

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

3M Scotchkote Urethane Aluminium Primer MCU 125

Product Identification Numbers GR-2001-0303-8

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

Identified uses Coating.

1.3. Details of the supplier of the substance or mixture

Address:3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.Telephone:+44 (0)1344 858 000E Mail:tox.uk@mmm.comWebsite:www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Flammable Liquid, Category 3 - Flam. Liq. 3; H226 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315 Respiratory Sensitization, Category 1 - Resp. Sens. 1; H334 Skin Sensitization, Category 1 - Skin Sens. 1; H317 Carcinogenicity, Category 2 - Carc. 2; H351 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336 Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Indication of danger Flammable; R10 Carcinogenic; Carc. Cat. 3; R40 Harmful; Xn; R20 Irritant; Xi; R36/37/38 Sensitizing; R42/43 Harmful; Xn; R48/20 Dangerous for the environment; R52/53

For full text of R phrases, see Section 16.

2.2. Label elements CLP REGULATION (EC) No 1272/2008

SIGNAL WORD DANGER!

Symbols:

GHS02 (Flame) |GHS07 (Exclamation mark) | GHS08 (Health Hazard) |

Pictograms



| Ingredient | CAS Nbr | % by Wt |
|--|------------|-----------|
| Solvent naphtha (petroleum), light aromatic | 64742-95-6 | 10 - 20 |
| P,P'-Methylenebis(phenyl isocyanate) | 101-68-8 | 7 - 13 |
| Formaldehyde, oligomeric reaction products with aniline and phosgene | 32055-14-4 | 5 - 10 |
| Naphtha (petroleum), hydrotreated heavy | 64742-48-9 | 5 - 10 |
| Diphenylmethane-2,4'-diisocyanate | 5873-54-1 | 1 - 5 |
| p-toluenesulphonyl isocyanate | 4083-64-1 | 0.5 - 1.0 |
| 2,2'-methylenediphenyl diisocyanate | 2536-05-2 | < 0.1 |
| | | |

| HAZARD STATEMENTS: | |
|--------------------|---|
| H226 | Flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| | |
| H373 | May cause damage to organs through prolonged or repeated exposure: respiratory system |
| | |
| H412 | Harmful to aquatic life with long lasting effects. |
| | |

PRECAUTIONARY STATEMENTS

| Prevention: | |
|--------------------|---|
| P210A | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P262 | Do not get in eyes, on skin, or on clothing. |
| P284A | In case of inadequate ventilation wear respiratory protection. |
| P280E | Wear protective gloves. |
| Response: | |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P342 + P311 | If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present |
| | and easy to do. Continue rinsing. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P331 | Do NOT induce vomiting. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. |
| P370 + P378G | In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish. |
| Disposal: | |
| | |

P501

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

31% of the mixture consists of components of unknown acute oral toxicity.

46% of the mixture consists of components of unknown acute inhalation toxicity. Contains 52% of components with unknown hazards to the aquatic environment.

Notes on labelling

H304 is not required on the label due to the product's viscosity Nota P applied to CASRN 64742-95-6 and CASRN 64742-48-9.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbol(s)



Contains:

1,2,4-Trimethylbenzene; Diphenylmethane-2,4'-diisocyanate; Formaldehyde, oligomeric reaction products with aniline and phosgene; P,P'-Methylenebis(phenyl isocyanate)

| Risk phrases | |
|---------------------|---|
| R10 | Flammable. |
| R20 | Harmful by inhalation. |
| R36/37/38 | Irritating to eyes, respiratory system and skin. |
| R42/43 | May cause sensitisation by inhalation and skin contact. |
| R48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| R40 | Limited evidence of a carcinogenic effect. |
| R52/53 | Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment. |
| | |

Safety phrases

| S23C | Do not breathe vapour or spray. |
|--------|---|
| S51 | Use only in well ventilated areas. |
| S36/37 | Wear suitable protective clothing and gloves. |
| S45 | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |
| S61 | Avoid release to the environment. Refer to special instructions/safety data sheets. |

Special provisions concerning the labelling of certain substances

Contains isocyanates. See information supplied by manufacturer.

Notes on labelling

R65 is not required on the label due to the product's viscosity.

Nota P applied to CASRNs 64742-95-6 and 64742-48-9.

2.3. Other hazards

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

SECTION 3: Composition/information on ingredients

| Ingredient | CAS Nbr | EU Inventory | % by Wt | Classification |
|---|------------|----------------------|---------|---|
| Non-Hazardous Ingredients | Mixture | | 20 - 30 | |
| Solvent naphtha (petroleum), light aromatic | 64742-95-6 | EINECS 265- 199-0 | 10 - 20 | Xn:R65 - Nota 4,P (EU) R10 (Vendor) Xi:R38; R67 (Self Classified) |
| | | | | Asp. Tox. 1, H304 - Nota P (CLP) |
| | | | | Flam. Liq. 3, H226 (Vendor) Skin Irrit. 2, H315; STOT SE 3, H336 (Self Classified) |
| Aluminium | 7429-90-5 | EINECS 231- 072-3 | 10 - 20 | F:R11-15 - Nota T (EU) |
| | | | | Flam. Sol. 1, H228; Water-react. 2, H261 - Nota T (CLP) |
| 1,2,4-Trimethylbenzene | 95-63-6 | EINECS 202- 436-9 | 10 - 20 | Xn:R20; Xi:R36-37-38; N:R51/53; R10 (EU) |
| | | | | Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 2, H411 (CLP) |
| P,P'-Methylenebis(phenyl isocyanate) | 101-68-8 | EINECS 202- 966-0 | 7 - 13 | Carc.Cat.3:R40; Xn:R20-48/20; Xi:R36-37-38; R42-43 - Nota 2,C (EU) |
| | | | | Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; Carc. 2, H351; STOT SE 3, H335; STOT RE 2, H373 - Nota 2,C (CLP) |

