00-8

Substance with National workplace exposure limits.

Classification

Not Classified

isobutyl acetate 1-5%

CAS number: 110-19-0 EC number: 203-745-1

Substance with National workplace exposure limits.

Classification

Flam. Liq. 2 - H225

2-Ethylhexanoic acid, zirconium salt <1%

CAS number: 22464-99-9 EC number: 245-018-1

Classification

Repr. 2 - H361d

Twist and Spray Radiator Satin White

Cobalt bis(2-ethylhexanoate) <0.15%

CAS number: 136-52-7 EC number: 205-250-6

M factor (Acute) = 1 M factor (Chronic) = 1

Classification

Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Repr. 2 - H361f Aquatic Acute 1 - H40

Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

Aluminium hydroxide <1%

Substance with National workplace exposure limits.

Classification

Not Classified

Xylene <0.1%

CAS number: 1330-20-7 EC number: 215-535-7

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315

Cumene <0.1%

CAS number: 98-82-8 EC number: 202-704-5

Classification

Flam. Liq. 3 - H226 STOT SE 3 - H335 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

Ethylbenzene <0.1%

Classification

Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Twist and Spray Radiator Satin White

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person warm and at rest. If in doubt, get medical

attention promptly.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any

discomfort continues.

Skin contact Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of

water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort

continues.

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

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

Inhalation Vapours may cause headache, fatigue, dizziness and nausea. Overexposure to organic

solvents may depress the central nervous system, causing dizziness and intoxication and, at

very high concentrations, unconsciousness and death.

Ingestion Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause

nausea, headache, dizziness and intoxication.

Skin contact Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. May

cause skin sensitisation or allergic reactions in sensitive individuals.

Eye contact Irritation of eyes and mucous membranes.

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

Notes for the doctor Treat symptomatically.

Specific treatments

No specific chemical antidote is known to be required after exposure to this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Pressurised container: may burst if heated The product is extremely flammable. In use may

form flammable/explosive vapour-air mixture.

Hazardous combustion

products

Thermal decomposition or combustion products may include the following substances: Oxides

of carbon.

5.3. Advice for firefighters

Protective actions during

firefighting

Cool containers exposed to heat with water spray and remove them from the fire area if it can

be done without risk. Use water spray to reduce vapours.

Special protective equipment

for firefighters

Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Twist and Spray Radiator Satin White

Personal precautions Avoid heat, flames and other sources of ignition. Provide adequate ventilation. If ventilation is

inadequate, suitable respiratory protection must be worn. Avoid inhalation of vapours/spray

and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Exposure to aquatic environment unlikely. Avoid discharge into drains.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Provide adequate ventilation. Absorb spillage with oil-absorbing material.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health

hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. During application and drying, solvent

vapours will be emitted. Avoid inhalation of vapours and spray/mists. Keep away from heat, sparks and open flame. When sprayed on a naked flame or any incandescent material the

aerosol vapours can be ignited.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Avoid exposing aerosol containers to high temperatures or direct sunlight. Keep away from

heat, sparks and open flame. Store in a cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Acetone

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³ Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

Butane

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³ Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

Isobutyl methyl ketone

Long-term exposure limit (8-hour TWA): WEL 50 ppm 208 mg/m³ Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m³ Sk

n-Butyl acetate

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³ Short-term exposure limit (15-minute): WEL 200 ppm 966 mg/m³

Titanium dioxide

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Amorphous silica

Long-term exposure limit (8-hour TWA): WEL 6 mg/m³ inhalable dust Long-term exposure limit (8-hour TWA): WEL 2.4 mg/m³ respirable dust

Twist and Spray Radiator Satin White

isobutyl acetate

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³ Short-term exposure limit (15-minute): WEL 187 ppm 903 mg/m³

2-Ethylhexanoic acid, zirconium salt

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ Short-term exposure limit (15-minute): WEL 10 mg/m³ as Zr

Aluminium hydroxide

Long-term exposure limit (8-hour TWA): WEL 2 mg/m³

Xylene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³ Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³ Sk

Cumene

Long-term exposure limit (8-hour TWA): WEL 25 ppm 125 mg/m³ Short-term exposure limit (15-minute): WEL 50 ppm 250 mg/m³ Sk

Ethylbenzene

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³ Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³ Sk

WEL = Workplace Exposure Limit Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering

controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Personal protective equipment for eye and face protection should comply with European Standard EN166. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Butyl rubber. Nitrile rubber. Frequent changes are recommended. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Hygiene measures

When using do not eat, drink or smoke. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove non-impervious clothing that becomes contaminated.

