



SAFETY DATA SHEET ANTI FOG/ANTI MIST

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

1.1. Product identifier

Product name ANTI FOG/ANTI MIST
Product number RAN250, BAM250, CRF250

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

Identified uses Window glass cleaner.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED
Bury
Lancashire
England
BL9 7NY
0161 764 5981
0161 797 5899
info@tetrosyl.com

Manufacturer TETROSYL LIMITED
Bury
Lancashire
England
BL9 7NY
0161 764 5981
0161 797 5899
info@tetrosyl.com

1.4. Emergency telephone number

Emergency telephone +44 (0)161 764 5981

SECTION 2: Hazards identification

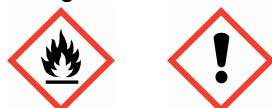
2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225
Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

ANTI FOG/ANTI MIST

| | |
|---------------------------------|--|
| Hazard statements | <p>H225 Highly flammable liquid and vapour.</p> <p>H319 Causes serious eye irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> |
| Precautionary statements | <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P240 Ground/ bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P312 Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p> <p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P102 Keep out of reach of children.</p> |

Contains IPA

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | | | |
|---|----------------------|--|-------------------|
| IPA | | | 60-100% |
| CAS number: 67-63-0 | EC number: 200-661-7 | REACH registration number: 01-2119457558-25-0000 | |
| Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336 | | | |
| POLYETHER MODIFIED TRISILOXANE | | | 1-<2.5% |
| CAS number: 27306-78-1 | EC number: 608-078-3 | | |
| Classification Acute Tox. 4 - H332 Eye Irrit. 2 - H319 Aquatic Chronic 2 - H411 | | | |

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

ANTI FOG/ANTI MIST

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|----------------------------|--|
| General information | Remove affected person from source of contamination. Effects may be delayed. Keep affected person under observation. Get medical attention. CAUTION! First aid personnel must be aware of own risk during rescue! Move affected person to fresh air at once. Keep affected person away from heat, sparks and flames. If breathing stops, provide artificial respiration. Place unconscious person on the side in the recovery position and ensure breathing can take place. |
| Inhalation | Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. Get medical attention. Show this Safety Data Sheet to the medical personnel. Place unconscious person on their side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration. |
| Ingestion | Get medical attention immediately. Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Keep affected person under observation. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Never give anything by mouth to an unconscious person. Keep affected person away from heat, sparks and flames. Place unconscious person on their side in the recovery position and ensure breathing can take place. |
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. Rinse with water. Use suitable lotion to moisturise skin. Get medical attention promptly if symptoms occur after washing. |
| Eye contact | Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Do not rub eye. Get medical attention if any discomfort continues. |

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

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|----------------------------|--|
| General information | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Effects may be delayed. Keep affected person under observation. |
| Inhalation | In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. Vapours may cause headache, fatigue, dizziness and nausea. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression. |
| Ingestion | May cause discomfort if swallowed. May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication. May cause chemical burns in mouth and throat. Central nervous system depression. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation. |
| Skin contact | Prolonged contact may cause redness, irritation and dry skin. |
| Eye contact | Irritation, burning, lachrymation, blurred vision after liquid splash. |

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

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| Notes for the doctor | No specific recommendations. If in doubt, get medical attention promptly. |
|-----------------------------|---|

SECTION 5: Firefighting measures

5.1. Extinguishing media

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| Suitable extinguishing media | Extinguish with the following media: Foam, carbon dioxide or dry powder. Water. Use fire-extinguishing media suitable for the surrounding fire. |
|-------------------------------------|---|

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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 Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember. The product is highly flammable. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Risk of re-ignition after fire has been extinguished. Risk of explosion. Cool containers exposed to flames with water until well after the fire is out. Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material.

Special protective equipment for firefighters Leave danger zone immediately.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage. Do not breathe vapour. Avoid contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up For waste disposal, see Section 13. Stop leak if possible without risk. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Cover large spillages with alcohol-resistant foam.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions

Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Vapours may accumulate on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Good personal hygiene procedures should be implemented. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Mechanical ventilation or local exhaust ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Keep away from heat, sparks and open flame. Keep container tightly closed. Keep containers upright. Keep only in the original container. Avoid contact with oxidising agents. Do not store near heat sources or expose to high temperatures. Store away from the following materials: Oxidising materials.