| Formaldehyde, oligomeric reaction products | 32055-14-4 | NLP 500-079- | 5 - 10 | Carc.Cat.3:R40; Xn:R20-48/20; |
|--|------------|----------------------|-----------|--|
| with aniline and phosgene | | 6 | | Xi:R36-37-38; R42-43 (Vendor) |
| | | | | Acute Tox. 4, H332; Skin Irrit. |
| | | | | 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. |
| | | | | 1, H317; Carc. 2, H351; STOT |
| | | | | SE 3, H335; STOT RE 2, H373 |
| | | | | (Vendor) |
| Naphtha (petroleum), hydrotreated heavy | 64742-48-9 | EINECS 265- | 5 - 10 | Xn:R65 - Nota 4,P (EU) Vi P_{29} , P_{17} (Salf Classified) |
| | | 150-3 | | Xi:R38; R67 (Self Classified) |
| | | | | Asp. Tox. 1, H304 - Nota P |
| | | | | (CLP) |
| | | | | Skin Irrit. 2, H315; STOT SE 3, |
| N-Propylbenzene | 103-65-1 | EINECS 203- | 1 - 5 | H336 (Self Classified) Xn:R65; Xi:R37; N:R51/53; R10 |
| IV-I Topytoenzene | 105-05-1 | 132-9 | 1 - 5 | - Nota 4 (EU) |
| | | | | Flam. Liq. 3, H226; Asp. Tox. 1, |
| | | | | H304; STOT SE 3, H335; |
| | 5052 54 1 | | 1.5 | Aquatic Chronic 2, H411 - Nota C (CLP) |
| Diphenylmethane-2,4'-diisocyanate | 5873-54-1 | EINECS 227- 534-9 | 1 - 5 | Carc.Cat.3:R40; Xn:R20-48/20; Xi:R36-37-38; R42-43 - Nota |
| | | 554-9 | | 2,C (EU) |
| | | | | Acute Tox. 4, H332; Skin Irrit. |
| | | | | 2, H315; Eye Irrit. 2, H319; |
| | | | | Resp. Sens. 1, H334; Skin Sens. |
| | | | | 1, H317; Carc. 2, H351; STOT SE 3, H335; STOT RE 2, H373 - |
| | | | | Nota 2,C (CLP) |
| p-toluenesulphonyl isocyanate | 4083-64-1 | EINECS 223- | 0.5 - 1.0 | Xi:R36-37-38; R42; R14 (EU) |
| | | 810-8 | | R52/53 (Self Classified) |
| | | | | EUH014; Skin Irrit. 2, H315; |
| | | | | Eye Irrit. 2, H319; Resp. Sens. 1, |
| | | | | H334; STOT SE 3, H335 (CLP) Aquatic Chronic 3, H412 (Self |
| | | | | Classified) |
| 2,2'-methylenediphenyl diisocyanate | 2536-05-2 | EINECS 219- | < 0.1 | Carc.Cat.3:R40; Xn:R20-48/20; |
| | | 799-4 | | Xi:R36-37-38; R42-43 - Nota |
| | | | | 2,C (EU) |
| | | | | Acute Tox. 4, H332; Skin Irrit. |
| | | | | 2, H315; Eye Irrit. 2, H319; |
| | | | | Resp. Sens. 1, H334; Skin Sens. |
| | | | | 1, H317; Carc. 2, H351; STOT |
| | | | | SE 3, H335; STOT RE 2, H373 - Nota 2,C (CLP) |
| Please see section 16 for the full text of any | | | | Nota 2,C (CLP) |

Please see section 16 for the full text of any R phrases and H statements referred to in this section

Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. Get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If swallowed

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

| <u>Substance</u> | <u>Condition</u> |
|---------------------|--------------------|
| Carbon monoxide. | During combustion. |
| Carbon dioxide. | During combustion. |
| Hydrogen cyanide. | During combustion. |
| Oxides of nitrogen. | During combustion. |
| | |

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Eliminate all ignition sources if safe to do so. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Dispose of collected material as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Do not use in a confined area with minimal air exchange. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Ingredient Free isocyanates | CAS Nbr 101-68-8 | Agency Manufacturer determined | Limit type TWA:0.005 ppm;STEL:0.02 ppm | Additional comments |
|---------------------------------------|---------------------|--------------------------------------|--|------------------------|
| Free isocyanates | 101-68-8 | Health and Safety Comm. (UK) | TWA(as NCO):0.02 mg/m3;STEL(as NCO):0.07 mg/m3 | Respiratory Sensitizer |
| Free isocyanates | 2536-05-2 | Manufacturer determined | TWA:0.005 ppm;STEL:0.02 ppm | |
| Free isocyanates | 2536-05-2 | Health and | TWA(as NCO):0.02 | Respiratory Sensitizer |