Respiratory protection

This product must not be handled in a confined space without adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Contains low-boiling liquids. Use an air-supplied respirator, if necessary. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Twist and Spray Radiator Satin White

Thermal hazards Contact with liquid form may cause frostbite.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Aerosol.

Colour White.

Odour Organic solvents.

pH Not relevant. The product is insoluble in water.

Melting point Not available. Technically not feasible.

Initial boiling point and range -42 °C - 0°C @ 760 mm Hg

Flash point < -60°C CC (Closed cup).

Evaporation rate No information available. The product contains volatile organic compounds (VOCs) which will

evaporate easily from all surfaces.

Upper/lower flammability or

explosive limits

Lower flammable/explosive limit: 2 % Upper flammable/explosive limit: 10 %

Vapour pressure 1000 mbar @ 20°C

Vapour density > 1 Vapours are heavier than air and may spread near ground and travel a considerable

distance to a source of ignition and flash back.

Relative density ~ 0.85

Solubility(ies) Immiscible with water. Soluble in the following materials: Organic solvents.

Auto-ignition temperature ~450°C

Viscosity No information available.

Explosive properties Not considered to be explosive.

Explosive under the influence

of a flame

The product is extremely flammable.

Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

Volatility Highly volatile.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Not applicable.

10.4. Conditions to avoid

Twist and Spray Radiator Satin White

Conditions to avoid When sprayed on a naked flame or any incandescent material the aerosol vapours can be

ignited. Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures

or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition None at ambient temperatures. Thermal decomposition or combustion products may include

products the following substances: Carbon dioxide (CO2). Carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 139.24

Skin corrosion/irritation

Animal data May cause defatting of the skin but is not an irritant. Repeated exposure may cause skin

dryness or cracking.

Extreme pH Not relevant.

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes. Vapour or spray in the eyes may cause irritation and smarting.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation May cause sensitisation by skin contact.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivoBased on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

Based on available data the classification criteria are not met.

development

Specific target organ toxicity - single exposure

STOT - single exposure Central nervous system depression. Vapours may cause drowsiness and dizziness.

Target organs No specific target organs known.

Specific target organ toxicity - repeated exposure

Twist and Spray Radiator Satin White

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant.

Inhalation Vapours may cause headache, fatigue, dizziness and nausea. Overexposure to organic

solvents may depress the central nervous system, causing dizziness and intoxication and, at

very high concentrations, unconsciousness and death.

Ingestion Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause

nausea, headache, dizziness and intoxication.

Skin contact Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. May

cause skin sensitisation or allergic reactions in sensitive individuals.

Eye contact Irritation of eyes and mucous membranes.

Acute and chronic health

hazards

A single exposure may cause the following adverse effects: Drowsiness.

Route of entry Inhalation Dermal

Target organs No specific target organs known.

Medical symptoms Fatigue. Headache. Coughing. Dry skin. Allergic rash.

Medical considerations Skin disorders and allergies.

Toxicological information on ingredients.

Acetone

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

5,800.0

Species Rat

Notes (oral LD₅₀) REACH dossier information.

ATE oral (mg/kg) 5,800.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 15,800.0

mg/kg)

Species Rabbit

Notes (dermal LD₅₀) REACH dossier information.

ATE dermal (mg/kg) 15,800.0

Acute toxicity - inhalation

Acute toxicity inhalation

132.0

(LC50 vapours mg/l)

Species Rat

Notes (inhalation LC₅₀) REACH dossier information.

ATE inhalation (vapours

mg/l)

132.0

Twist and Spray Radiator Satin White

Skin corrosion/irritation

Animal data Dose: 0.01mL, 3 days, Rat

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye

Slightly irritating

damage/irritation

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative.

Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative.

Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOEL 79 mg/mouse/application, Dermal, Mouse

Based on available data the classification criteria are not met.

Target organ for carcinogenicity

Not relevant.

Reproductive toxicity

Reproductive toxicity -

fertility

One-generation study - NOEL 4858 mg/kg/day, Oral, Mouse P Based on available data the classification criteria are not met.

