SAFETY DATA SHEET according to Regulation EC 1907/2006

TPM RESIN CLEANER

Valid from 23/03/2016

Version 1

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

1.1. Product identifier Trade name : TPM RESIN CLEANER

1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the Substance/Mixture : Manufacture of substances, Industrial formulation, Intermediate, Coatings, Cleaning agent, Metal working fluids, Functional Fluids, Oil and gas, Laboratory chemicals, Use in agrochemicals Uses advised against : At this moment we have not identified any uses advised against

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

Thanet Coatings Ltd, 4 Patricia Way, Pysons Road Ind Est, Broadstairs CT10 2LF
Telephone : +44 (0) 1843 861861
E-mail address : info@thanet-coatings.co.uk

1.4. Emergency telephone number Emergency telephone number : Emergency only telephone number (open 24 hours): +44 (0) 1843 861861

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 The product is not classified as dangerous according to Regulation (EC) No. 1272/2008. Most important adverse effects Human Health : See section 11 for toxicological information.

Physical and chemical hazards : See section 9 for physicochemical information. Potential environmental effects : See section 12 for environmental information.

2.2. Label elements Labelling according to Regulation (EC) No 1272/2008 The product is not labeled as dangerous according to Regulation (EC) No. 1272/2008.

2.3. Other hazards For Results of PBT and vPvB

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SECTION 3: Composition/information on ingredients

3.1. Substances

Tripropyleneglycol methyl ether >97.5%
CAS-No. : 25498-49-1
Dipropylene glycol <=1.99%
CAS-No :25265-71-8

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : No special precautions required.

If inhaled : Remove to fresh air.

If breathing is irregular or stopped, administer artificial respiration. Get medical attention.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. High doses can lead to depression of Central Nervous System. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed Symptoms : See Section 11 for more detailed information on health effects and symptoms. Effects : Health injuries are not known or expected under normal use. See Section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media Suitable extinguishing media :

Use extinguishing measures that are appropriate

to local circumstances and the surrounding

environment.

Water spray, foam, dry powder or CO2. Unsuitable

extinguishing media : High volume water jet

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5.2. Special hazards arising from the substance or mixture Specific hazards during firefighting : Heating can release vapours which can be ignited. Vapours are heavier than air and may spread along floors. Mists can be combustible under the normal flashpoint. Cool closed containers exposed to fire with water spray. Hazardous combustion products : Carbon monoxide, Carbon dioxide (CO2)

5.3. Advice for firefighters Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Choose protective equipment according to size of fire.
Further advice : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3. Methods and materials for containment and cleaning up Methods and materials for containment and cleaning up : Remove all sources of ignition. Soak up with inert, noncombustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite, acid binder, universal binder). Shovel into suitable container for waste disposal. Sweep up residues without creating dust. After cleaning flush away traces with water. Retain and dispose of contaminated wash water. The surface of the spill can be covered in order to reduce vaporization and thereby the fire hazard.

Non-sparking tools should be used. Keep in suitable, closed containers for disposal.

Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on personal protective equipment. See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Do not use sparking tools. Keep away from heat, flame sparks and other ignition sources. Ensure all equipment is electrically grounded before beginning transfer operations. Vapors may produce explosive mixtures with air at temperatures over the flash point. Hygiene measures: Keep away from food, drink and animal feedingstuffs.

7.2. Conditions for safe storage, including any incompatibilities Requirements for storage areas and containers : Store in original container. As it is moisture sensitive hence it should be stored under nitrogen gas. Advice on protection against fire and explosion : Normal measures for preventive fire protection. Ensure all equipment is electrically grounded before beginning transfer operations. Keep away from open flames, hot surfaces and sources of ignition. Attention! The formation of organic peroxides is possible. Further information on storage conditions : Keep tightly closed in a dry and cool place. Protect against water. Reacts with air to form peroxides. Advice on common storage : Keep away from food, drink and animal feeding stuffs. Incompatible with oxidizing agents. atmospheric oxygen

Suitable packaging materials : Carbon steel, lacquer lined steel/tin Unsuitable packaging materials : , Plastic, Rubber, Some synthetic materials may be unsuitable for containers or container linings. Compatibility should be checked with the manufacturer.

7.3. Specific end use(s) Specific use(s) : No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL Workers, Long-term - systemic effects, Skin contact : 65 mg/kg bw/day

DNEL Workers, Long-term - systemic effects, Inhalation : 310 mg/m3

DNEL Consumers, Long-term - systemic effects, Skin contact : 15 mg/kg bw/day

DNEL Consumers, Long-term - systemic effects, Inhalation : 37.2 mg/m3

DNEL Consumers, long-term, Ingestion : 1.67 mg/kg bw/day

PNEC

Fresh water
(AF = 100) : 19 mg/l

Marine water

(AF = 1000) : 1.9 mg/l

Intermittent releases
(AF = 10) : 190 mg/l

Fresh water sediment : 70.2 mg/kg dry weight (d.w.)

Marine sediment : 7.02 mg/kg dry weight (d.w.)