| | | Safety Comm. (UK) | mg/m3;STEL(as NCO):0.07 mg/m3 | |
|--|--|----------------------|--------------------------------------|------------------------|
| Free isocyanates | 5873-54-1 | Manufacturer | TWA:0.005 ppm;STEL:0.02 | |
| | | determined | ppm | |
| Free isocyanates | 5873-54-1 | Health and | TWA(as NCO):0.02 | Respiratory Sensitizer |
| | | Safety Comm. | mg/m3;STEL(as NCO):0.07 | |
| | | (UK) | mg/m3 | |
| Naphtha (petroleum), | 64742-48-9 | Manufacturer | TWA:100 ppm | |
| hydrotreated heavy | | determined | 11 | |
| Aluminium | 7429-90-5 | Health and | TWA(as inhalable dust):10 | |
| | | Safety Comm. | mg/m ³ ;TWA(as respirable | |
| | | (UK) | dust):4 mg/m ³ | |
| Benzene, trimethyl- | 95-63-6 | Health and | TWA:125 mg/m3(25 ppm) | |
| Denzene, unitetityr | <i>)))))))) i i i i i i i i i i</i> | Safety Comm. | 1 WA.125 mg/m5(25 ppm) | |
| | | - | | |
| | | (UK) | | |
| Health and Safety Comm. (UK) : UK Heal | th and Safety Cor | nmission | | |

Health and Safety Comm. (UK) : UK Health and Safety Commission TWA: Time-Weighted-Average STEL: Short Term Exposure Limit CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment. Curing enclosures must be exhausted to outdoors or to a suitable emission control device.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

In case of inadequate ventilation wear respiratory protection. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure: Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical and chemical proj | perties |
|--|---|
| Physical state | Liquid. |
| Specific Physical Form: | Viscous liquid |
| Appearance/Odour | Aromatic solvent odour; Silver grey colour |
| Odour threshold | No data available. |
| рН | Not applicable. |
| Boiling point/boiling range | >=155 °C |
| Melting point | Not applicable. |
| Flammability (solid, gas) | Not applicable. |
| Explosive properties | Not classified |
| Oxidising properties | Not classified |
| Flash point | 40 °C [Test Method:Closed Cup] |
| Autoignition temperature | >=240 °C |
| Flammable Limits(LEL) | 0.6 % volume |
| Flammable Limits(UEL) | 7 % volume |
| Vapour pressure | 2,133.2 Pa |
| Relative density | 1.07 [<i>Ref Std</i> :WATER=1] |
| Water solubility | Negligible |
| Solubility- non-water | Nil |
| Partition coefficient: n-octanol/water | No data available. |
| Evaporation rate | No data available. |
| Vapour density | No data available. |
| Decomposition temperature | No data available. |
| Viscosity | >=0.1 Pa-s [<i>Test Method</i> :Brookfield] |
| Density | 1.07 g/ml |
| 9.2. Other information | |
| Volatile organic compounds (VOC) Percent volatile | 395 g/l [<i>Test Method</i> :Estimated] [<i>Details</i> :EU Definition] 40 % |

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat. Sparks and/or flames. **10.5 Incompatible materials** Alcohols. Amines. Strong acids. Strong bases.

10.6 Hazardous decomposition products

<u>Substance</u>

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Toxic if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause target organ effects after inhalation.

Skin contact

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause target organ effects after ingestion.

Target Organ Effects:

Single exposure may cause:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:

Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

Additional information:

Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

| Name | Route | Species | Value |
|---|-----------------------------------|---------|--|
| Overall product | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Inhalation- Dust/Mist(4 hr) | | No data available; calculated ATE0.5 - 1 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| 1,2,4-Trimethylbenzene | Dermal | Rabbit | LD50 > 3,160 mg/kg |
| 1,2,4-Trimethylbenzene | Inhalation- | Rat | LC50 18 mg/l |
| 1,2,4-11iniculyiochizene | Vapor (4 | Kat | |
| | hours) | | |
| 1,2,4-Trimethylbenzene | Ingestion | Rat | LD50 3,400 mg/kg |
| Solvent naphtha (petroleum), light aromatic | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Solvent naphtha (petroleum), light aromatic | Inhalation- | Rat | LC50 > 5.2 mg/l |
| | Vapor (4 | | - |
| | hours) | | |
| Solvent naphtha (petroleum), light aromatic | Ingestion | Rat | LD50 > 5,000 mg/kg |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation- | | LC50 estimated to be 10 - 20 mg/l |
| | Vapor | | |
| P,P'-Methylenebis(phenyl isocyanate) | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation- | Rat | LC50 0.369 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| P,P'-Methylenebis(phenyl isocyanate) | Ingestion | Rat | LD50 31,600 mg/kg |
| Aluminium | Dermal | | LD50 estimated to be $> 5,000 \text{ mg/kg}$ |
| Aluminium | Ingestion | D / | LD50 estimated to be $>$ 5,000 mg/kg |
| Aluminium | Inhalation- | Rat | LC50 > .888 mg/l |
| | Dust/Mist (4 hours) | | |
| Naphtha (petroleum), hydrotreated heavy | Inhalation- | | LC50 estimated to be 20 - 50 mg/l |
| Napitila (peroleum), nyuloiteateu neavy | Vapor | | LC50 estimated to be 20 - 50 mg/r |
| Naphtha (petroleum), hydrotreated heavy | Dermal | Rabbit | LD50 > 3,000 mg/kg |
| Naphtha (petroleum), hydrotreated heavy | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Diphenylmethane-2,4'-diisocyanate | Inhalation- | | LC50 estimated to be 10 - 20 mg/l |
| r - j | Vapor | | |
| Diphenylmethane-2,4'-diisocyanate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Diphenylmethane-2,4'-diisocyanate | Inhalation- | Rat | LC50 0.369 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| Diphenylmethane-2,4'-diisocyanate | Ingestion | Rat | LD50 31,600 mg/kg |
| N-Propylbenzene | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| N-Propylbenzene | Ingestion | Rat | LD50 6,040 mg/kg |
| 2,2'-methylenediphenyl diisocyanate | Inhalation- Vapor | | LC50 estimated to be 10 - 20 mg/l |
| 2,2'-methylenediphenyl diisocyanate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 2,2'-methylenediphenyl diisocyanate | Inhalation- | Rat | LC50 0.369 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| 2,2'-methylenediphenyl diisocyanate | Ingestion | Rat | LD50 31,600 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|------------|---------------------------|
| 1,2,4-Trimethylbenzene | Rabbit | Irritant |
| Solvent naphtha (petroleum), light aromatic | Rabbit | Irritant |
| P,P'-Methylenebis(phenyl isocyanate) | official | Irritant |
| | classifica | |
| | tion | |
| Aluminium | Rabbit | No significant irritation |