Storage class

Flammable liquid storage.

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

No exposure limits known for ingredient(s).

IPA

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Use explosion-proof general and local exhaust ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients. All handling should only take place in well-ventilated areas.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. 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. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Provide eyewash station. Wash promptly with soap and water if skin becomes contaminated. When using do not eat, drink or smoke. Contaminated clothing should be placed in a closed container for disposal or decontamination.

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Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type AX.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
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| Appearance | Clear liquid. |
| Colour | Colourless. |
| Odour | Alcoholic. |
| pH | Scientifically unjustified. |
| Melting point | Not determined. |
| Initial boiling point and range | 82°C @ |
| Flash point | 12°C |
| Evaporation rate | Not determined. |
| Upper/lower flammability or explosive limits | Not determined. |
| Vapour pressure | Not determined. |
| Vapour density | Not determined. |
| Relative density | 0.790g/cm ³ @ 20°C |
| Solubility(ies) | Miscible with water. |
| Partition coefficient | Not determined. |
| Auto-ignition temperature | Not determined. |
| Decomposition Temperature | Not determined. |
| Viscosity | <50 cP @ 20°C |

9.2. Other information

| | |
|-------------------|-------|
| Other information | None. |
|-------------------|-------|

SECTION 10: Stability and reactivity

10.1. Reactivity

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|------------|---|
| Reactivity | Vapours may form explosive mixtures with air. |
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10.2. Chemical stability

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|-----------|---|
| Stability | Stable at normal ambient temperatures and when used as recommended. |
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10.3. Possibility of hazardous reactions

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| Possibility of hazardous reactions | Not relevant. |
|------------------------------------|---------------|

10.4. Conditions to avoid

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|---------------------|---|
| Conditions to avoid | Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight. |
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10.5. Incompatible materials

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Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None at ambient temperatures. Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - inhalation

ATE inhalation (gases ppm) 450,000.0

ATE inhalation (vapours mg/l) 1,100.0

ATE inhalation (dusts/mists mg/l) 150.0

General information Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. The product contains small amounts of organic solvents. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations.

Inhalation Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Headache. Dizziness. Drowsiness. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. The product contains organic solvents. Overexposure may depress the central nervous system, causing dizziness and intoxication.

Ingestion May cause internal injury. May cause nausea, headache, dizziness and intoxication. Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Skin contact Prolonged contact may cause dryness of the skin. Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Route of entry Inhalation Skin absorption Ingestion. Skin and/or eye contact

Medical symptoms Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

Medical considerations Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

SECTION 12: Ecological Information

Ecotoxicity The product contains a substance which has a photochemical ozone creation potential.

12.1. Toxicity

Acute toxicity - fish Not available.

Acute toxicity - aquatic invertebrates Not available.

12.2. Persistence and degradability

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Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility The product is miscible with water. May spread in water systems.

Adsorption/desorption coefficient Not available.

12.5. Results of PBT and vPvB assessment

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 Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not puncture or incinerate, even when empty.

Disposal methods Confirm disposal procedures with environmental engineer and local regulations. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion. Reuse or recycle products wherever possible.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1219

UN No. (IMDG) 1219

UN No. (ICAO) 1219

UN No. (ADN) 1219

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (IMDG) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (ICAO) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (ADN) ISOPROPANOL (ISOPROPYL ALCOHOL)

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

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IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ADN packing group II

ICAO packing group II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-E, S-D

ADR transport category 2

Emergency Action Code •2YE

Hazard Identification Number 33
(ADR/RID)

Tunnel restriction code (D/E)

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

Transport in bulk according to Not applicable.

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 EH40/2005 Workplace exposure limits

EU legislation 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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 19/05/2016

Revision 3

ANTI FOG/ANTI MIST

Supersedes date 24/10/2012

SDS status Approved.

Hazard statements in full

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.