Soil : 2.74 mg/kg dry weight (d.w.)

Sewage treatment plant (STP) (AF = 1) : 4168 mg/l

OTHER OCCUPATIONAL EXPOSURE LIMIT VALUES

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, Time Weighted Average (TWA): 50 ppm, 308 mg/m3 Indicative UK. EH40 Workplace Exposure Limits (WELs), Skin designation: Can be absorbed through the skin. UK. EH40 Workplace Exposure Limits (WELs), Time Weighted Average (TWA): 50 ppm, 308 mg/m3 ELV (IE), Time Weighted Average (TWA): 50 ppm, 308 mg/m3 Indicative OELV ELV (IE), Skin designation: Can be absorbed through the skin.

8.2. Exposure controls Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection Advice : If ventilation is insufficient, suitable respiratory protection must be provided Required, if exposure limit is exceeded (e.g. OEL).

In the case of vapour formation use a respirator with an approved filter.

Respiratory protection complying with EN 141. Filter Type : Combined particulates and organic vapour type Hand protection Advice : Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Protective gloves should be replaced at first signs of wear.

Material : butyl-rubber

Break through time : >= 480 min

Glove thickness : 5 mm Eye

protection Advice :

Safety goggles Skin and body protection Advice : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. Wear appropriate chemical resistant clothing and boots.

Environmental exposure controls General advice :

Do not flush into surface water or sanitary sewer system.

Avoid subsoil penetration.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form : Liquid
Colour : clear colourless
Odour : ether
Odour Threshold : no data available
pH : no data available Melting point
n/a
Boiling point/boiling range : 242.8°C at760mmHg
Flash point : 124 °C closed cup
Evaporation rate : no data
Flammability (solid, gas) : no data available
Upper explosion limit : 8.5% vol
Lower explosion limit : 0.8% vol
Vapour pressure : 1.7 Pa at 293.15k
Relative vapour density : 7.15 (air=1)
Relative density : 0.9650 at 20°C
Density : 0.539 g/cm3 (20 °C)
Water solubility : (20 °C) completely soluble in all proportions
Partition coefficient: log Pow 0.31 EST
Auto-ignition temperature : 277 °C (1013 hPa)
Thermal decomposition : no data available

Viscosity, dynamic : 5.5 Cp at 25°C
Viscosity, kinematic : 6.71 mm2/s (20 °C)
Explosivity :Product is not explosive.
Oxidizing properties : no

Liquid Density: 0.9680g/cm3 at 20°C

Molecular Weight: 206.3g/mol

Surface Tension: 30.0 Mn/m at 20°C

9.2. Other information

No further information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice :

No data available

10.2. Chemical stability

Advice :

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions :

Polymerization will not occur

10.4. Conditions to avoid

Conditions to avoid :

Exposure to avoid. Do not distill to dryness. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

10.5. Incompatible materials

Materials to avoid :

Avoid contact with Strong Acids/Bases/Oxidizers

10.6. Hazardous decomposition products

Hazardous decomposition products :

Decomposition products can include and are not

limited to: Aldehydes, Ketones and Organic acids.

SECTION 11: Toxicological Information

Toxicological information appears in this section when such data are available.

Information on likely routes of exposure

Ingestion, Inhalation, Skin contact, Eye contact.

Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed

effects known unless otherwise noted)

Acute Toxicity Endpoints:

Not classified based on available information.

Acute oral toxicity

Information for the Product:

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal

handling operations are not likely to cause injury; however, swallowing larger amounts may

cause injury.

Based on product testing:

LD50, Rat, male and female, 3,500 mg/kg

Information for components:

Tripropyleneglycol methyl ether

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LD50, Rat, male and female, 3,500 mg/kg

Dipropylene glycol

LD50, Rat, > 5,000 mg/kg

Acute dermal toxicity

Information for the Product:

Prolonged skin contact is unlikely to result in absorption of harmful amounts. Prolonged skin

contact with very large amounts may cause dizziness or drowsiness.

Based on product testing:

LD50, Rabbit, > 15,440 mg/kg

Information for components:

Tripropyleneglycol methyl ether

LD50, Rabbit, > 15,440 mg/kg

Dipropylene glycol

LD50, Rabbit, > 5,010 mg/kg

Acute inhalation toxicity

Information for the Product:

No adverse effects are anticipated from single exposure to vapor. Based on the available

data, narcotic effects were not observed. Based on the available data, respiratory irritation

was not observed.

LC0, Rat, 8 Hour, vapour, > 30 ppm No deaths occurred at this concentration.

Information for components:

Tripropyleneglycol methyl ether

No adverse effects are anticipated from single exposure to vapor. Based on the

available data, narcotic effects were not observed.

Based on the available data,

respiratory irritation was not observed.

LC0, Rat, 8 Hour, vapour, > 30 ppm No deaths

occurred at this concentration.

Dipropylene glycol

Maximum attainable concentration. LC50, Rat, 4 Hour, vapour, > 2.34 mg/l No deaths

occurred at this concentration.