| Naphtha (petroleum), hydrotreated heavy | Rabbit | Irritant |
|---|------------|----------|
| Diphenylmethane-2,4'-diisocyanate | official | Irritant |
| | classifica | |
| | tion | |
| 2,2'-methylenediphenyl diisocyanate | official | Irritant |
| | classifica | |
| | tion | |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|------------|---------------------------|
| 1,2,4-Trimethylbenzene | Rabbit | Mild irritant |
| Solvent naphtha (petroleum), light aromatic | Rabbit | Mild irritant |
| P,P'-Methylenebis(phenyl isocyanate) | official | Severe irritant |
| | classifica | |
| | tion | |
| Aluminium | Rabbit | No significant irritation |
| Naphtha (petroleum), hydrotreated heavy | Rabbit | No significant irritation |
| Diphenylmethane-2,4'-diisocyanate | official | Severe irritant |
| | classifica | |
| | tion | |
| 2,2'-methylenediphenyl diisocyanate | official | Severe irritant |
| | classifica | |
| | tion | |

Skin Sensitisation

| Name | Species | Value |
|---|-------------|-----------------|
| 1,2,4-Trimethylbenzene | Guinea | Not sensitizing |
| | pig | |
| Solvent naphtha (petroleum), light aromatic | Guinea | Not sensitizing |
| | pig | |
| P,P'-Methylenebis(phenyl isocyanate) | official | Sensitising |
| | classificat | |
| | ion | |
| Aluminium | Guinea | Not sensitizing |
| | pig | |
| Naphtha (petroleum), hydrotreated heavy | Guinea | Not sensitizing |
| | pig | |
| Diphenylmethane-2,4'-diisocyanate | official | Sensitising |
| | classificat | |
| | ion | |
| 2,2'-methylenediphenyl diisocyanate | official | Sensitising |
| | classificat | |
| | ion | |

Respiratory Sensitisation

| Name | Species | Value |
|--------------------------------------|---------|--|
| P,P'-Methylenebis(phenyl isocyanate) | Human | Sensitising |
| Aluminium | Human | Some positive data exist, but the data are not sufficient for classification |
| Diphenylmethane-2,4'-diisocyanate | Human | Sensitising |
| 2,2'-methylenediphenyl diisocyanate | Human | Sensitising |

Germ Cell Mutagenicity

| Name | Route | Value |
|---|----------|--|
| 1,2,4-Trimethylbenzene | In Vitro | Not mutagenic |
| P,P'-Methylenebis(phenyl isocyanate) | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Aluminium | In Vitro | Not mutagenic |
| Naphtha (petroleum), hydrotreated heavy | In vivo | Not mutagenic |
| Naphtha (petroleum), hydrotreated heavy | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Diphenylmethane-2,4'-diisocyanate | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 2,2'-methylenediphenyl diisocyanate | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|---|------------|------------------------|--|
| Solvent naphtha (petroleum), light aromatic | Inhalation | Mouse | Some positive data exist, but the data are not sufficient for classification |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| Naphtha (petroleum), hydrotreated heavy | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | Human and animal | Some positive data exist, but the data are not sufficient for classification |
| Diphenylmethane-2,4'-diisocyanate | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| 2,2'-methylenediphenyl diisocyanate | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|------------|--|---------|---------------------|-------------------------|
| 1,2,4-Trimethylbenzene | Inhalation | Some positive female reproductive data exist, but the data are not sufficient for classification | Rat | NOAEL 1.2 mg/l | 3 months |
| 1,2,4-Trimethylbenzene | Inhalation | Some positive male reproductive data exist, but the data are not sufficient for classification | Rat | NOAEL 1.2 mg/l | 3 months |
| 1,2,4-Trimethylbenzene | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 1.5 mg/l | during gestation |
| Solvent naphtha (petroleum), light aromatic | Inhalation | Not toxic to female reproduction | Rat | NOAEL 1,500 ppm | 2 generation |
| Solvent naphtha (petroleum), light aromatic | Inhalation | Not toxic to male reproduction | Rat | NOAEL 1,500 ppm | 2 generation |
| Solvent naphtha (petroleum), light aromatic | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 500 ppm | 2 generation |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 0.004 mg/l | during organogenesis |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | Not toxic to development | Rat | NOAEL 2.4 mg/l | during organogenesis |
| Diphenylmethane-2,4'-diisocyanate | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 0.004 mg/l | during organogenesis |
| 2,2'-methylenediphenyl diisocyanate | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 0.004 mg/l | during organogenesis |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|------------|--------------------------------------|--|--------------------------------|------------------------|----------------------|
| 1,2,4-Trimethylbenzene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | NOAEL Not available | |
| 1,2,4-Trimethylbenzene | Inhalation | respiratory irritation | May cause respiratory irritation | official classifica tion | NOAEL Not available | |
| Solvent naphtha (petroleum), light aromatic | Inhalation | central nervous system depression | May cause drowsiness or dizziness | | NOAEL Not available | |
| Solvent naphtha (petroleum), light aromatic | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | NOAEL Not available | |
| Solvent naphtha | Ingestion | central nervous | May cause drowsiness or | | NOAEL Not | |