Reproductive toxicity -

development

Maternal toxicity: - NOAEC: 2200 ppm, Inhalation, Rat

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure A single exposure may cause the following adverse effects: Drowsiness, dizziness,

disorientation, vertigo.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Target organs Not relevant.

Aspiration hazard

Aspiration hazardNot anticipated to present an aspiration hazard, based on chemical structure.

Propane

Acute toxicity - oral

Notes (oral LD₅₀) Technically not feasible.

Acute toxicity - dermal

Notes (dermal LD₅₀) Technically not feasible.

Twist and Spray Radiator Satin White

Acute toxicity - inhalation

Acute toxicity inhalation

(LC₅₀ gases ppmV)

800,000.0

Species Rat

Notes (inhalation LC₅₀) REACH dossier information.

ATE inhalation (gases

800,000.0

ppm)

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye

Based on available data the classification criteria are not met.

damage/irritation

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitroChromosome aberration: Negative. Based on available data the classification

criteria are not met.

Genotoxicity - in vivoChromosome aberration: Negative. Based on available data the classification

criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity -

fertility

Screening - NOAEC 9000 ppm, Inhalation, Rat P Based on available data the

classification criteria are not met.

Reproductive toxicity -

development

Maternal toxicity: - NOAEC: 12000 ppm, Inhalation, Rat Based on available data

the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazardNot anticipated to present an aspiration hazard, based on chemical structure.

Butane

Acute toxicity - oral

Notes (oral LD₅₀) Technically not feasible.

Acute toxicity - dermal

Notes (dermal LD₅₀) Technically not feasible.

Twist and Spray Radiator Satin White

Acute toxicity - inhalation

Acute toxicity inhalation

(LC₅₀ gases ppmV)

539,600.0

Species Mouse

Notes (inhalation LC50) REACH dossier information. Based on available data the classification criteria are

not met.

ATE inhalation (gases

ppm)

539,600.0

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye

Based on available data the classification criteria are not met.

damage/irritation

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Technically not feasible.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. Based on available data the classification

criteria are not met.

Carcinogenicity

Carcinogenicity Not determined. Scientifically unjustified.

Reproductive toxicity

Reproductive toxicity -

fertility

Fertility - NOAEC 9000 ppm, Inhalation, Rat P REACH dossier information. Based

on available data the classification criteria are not met.

Reproductive toxicity -

development

Maternal toxicity: - NOAEC: 12000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 9000 ppm, Inhalation, Rat REACH dossier information. Based on available

data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Isobutyl methyl ketone

Acute toxicity - oral

Acute toxicity oral (LD₅o

mg/kg)

2,080.0

Species Rat

Twist and Spray Radiator Satin White

Notes (oral LD50) REACH dossier information. Based on available data the classification criteria are

not met.

ATE oral (mg/kg) 2,080.0

Acute toxicity - dermal

Notes (dermal LD₅o) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Data lacking. Acute Tox. 4 - H332

11.0

ATE inhalation (vapours

Skin corrosion/irritation

mg/l)

P · · /

Animal data Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema

score: No oedema (0).

REACH dossier information. Based on available data the classification criteria are

not met.

Extreme pH Moderate pH (> 2 and < 11.5).

Serious eye damage/irritation

Serious eye

damage/irritation

Irritating to eyes.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

REACH dossier information. Based on available data the classification criteria are

not met.

Germ cell mutagenicity

Genotoxicity - in vitroBacterial reverse mutation test: Negative.

REACH dossier information. Based on available data the classification criteria are

not met.

Genotoxicity - in vivo Chromosome aberration: Negative.

REACH dossier information. Based on available data the classification criteria are

not met.

Carcinogenicity

Carcinogenicity NOAEC 450 ppm, Inhalation, Rat

REACH dossier information. Based on available data the classification criteria are

not met.

Reproductive toxicity

Reproductive toxicity -

Two-generation study - NOAEC 1000 ppm, Inhalation, Rat

fertility

REACH dossier information. Based on available data the classification criteria are

not met.

Reproductive toxicity -

development

Maternal toxicity: - NOAEL: 1000 ppm, Inhalation,

REACH dossier information. Based on available data the classification criteria are

not met.