Skin corrosion/irritation

Not classified based on available information.

Information for the Product:

Based on product testing:

Prolonged exposure not likely to cause significant skin irritation.

Information for components:

Tripropyleneglycol methyl ether

Prolonged exposure not likely to cause significant skin irritation.

Dipropylene glycol

Prolonged exposure not likely to cause significant skin irritation.

Serious eye damage/eye irritation

Not classified based on available information.

Information for the Product:

Based on product testing:

May cause slight temporary eye irritation.

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Corneal injury is unlikely.

Information for components:

Tripropyleneglycol methyl ether

May cause slight temporary eye irritation.

Corneal injury is unlikely.

Dipropylene glycol

May cause slight temporary eye irritation.

Mist may cause eye irritation.

Sensitization

For skin sensitization:

Not classified based on available information.

For respiratory sensitization:

Not classified based on available information.

Information for the Product:

For skin sensitization:

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

Information for components:

Tripropyleneglycol methyl ether

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

Dipropylene glycol

For skin sensitization:

Did not cause allergic skin reactions when tested in humans.

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Not classified based on available information.

Information for the Product:

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Information for components:

Tripropyleneglycol methyl ether

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Dipropylene glycol

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Aspiration Hazard

Not classified based on available information.

Information for the Product:

Based on physical properties, not likely to be an aspiration hazard.

Information for components:

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Tripropyleneglycol methyl ether

Based on physical properties, not likely to be an

aspiration hazard.

Dipropylene glycol

Based on physical properties, not likely to be

an aspiration hazard.

Chronic toxicity (represents longer term exposures with repeated dose resulting in

chronic/delayed effects - no immediate effects known unless otherwise noted)

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Not classified based on available information.

Information for the Product:

Signs and symptoms of excessive exposure may include:

Anesthetic or narcotic effects.

Information for components:

Tripropyleneglycol methyl ether

Signs and symptoms of excessive exposure may include:

Anesthetic or narcotic effects.

Dipropylene glycol

In animals, effects have been reported on the following organs after ingestion:

Nasal tissue.

Kidney.

Dose levels producing these effects were many times higher than any dose levels expected

from exposure due to use.

Carcinogenicity

Not classified based on available information.

Information for the Product:

Similar material(s) did not cause cancer in laboratory animals.

Information for components:

Tripropyleneglycol methyl ether

Similar material(s) did not cause cancer in laboratory animals.

Dipropylene glycol

Did not cause cancer in laboratory animals.

Teratogenicity

Not classified based on available information.

Information for the Product:

Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects

in the mother.

Information for components:

Tripropyleneglycol methyl ether

Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

Dipropylene glycol

Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

Reproductive toxicity

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Not classified based on available information.

Information for the Product:

For similar material(s): In laboratory animal studies,

effects on reproduction have been seen

only at doses that produced significant toxicity

to the parent animals.

Information for components:

Tripropyleneglycol methyl ether

For similar material(s): In laboratory animal studies, effects on reproduction have been seen

only at doses that produced significant toxicity to the parent animals.

Dipropylene glycol

In animal studies, repeated exposures did not have any effects on reproductive organs.

Mutagenicity

Not classified based on available information.

Information for the Product:

In vitro genetic toxicity studies were negative.

Information for components:

Tripropyleneglycol methyl ether

In vitro genetic toxicity studies were negative.

Dipropylene glycol

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

LC50 : 3.35 mg/l (Rat; 7 h)

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SECTION 12: Ecological information

Toxicity

Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis

(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LL50, Pimephales promelas (fathead minnow), static test, 96 Hour, 11,619 mg/l, OECD Test

Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

LC50, Daphnia magna (Water flea), static test, 48 Hour, > 10,000 mg/l, OECD Test Guideline

202 or Equivalent

Persistence and degradability

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready

biodegradability. Biodegradation rate may increase in soil and/or water with acclimation.

10-day Window: Pass

Biodegradation: 60 %

Exposure time: 28 d

Method: OECD Test Guideline 301F or Equivalent

Theoretical Oxygen Demand: 2.09 mg/mg

Chemical Oxygen Demand: 2.02 mg/mg Dichromate

Biological oxygen demand (BOD)

Incubation

Time

BOD

5 d 0 %

10 d 0.9 %

20 d 51 %

Bioaccumulative potential

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 0.31 at 20 °C Estimated.

Mobility in soil

Partition coefficient (Koc): 0.4 Estimated.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging : Dispose of contaminated packaging in the same way as the product. In accordance with local and national regulations.

European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

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

Not applicable.

SECTION 15: Regulatory information

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

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and

Community Right-to-Know Act of 1986) Sections 311 and 312

No SARA Hazards

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and

Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the

threshold (De Minimis) reporting levels established by

SARA Title III, Section 313.

Pennsylvania Worker and Community

Right-To-Know Act:

To the best of our knowledge, this product does

not contain chemicals at levels which require reporting

under this statute.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Further information

Key literature references and sources for data :

Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Other information :

The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.