| (petroleum), light aromatic | | system depression | dizziness | | available | |
|--|------------|--------------------------------------|--|--------------------------------|------------------------|---------|
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation | respiratory irritation | May cause respiratory irritation | official classifica tion | NOAEL Not available | |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | NOAEL Not available | |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | NOAEL Not available | |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | nervous system | Some positive data exist, but the data are not sufficient for classification | Dog | NOAEL 6.5 mg/l | 4 hours |
| Diphenylmethane-2,4'- diisocyanate | Inhalation | respiratory irritation | May cause respiratory irritation | official classifica tion | NOAEL Not available | |
| 2,2'-methylenediphenyl diisocyanate | Inhalation | respiratory irritation | May cause respiratory irritation | official classifica tion | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|------------|---|--|-------------------------------|-----------------------------|--------------------------|
| 1,2,4-Trimethylbenzene | Inhalation | hematopoietic system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 0.5 mg/l | 3 months |
| 1,2,4-Trimethylbenzene | Inhalation | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 0.1 mg/l | 3 months |
| 1,2,4-Trimethylbenzene | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| 1,2,4-Trimethylbenzene | Inhalation | liver kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1.2 mg/l | 3 months |
| 1,2,4-Trimethylbenzene | Inhalation | heart endocrine system immune system | All data are negative | Rat | NOAEL 1.2 mg/l | 3 months |
| 1,2,4-Trimethylbenzene | Ingestion | hematopoietic system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 600 mg/kg/day | 14 days |
| 1,2,4-Trimethylbenzene | Ingestion | liver immune system kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| Aluminium | Inhalation | nervous system respiratory system | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 4.6 mg/l | 6 months |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 1.9 mg/l | 13 weeks |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL 0.6 mg/l | 90 days |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | bone, teeth, nails, and/or hair blood liver muscles | All data are negative | Rat | NOAEL 5.6 mg/l | 12 weeks |
| Naphtha (petroleum), hydrotreated heavy | Inhalation | heart | All data are negative | Multiple animal species | NOAEL 1.3 mg/l | 90 days |
| Diphenylmethane-2,4'- diisocyanate | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| 2,2'-methylenediphenyl diisocyanate | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |

Aspiration Hazard

| Name | Value |
|---|-------------------|
| 1,2,4-Trimethylbenzene | Aspiration hazard |
| Solvent naphtha (petroleum), light aromatic | Aspiration hazard |
| Naphtha (petroleum), hydrotreated heavy | Aspiration hazard |

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

| Material | CAS Nbr | Organism | Туре | Exposure | Test endpoint | Test result |
|----------------|-----------|---------------|------------------|----------|---------------|-------------|
| 1,2,4- | 95-63-6 | Fathead | Experimental | 96 hours | LC50 | 7.72 mg/l |
| Trimethylbenz | | minnow | | | | |
| ene | | | | | | |
| 1,2,4- | 95-63-6 | Water flea | Experimental | 48 hours | EC50 | 3.6 mg/l |
| Trimethylbenz | | | | | | |
| ene | | | | | | |
| 1,2,4- | 95-63-6 | Mysid Shrimp | Experimental | 96 hours | EC50 | 2 mg/l |
| Trimethylbenz | | | | | | |
| ene | | | | | | |
| Diphenylmetha | 5873-54-1 | Water flea | Estimated | 24 hours | EC50 | >500 mg/l |
| ne-2,4'- | | | | | | |
| diisocyanate | | | | | | |
| N- | 103-65-1 | Rainbow trout | Experimental | 96 hours | LC50 | 1.55 mg/l |
| Propylbenzene | | | | | | |
| N- | 103-65-1 | Water flea | Experimental | 24 hours | EC50 | 2 mg/l |
| Propylbenzene | | | | | | |
| N- | 103-65-1 | Green Algae | Experimental | 72 hours | EC50 | 1.8 mg/l |
| Propylbenzene | | | | | | |
| p- | 4083-64-1 | Green Algae | Experimental | 72 hours | EC50 | 23 mg/l |
| toluenesulphon | | | | | | |
| yl isocyanate | | | | | | |
| p- | 4083-64-1 | Ricefish | Experimental | 96 hours | LC50 | 435 mg/l |
| toluenesulphon | | | | | | |
| yl isocyanate | | | | | | |
| p- | 4083-64-1 | Water flea | Experimental | 24 hours | EC50 | 150 mg/l |
| toluenesulphon | | | | | | |
| yl isocyanate | | | | | | |
| p- | 4083-64-1 | Water flea | Experimental | 21 days | NOEC | 47 mg/l |
| toluenesulphon | | | | | | |
| yl isocyanate | | | | | | |
| Aluminium | 7429-90-5 | | Data not | | | |
| | | | available or | | | |
| | | | insufficient for | | | |