Twist and Spray Radiator Satin White

Specific target organ toxicity - single exposure

STOT - single exposure Irritating to respiratory system.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 450 ppm, Inhalation, Rat

REACH dossier information. Based on available data the classification criteria are

not met

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

n-Butyl acetate

Acute toxicity - oral

Acute toxicity oral (LD₅o

mg/kg)

10,760.0

Species Rat

REACH dossier information. Conclusive data but not sufficient for classification. Notes (oral LD₅₀)

ATE oral (mg/kg) 10,760.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 14,112.0

mg/kg)

Species Rabbit

REACH dossier information. Conclusive data but not sufficient for classification. Notes (dermal LD50)

ATE dermal (mg/kg) 14,112.0

Acute toxicity - inhalation

Acute toxicity inhalation

(LC₅₀ vapours mg/l)

21.1

Species Rat

REACH dossier information. Conclusive data but not sufficient for classification. Notes (inhalation LC50)

ATE inhalation (vapours

mg/l)

21.1

Skin corrosion/irritation

Animal data Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema

score: No oedema (0).

REACH dossier information. Based on available data the classification criteria are

not met.

Extreme pH Moderate pH (> 2 and < 11.5).

Serious eye damage/irritation

Serious eye

damage/irritation

Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation No information available.

Twist and Spray Radiator Satin White

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

REACH dossier information. Based on available data the classification criteria are

not met

Genotoxicity - in vivo Chromosome aberration: Negative.

REACH dossier information. Based on available data the classification criteria are

not met.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity -

Two-generation study - NOAEC 2000 ppm, Inhalation, Rat F1

fertility

REACH dossier information. Based on available data the classification criteria are

not met.

Reproductive toxicity -

development

Maternal toxicity: - LOAEC: 1500 ppm, Inhalation,

REACH dossier information. Based on available data the classification criteria are

not met.

Specific target organ toxicity - single exposure

STOT - single exposure Drowsiness, dizziness, disorientation, vertigo.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 500 ppm, Inhalation, Rat

REACH dossier information. Not classified as a specific target organ toxicant after

repeated exposure.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Titanium dioxide

Acute toxicity - oral

Based on available data the classification criteria are not met. Notes (oral LD₅₀)

Acute toxicity - dermal

Notes (dermal LD₅₀) No information available. Scientifically unjustified.

Acute toxicity - inhalation

Acute toxicity inhalation

(LC₅₀ dust/mist mg/l)

6.82

Species Rat

REACH dossier information. Based on available data the classification criteria are Notes (inhalation LC50)

not met.

ATE inhalation (dusts/mists mg/l)

6.82

Skin corrosion/irritation

Twist and Spray Radiator Satin White

Animal data Dose: 0.5 g, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema

score: No oedema (0).

REACH dossier information. Based on available data the classification criteria are

not met.

Serious eye damage/irritation

Serious eye

Based on available data the classification criteria are not met.

damage/irritation

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Not sensitising.

REACH dossier information. Based on available data the classification criteria are

not met.

Germ cell mutagenicity

Genotoxicity - in vitroBacterial reverse mutation test: Negative.

REACH dossier information. Based on available data the classification criteria are

not met.

Genotoxicity - in vivo Chromosome aberration: Negative.

REACH dossier information. Based on available data the classification criteria are

not met.

Carcinogenicity

Carcinogenicity NOAEL 50 mg/m³, Inhalation, Rat

REACH dossier information. Based on available data the classification criteria are

not met.

Reproductive toxicity

Reproductive toxicity -

No information available.

fertility

Reproductive toxicity -

development

No information available.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 10 mg/m³, Inhalation, Rat

REACH dossier information. Not classified as a specific target organ toxicant after

repeated exposure.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

Acetone

Twist and Spray Radiator Satin White

Toxicity Not considered toxic to fish.

LC₅o, 96 hours: 5540 mg/l, Onchorhynchus mykiss (Rainbow trout) Acute toxicity - fish

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: 12700 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

NOEC, 192 hours: 530 mg/l, Microcystis aeruginosa

Chronic toxicity - aquatic

invertebrates

NOEC, 28 days: 2212 mg/l, Daphnia magna

Propane

Acute toxicity - fish LC₅₀, 96 hours: 27.98 mg/l, Estimated value.

Acute toxicity - aquatic

invertebrates

LC₅₀, 48 hours: 14.22 mg/l, Estimated value.