| | | classification | | |
|----------------|------------|------------------|--|--|
| 2,2'- | 2536-05-2 | Data not | | |
| methylenediph | | available or | | |
| enyl | | insufficient for | | |
| diisocyanate | | classification | | |
| Formaldehyde, | 32055-14-4 | Data not | | |
| oligomeric | | available or | | |
| reaction | | insufficient for | | |
| products with | | classification | | |
| aniline and | | | | |
| phosgene | | | | |
| Non- | Mixture | Data not | | |
| Hazardous | | available or | | |
| Ingredients | | insufficient for | | |
| | | classification | | |
| Solvent | 64742-95-6 | Data not | | |
| naphtha | | available or | | |
| (petroleum), | | insufficient for | | |
| light aromatic | | classification | | |
| Naphtha | 64742-48-9 | Data not | | |
| (petroleum), | | available or | | |
| hydrotreated | | insufficient for | | |
| heavy | | classification | | |
| P,P'- | 101-68-8 | Data not | | |
| Methylenebis(| | available or | | |
| phenyl | | insufficient for | | |
| isocyanate) | | classification | | |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|--|------------|--|----------|-------------------------|------------------------|---------------|
| N- | 103-65-1 | Experimental | | Photolytic half- | 5.17 days (t | Other methods |
| Propylbenzene | | Photolysis | | life (in air) | 1/2) | |
| 1,2,4- | 95-63-6 | Experimental | | Photolytic half- | 11.8 hours (t | Other methods |
| Trimethylbenz | | Photolysis | | life (in air) | 1/2) | |
| ene | | | | | | |
| Non- Hazardous Ingredients | Mixture | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| p- toluenesulphon yl isocyanate | 4083-64-1 | Estimated Hydrolysis | | Hydrolytic half-life | <10 minutes (t 1/2) | Other methods |
| Solvent naphtha (petroleum), light aromatic | 64742-95-6 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Aluminium | 7429-90-5 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| P,P'- Methylenebis(phenyl isocyanate) | 101-68-8 | Experimental Hydrolysis | | Hydrolytic half-life | <2 hours (t 1/2) | Other methods |

| 2,2'- | 2536-05-2 | Experimental | | Hydrolytic | <2 hours (t | Other methods |
|---|------------|--|---------|------------|-------------|--|
| methylenediph | | Hydrolysis | | half-life | 1/2) | |
| enyl | | | | | | |
| diisocyanate | | | | | | |
| Diphenylmetha | 5873-54-1 | Estimated | | Hydrolytic | <2 hours (t | Other methods |
| ne-2,4'- | | Hydrolysis | | half-life | 1/2) | |
| diisocyanate | | | | | | |
| Formaldehyde, | 32055-14-4 | Data not | N/A | N/A | N/A | N/A |
| oligomeric | | available or | | | | |
| reaction | | insufficient for | | | | |
| products with | | classification | | | | |
| aniline and | | | | | | |
| phosgene | | | | | | |
| p- | 4083-64-1 | Experimental | 28 days | BOD | 3 % weight | OECD 301C - MITI |
| toluenesulphon | | Biodegradation | | | | test (I) |
| yl isocyanate | | | | | | |
| Naphtha | 64742-48-9 | Data not | N/A | N/A | N/A | N/A |
| (petroleum), | | available or | | | | |
| hydrotreated | | insufficient for | | | | |
| heavy | | classification | | | | |
| 1,2,4- | 95-63-6 | Experimental | 28 days | BOD | 4 % weight | OECD 301C - MITI |
| Trimethylbenz | | Biodegradation | - | | | test (I) |
| ene | | _ | | | | |
| P,P'- | 101-68-8 | Experimental | 28 days | BOD | 0 % weight | OECD 301C - MITI |
| Methylenebis(| | Biodegradation | - | | - | test (I) |
| phenyl | | | | | | |
| isocyanate) | | | | | | |
| 2,2'- | 2536-05-2 | Experimental | 28 days | BOD | 0 % weight | OECD 301C - MITI |
| | | Biodegradation | - | | Ũ | test (I) |
| enyl | | | | | | |
| diisocyanate | | | | | | |
| Diphenylmetha | 5873-54-1 | Estimated | 28 days | BOD | 0 % weight | OECD 301C - MITI |
| ne-2,4'- | | | | | E . | test (I) |
| · · · · · · · · · · · · · · · · · · · | | | | | | |
| ene P,P'- Methylenebis(phenyl isocyanate) 2,2'- methylenediph enyl diisocyanate Diphenylmetha | 2536-05-2 | Experimental Biodegradation Experimental Biodegradation | 28 days | BOD | 0 % weight | OECD 301C - MITI test (I) OECD 301C - MITI test (I) |

12.3 : Bioaccumulative potential

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---------------|------------|------------------|----------|------------|-------------|----------|
| Non- | Mixture | Data not | N/A | N/A | N/A | N/A |
| Hazardous | | available or | | | | |
| Ingredients | | insufficient for | | | | |
| | | classification | | | | |
| Aluminium | 7429-90-5 | Data not | N/A | N/A | N/A | N/A |
| | | available or | | | | |
| | | insufficient for | | | | |
| | | classification | | | | |
| Formaldehyde, | 32055-14-4 | Data not | N/A | N/A | N/A | N/A |
| oligomeric | | available or | | | | |
| reaction | | insufficient for | | | | |
| products with | | classification | | | | |
| aniline and | | | | | | |
| phosgene | | | | | | |
| Solvent | 64742-95-6 | Data not | N/A | N/A | N/A | N/A |
| naphtha | | available or | | | | |
| (petroleum), | | insufficient for | | | | |

| light aromatic | | classification | | | | |
|--|------------|--|---------|----------------------------|------|---------------|
| Naphtha (petroleum), hydrotreated heavy | 64742-48-9 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 1,2,4- Trimethylbenz ene | 95-63-6 | Experimental BCF-Carp | 56 days | Bioaccumulati on factor | 275 | Other methods |
| P,P'- Methylenebis(phenyl isocyanate) | 101-68-8 | Experimental BCF-Carp | 28 days | Bioaccumulati on factor | 200 | Other methods |
| 2,2'- methylenediph enyl diisocyanate | 2536-05-2 | Experimental BCF-Carp | 28 days | Bioaccumulati on factor | 200 | Other methods |
| Diphenylmetha ne-2,4'- diisocyanate | 5873-54-1 | Estimated BCF-Carp | 28 days | Bioaccumulati on factor | 200 | Other methods |
| p- toluenesulphon yl isocyanate | 4083-64-1 | Experimental Bioconcentrati on | | Log Kow | 0.82 | Other methods |
| N- Propylbenzene | 103-65-1 | Experimental Bioconcentrati on | | Log Kow | 3.69 | Other methods |

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Dispose of waste product in a permitted industrial waste facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transportation information

GR-2001-0303-8

С

ADR/RID: UN1263, PAINT RELATED MATERIAL, LIMITED QUANTITY, 3., III, (E), ADR Classification Code: F1. IMDG-CODE: UN1263, PAINT RELATED MATERIAL, 3, III, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FE,SE. ICAO/IATA: UN1263, PAINT RELATED MATERIAL, 3., III.

SECTION 15: Regulatory information

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

| Cai | •cinogenicity | | | |
|-----|---|------------|-------------------------|------------------------|
| | Ingredient | CAS Nbr | Classification | Regulation |
| | 2,2'-methylenediphenyl diisocyanate | 2536-05-2 | Carc. 2 | Regulation (EC) No. |
| | | | | 1272/2008, Table 3.1 |
| | 2,2'-methylenediphenyl diisocyanate | 2536-05-2 | Carc.Cat.3 | Regulation (EC) No. |
| | | | | 1272/2008, Table 3.2 |
| | Diphenylmethane-2,4'-diisocyanate | 5873-54-1 | Carc. 2 | Regulation (EC) No. |
| | | | | 1272/2008, Table 3.1 |
| | Diphenylmethane-2,4'-diisocyanate | 5873-54-1 | Carc.Cat.3 | Regulation (EC) No. |
| | | | | 1272/2008, Table 3.2 |
| | Formaldehyde, oligomeric reaction products with | 32055-14-4 | Carc. 2 | Vendor classified |
| | aniline and phosgene | | | according to |
| | | | | Regulation (EC) No |
| | | | | 1272/2008 |
| | Formaldehyde, oligomeric reaction products with | 32055-14-4 | Carc.Cat.3 | Vendor classified |
| | aniline and phosgene | | | according to Directive |
| | | | | 67/548/EEC |
| | P,P'-Methylenebis(phenyl isocyanate) | 101-68-8 | Carc. 2 | Regulation (EC) No. |
| | | | | 1272/2008, Table 3.1 |
| | P,P'-Methylenebis(phenyl isocyanate) | 101-68-8 | Carc.Cat.3 | Regulation (EC) No. |
| | | | | 1272/2008, Table 3.2 |
| | P,P'-Methylenebis(phenyl isocyanate) | 101-68-8 | Gr. 3: Not classifiable | International Agency |
| | | | | for Research on Cancer |
| | | | | |

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

| EUH014 | Reacts violently with water. |
|--------|--|
| H226 | Flammable liquid and vapour. |
| H228 | Flammable solid. |
| H261 | In contact with water releases flammable gas. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

List of relevant R-phrases

| List of Ferenant P | |
|--------------------|---|
| R10 | Flammable. |
| R11 | Highly flammable. |
| R14 | Reacts violently with water. |
| R15 | Contact with water liberates highly flammable gases. |
| R20 | Harmful by inhalation. |
| R36 | Irritating to eyes. |
| R36/37/38 | Irritating to eyes, respiratory system and skin. |
| R37 | Irritating to respiratory system. |
| R38 | Irritating to skin. |
| R40 | Limited evidence of a carcinogenic effect. |
| R42 | May cause sensitisation by inhalation. |
| R42/43 | May cause sensitisation by inhalation and skin contact. |
| R43 | May cause sensitisation by skin contact. |
| R48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| R51/53 | Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. |
| R52/53 | Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment. |
| R65 | Harmful: May cause lung damage if swallowed. |
| R67 | Vapours may cause drowsiness and dizziness. |
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Revision information:

Revision Changes:

Section 8: Skin protection - recommended gloves information information was modified.