Acute toxicity - aquatic

plants

EC₅₀, 96 hours: 7.71 mg/l, Estimated value.

Chronic toxicity - fish early No information available.

life stage

Butane

LC₅₀, 96 hours: 24.1 mg/l, Acute toxicity - fish

Estimated value.

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: 14.2 mg/l,

Estimated value.

Acute toxicity - aquatic

plants

EC₅₀, 96 hours: 7.7 mg/l,

Estimated value.

Isobutyl methyl ketone

Acute toxicity - fish LC₅₀, 96 hours: > 179 mg/l, Brachydanio rerio (Zebra Fish)

REACH dossier information.

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: > 200 mg/l, Daphnia magna

REACH dossier information.

Acute toxicity - aquatic

plants

EC₅₀, 7 days: > 146 mg/l, Freshwater plants

REACH dossier information.

n-Butyl acetate

LC₅₀, 96 hours: 18 mg/l, Pimephales promelas (Fat-head Minnow) Acute toxicity - fish

REACH dossier information.

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: 44 mg/l, Daphnia magna

REACH dossier information.

Acute toxicity - aquatic

plants

EC₅₀, 72 hours: 674.7 mg/l, Scenedesmus subspicatus

REACH dossier information.

Twist and Spray Radiator Satin White

Titanium dioxide

Acute toxicity - fish LC₅₀, 96 hours: 1000 mg/l, Pimephales promelas (Fat-head Minnow)

REACH dossier information.

Acute toxicity - aquatic

EC₅₀, 48 hours: 100 mg/l, Daphnia magna

invertebrates

REACH dossier information.

Acute toxicity - aquatic

EC₅₀, 72 hours: 61 mg/l, Pseudokirchneriella subcapitata

plants

REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known. The product contains volatile organic

compounds (VOCs) which will evaporate easily from all surfaces. Volatile substances are

degraded in the atmosphere within a few days.

Ecological information on ingredients.

Acetone

Persistence and degradability

The substance is readily biodegradable.

aogradability

Water - DT₅₀: 20-115 days

Phototransformation
Stability (hydrolysis)

No significant reaction in water.

Biodegradation

Water - Degradation 90: 28 days

Propane

Persistence and

degradability

Highly volatile.

Phototransformation

Water - DT₅o: 1906 days

Stability (hydrolysis)

Not applicable.

Biodegradation

Water - 100%: 385.5 hours

Butane

Phototransformation

Not determined.

Stability (hydrolysis)

No significant reaction in water.

Biodegradation

Water - DT₅₀: 3.5 days

Estimated value.

The substance is readily biodegradable.

Isobutyl methyl ketone

Phototransformation

No information available.

Stability (hydrolysis)

No significant reaction in water.

Biodegradation

Water - Degradation 83: 28 days

REACH dossier information.

The substance is readily biodegradable.

Twist and Spray Radiator Satin White

n-Butyl acetate

Phototransformation Water - Half-life: 3.3 days

REACH dossier information.

Stability (hydrolysis) pH7 - Half-life : ~ 26 months @ 25°C

Estimated value.

REACH dossier information.

Biodegradation Water - Degradation 80: 5 days

REACH dossier information.

The substance is readily biodegradable.

Titanium dioxide

Phototransformation No information available.

Stability (hydrolysis) No significant reaction in water.

Biodegradation Not applicable.

Substance is inorganic.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

Acetone

Bioaccumulative potential BCF: 3,

Estimated value.

Partition coefficient log Pow: -0.24

Propane

Partition coefficient log Pow: 1.09

Butane

Bioaccumulative potential The product is not bioaccumulating.

Isobutyl methyl ketone

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 1.9

n-Butyl acetate

Bioaccumulative potential BCF: ~ 15.3,

The product is not bioaccumulating.

Partition coefficient log Pow: 2.3

Titanium dioxide

Bioaccumulative potential The product is not bioaccumulating.

Twist and Spray Radiator Satin White

Partition coefficient Not applicable. Substance is inorganic.

12.4. Mobility in soil

The product is immiscible with water and will spread on the water surface. The product Mobility

contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Ecological information on ingredients.

Acetone

Mobility Highly volatile. Soluble in water.

Henry's law constant 2.303 Pa m3/mol @ 15°C

Propane

Mobility Highly volatile.

Butane

The product is insoluble in water. Highly volatile. Mobility

Isobutyl methyl ketone

Mobility The product is water-soluble and may spread in water systems.

Adsorption/desorption coefficient

Water - log Koc: 2.008 @ 25°C REACH dossier information.

Henry's law constant 18.75 Pa m3/mol @ 20°C

n-Butyl acetate

Mobility Volatile. The product is insoluble in water and will spread on the water surface.

Titanium dioxide

Mobility The product is insoluble in water and will sediment in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

Ecological information on ingredients.

Acetone

Results of PBT and vPvB

This substance is not classified as PBT or vPvB according to current EU criteria.

assessment

Propane

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria.

assessment

Butane

Twist and Spray Radiator Satin White

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

Isobutyl methyl ketone

Results of PBT and vPvB

This substance is not classified as PBT or vPvB according to current EU criteria.

assessment

n-Butyl acetate

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

Titanium dioxide

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects

None known.

Ecological information on ingredients.

Acetone

Other adverse effects

None known.

Propane

Other adverse effects

None known.

Butane

Other adverse effects

None known.

Isobutyl methyl ketone

Other adverse effects

None known.

n-Butyl acetate

Other adverse effects

None known.

Titanium dioxide

Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

Information given is applicable to the product as supplied. When handling waste, the safety precautions applying to handling of the product should be considered. Do not puncture or incinerate, even when empty. Reuse or recycle products wherever possible.

Twist and Spray Radiator Satin White

Disposal methods Do not empty into drains. Dispose of waste product or used containers in accordance with

local regulations

Waste codes should be assigned by the user, preferably in discussion with the waste

disposal authorities.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008

on waste and repealing certain Directives.

Waste class Information given is applicable to the product as supplied. [08 01 11*] / [20 01 27*]

SECTION 14: Transport information

General For limited quantity packaging/limited load information, consult the relevant modal

documentation using the data shown in this section.

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

UN No. (ADN) 1950

14.2. UN proper shipping name

Proper shipping name

AEROSOLS

(ADR/RID)

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) Aerosols, flammable

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2 (5F)

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-D, S-U

Twist and Spray Radiator Satin White

Tunnel restriction code

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

(D)

Transport in bulk according to Not relevant.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).

EH40/2005 Workplace exposure limits.

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16

December 2008 on classification, labelling and packaging of substances and mixtures (as

amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on

waste and repealing certain Directives.

Health and environmental

listings

Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer (as amended). Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants (as amended). Regulation (EC) 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals (as amended).

None of the ingredients are listed.

Authorisations (Title VII

Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII

Regulation 1907/2006)

No specific restrictions on use are known for this product.

SEVESO P3a - Lower tier 150 tonnes, Upper tier 500 tonnes.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Twist and Spray Radiator Satin White

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by

Road.

IMDG: International Maritime Dangerous Goods.

IATA: International Air Transport Association.

ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways.

ATE: Acute Toxicity Estimate.

LD₅o: Lethal Dose to 50% of a test population (Median Lethal Dose).

LC₅o: Lethal Concentration to 50 % of a test population.

LOAEC: Lowest Observed Adverse Effect Concentration.

NOAEC: No Observed Adverse Effect Concentration.

EC₅o: 50% of maximal Effective Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance.

vPvB: Very Persistent and Very Bioaccumulative.

BCF: Bioconcentration Factor.

Kow: Octanol-water partition coefficient.

Classification abbreviations

and acronyms

Aerosol = Aerosol Eye Irrit. = Eye irritation

STOT SE = Specific target organ toxicity-single exposure

Classification procedures according to Regulation (EC) 1272/2008

Aerosol 1 - H222, H229: Bridging principle (Aerosols). Eye Irrit. 2 - H319, STOT SE 3 - H336,

EUH208: Calculation method. EUH066: Expert judgement.

Revision date 21/04/2016

Revision 3

Supersedes date 07/03/2016

SDS number 919

Hazard statements in full H220 Extremely flammable gas.

H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H229 Pressurised container: may burst if heated

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H361f Suspected of damaging fertility if swallowed.

H373 May cause damage to organs (Hearing organs) through prolonged or repeated

exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

EUH208 Contains Cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

Twist and Spray Radiator Satin White

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.