Section 8: Respiratory protection - recommended respirators information information was modified.

Risk phrase information was modified.

- Section 8: Personal Protection Skin/body information information was modified.
- Section 8: Skin protection protective clothing information information was modified.
- Section 2: Label ingredient information information was modified.
- Section 1: Product identification numbers heading information was modified.
- Section 9: Viscosity information information was modified.
- Section 15: Carcinogenicity information information was modified.
- Section 3: Composition/ Information of ingredients table information was modified.
- Section 2: Indication of danger information information was modified.
- Section 16: Regulations Inventories EU ONLY information was modified.
- Section 8: Occupational exposure limit table information was modified.

Telephone header information was modified.

Company Telephone information was modified. Section 11: Acute Toxicity table information was modified. Section 11: Carcinogenicity Table information was modified. Section 11: Serious Eye Damage/Irritation Table information was modified. Section 11: Germ Cell Mutagenicity Table information was modified. Section 11: Skin Sensitization Table information was modified. Section 11: Respiratory Sensitization Table information was modified. Section 11: Reproductive Toxicity Table information was modified. Section 11: Skin Corrosion/Irritation Table information was modified. Section 11: Target Organs - Repeated Table information was modified. Section 11: Target Organs - Single Table information was modified. Section 11: Health Effects - Inhalation information information was modified. Section 5: Fire - Extinguishing media information information was modified. Section 8: Personal Protection - Eye information information was modified. Section 13: Standard Phrase Category Waste GHS information was modified. Section 4: First aid for inhalation information information was modified. Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified. Label: Graphic information was modified. Section 9: Specific physical form information information was added. Section 9: Specific physical form heading information was added. Section 12: Component ecotoxicity information information was added. Section 12: Persistence and Degradability information information was added. Section 12:Bioccumulative potential information information was added. Section 12: Component Ecotoxicity table Material column header information was added. Section 12: Component Ecotoxicity table CAS No column header information was added. Section 12: Component Ecotoxicity table Organism column header information was added. Section 12: Component Ecotoxicity table Type column header information was added. Section 12: Component Ecotoxicity table Exposure column header information was added. Section 12: Component Ecotoxicity table End point column header information was added. Section 12: Component Ecotoxicity table Result column header information was added. Section 12: Persistence and degradability table Material column header information was added. Section 12: Persistence and degradability table CAS No column header information was added. Section 12: Persistence and degradability table Test Type column header information was added. Section 12: Persistence and degradability table Duration column header information was added. Section 12: Persistence and degradability table Test Result column header information was added. Section 12: Persistence and degradability table Protocol column header information was added. Section 12:Bioccumulative potential table Material column header information was added. Section 12:Bioccumulative potential table CAS No column header information was added. Section 12:Bioccumulative potential table CAS No column header information was added. Section 12:Bioccumulative potential table Test Result column header information was added. Section 12:Bioccumulative potential table Protocol column header information was added. Section 12:Bioccumulative potential table Test Type column header information was added. Label: Signal Word - Header information was added. Label: Signal Word information was added. Label: CLP Classification - Header information was added. Label: CLP Classification information was added. Label: CLP Classification information was added. Label: CLP Classification - Header information was added. Label: CLP Percent Unknown information was added. Label: CLP Percent Unknown information was added. Label: CLP Percent Unknown information was added. Label: CLP Environmental Hazard Statements information was added. Label: Graphic information was added. Label: Graphic information was added. Label: Symbol information was added.

Label: Symbol information was added. Label: CLP Precautionary - Disposal information was added. Label: CLP Precautionary - Disposal - Header information was added. Label: CLP Precautionary - Prevention information was added. Label: CLP Precautionary - Prevention - Header information was added. Label: CLP Precautionary - Response information was added. Label: CLP Precautionary - Response - Header information was added. Label: Precautionary Statement - Header information was added. CLP: Ingredient table information was added. Section 2: Notes on labelling heading information was added. Section 15: Label remarks and EU Detergent information was added. CLP Remark(phrase) information was added. Section 2: 2.2 & 2.3. CLP REGULATION heading information was added. Label: CLP Ingredients table Ingredient heading information was added. Label: CLP Ingredients table CAS No heading information was added. Label: CLP Ingredients table Percent by Wt heading information was added. Section 12: Persistence and degradability table Study Type column header information was added. Section 12:Bioccumulative potential table Test Type column header information was added. Section 09: Solubility as text (non-water) information was added. Section 2: H phrase reference information was added. Label: CLP Target Organ Hazard Statement Heading information was added. Label: CLP Target Organ Hazard Statement information was added. Section 12: Classification Warning information was added. Section 11: Classification disclaimer information was added. Section 8: 8.1.1 Biological limit values table heading information was added. Section 8: BLV information was added. Prints No Data if Component ecotoxicity information is not present information was deleted. Prints No Data if Persistence and Degradability information is not present information was deleted. Prints No Data if Bioccumulative potential information is not present information was deleted. Label: CLP Supplemental Hazard Statements information was deleted. Label: CLP Supplemental Hazard Statements - Header information was deleted. Label: CLP Supplemental Information - Header information was deleted. Section 11: Classification disclaimer information was deleted. Section 12: Classification Warning information was deleted. Label: Graphic Text information was deleted. Section 9: Solubility (non-water) information was deleted.

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