Bird Brand

# MATERIAL SAFETY DATA SHEET

*15th February, 2017*

# ISOPROPANOL

## SECTION 1: IDENTIFICATION OF SUBSTANCE/MIXTURE/UNDERTAKING

### 1.1 Product identifier

| | |
|---|---|
| **Product name:** | ISOPROPANOL |
| **Product number:** | 1003 |
| **Synonyms; trade names** | PROPAN-2-OL, SECONDARY PROPANOL, SECONDARY PROPYL ALCOHOL, DIMETHYL CARBINOL, IPA |
| **REACH registration no** | 01-2119457558-25-XXXX |
| **CAS number** | 67-63-0 |
| **EU index number** | 603-117-00-0 |
| **EC number** | 200-661-7 |

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

| | |
|---|---|
| **Identified uses** | Manufacture of substance, Use as an intermediate Distribution of substance formulation & (re)packing of substances and mixtures, Uses in coatings, Uses in cleaning agents Lubricants Metal working fluids/rolling oils, Use as binders and release agents, Agrochemical use, Use as a fuel, Use as a functional fluid De-icing and anti-icing applications Laboratory agents Water treatment chemicals Other consumer uses. |
| **Uses advised against** | This product is not recommended for any industrial, professional or consumer uses other than those identified above. |

### 1.3 Details of the supplier of the safety data sheet

| | |
|---|---|
| **Supplier** | R.K.& J.Jones Ltd<br>Southery Road, Feltwell,<br>Thetford, Norfolk,<br>IP26 4EH. |
| **Tel** | 01842 828101 |
| **Contact person** | r.jones@birdbrand.co.uk |

### 1.4 Emergency telephone number

| | |
|---|---|
| **Emergency tel. number** | 01842 828101 |

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification**

| | |
|---|---|
| **Physical hazards** | Flam.Liq. 2 – H225 |
| **Health hazards** | Eye Irrit. 2 – H319 STOT SE 3 – H336 |

**Environmental hazards** Not classified Xi, R36, F;R11, R67

**Human health** Irritating to eyes. May cause serious eye damage. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. May cause sensitisation or allergic reactions in sensitive individuals. In high concentrations, vapours may be irritating to the respiratory system. In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. See Section 11 for additional information on health hazards.

**Environmental** Not considered as an environmental hazard according to CLP criteria

**Physicochemical** The product is highly flammable. 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.

**2.2 Label elements**

**EC number** 200-661-7

**Pictogram**

**Signal word** Danger

**Hazard statements**

**H225** Highly flammable liquid and vapour
**H319** Causes serious eye irritation
**H336** May cause drowsiness or dizziness

**Precautionary statements**

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
**P233** Keep container tightly closed.
**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
**P313** Get medical advice/attention
**P501** Dispose of contents/container in accordance with national regulations

**Supplementary precautionary statements**

**P240** Ground/bond container and receiving equipment
**P241** Use explosion proof electrical/ventilating/lighting/equipment
**P242** Use only non-sparking tools
**P243** Take precautionary measures against static discharge.
**P261** Avoid breathing dust/fume/gas/mist/vapours/spray
**P264** Wash thoroughly after handling
**P271** Use only outdoors or in a well-ventilated area
**P280** Wear protective gloves/protective clothing/eye protection/face protection.
**P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
**P304+P340** IF INHALED: Remove person to fresh air and keep Comfortable for breathing.
**P312** Call a POISON CENTRE/doctor if you feel unwell.
**P337** If eye irritation persists:
**P370+P378** In case of fire: Use…for extinction.
**P403+P233** Store in a well-ventilated place. Keep container tightly closed.

**P403+P235** Store in a well-ventilated place. Keep cool.
**P405** Store locked up.

**2.3 Other hazards** This product does not contain any substances classified as PBT or vPvB

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | |
|---|---|
| **Product name** | ISOPROPANOL |
| **REACH registration no.** | 01-2119457558-25-XXXX |
| **EU index number** | 603-117-00-0 |
| **CAS number** | 67-63-0 |
| **EC number** | 200-661-7 |

## SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures**

**General information** Keep affected person under observation. Effects may be delayed. If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

**Inhalation** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person under observation. Get medical attention if symptoms are severe or persist. Show this Safety Data Sheet to the medical personnel.

**Ingestion:** Get medical attention immediately. Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Keep affected person under observation. Show this Safety Data Sheet to the medical personnel.

**Skin Contact:** Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

**Eyes:** Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

**Protection of first aiders:** First aid personnel should wear appropriate protective equipment during any rescue.

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

**General information** Get medical attention immediately. The casualty should be transferred to hospital as soon as possible.

**Inhalation** Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Overexposure to organic solvents may depress the central nervous system causing dizziness and intoxication and, at very concentrations, unconsciousness and death.

**Ingestion** Gastrointestinal symptoms including upset stomach. Diarrhoea. Nausea, vomiting.

**Skin contact** Prolonged contact may cause redness, irritation and dry skin. Product has a defatting effect on skin.

**Eye contact** Causes serious eye irritation. Immediate first aid is imperative. Vapour or spray in the eyes may cause irritation and smarting.

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

**Notes for the doctor** No specific recommendations

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

## SECTION 5: FIRE FIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing Media** Do not use water jet as an extinguisher, as this will spread the fire. Non alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture**

Vapours are heavier than air and may travel along the floor and accumulate in the bottom of the containers. Solvent vapours may form explosive mixtures with air. May ignite at high temperature. Highly flammable liquid and vapour. Vapours may accumulate on the floor and in low lying areas. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours are heavier than air and may spread near ground and travel a considerate distance to a source of ignition and flash back. Vapours may be ignited by a spark, a hot surface or an ember.

**Hazardous combustion products**

Oxides of carbon. Acrid smoke or fumes.

**5.3 Advice for firefighters**

**Protective actions during firefighting**

Move containers from fire area if it can be done without risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Withdraw immediately in case of rising sound from venting safety device or any discolouration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Control run off water by containing and keeping it out of sewers and water courses. If risk of water pollution occurs, notify appropriate authorities.

**Special protective equipment for firefighters**

Wear positive pressure self-contained apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents. Use protective equipment appropriate for surrounding materials.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Take precautionary measures against static discharges. Take care as floors and other surfaces may become slippery**.** Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.

**6.2 Environmental precautions**

Environmental Manager must be informed of all major spillages. Do not discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

**6.3 Methods and material for containment and cleaning up**

**Methods for cleaning up** Stop leak if possible without risk. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid the spillage or runoff entering drains, sewers or watercourses. Take care as floors and other surfaces may become slippery. Contain spillage with sand, earth or other suitable non-combustible material. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Dispose of contents/container in accordance with international regulations. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

**6.4 Reference to other sections**

**Reference to other section** Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in Section 13.

## SECTION 7 : HANDLING AND STORAGE

**7.1 Precautions for safe handling**

**Usage precautions** Keep away from heat, sparks and open flame. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours and spray/mists. Avoid spilling. Avoid release to the environment. Use explosion-proof electrical, ventilating and lighting equipment. Use only in well-ventilated areas. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharge. Earth container and transfer equipment to eliminate sparks from static electricity. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge AVOID splash filling DO NOT use compressed air for filling, discharging or handling operations.

**Advice on general occupational hygiene**

Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Clean equipment and the work area every day. Contaminated clothing should be placed in a closed container for disposal or decontamination.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage precautions** Keep away from oxidising materials, heat and flames. Store in tightly-

closed, original container in a well-ventilated place. Bund storage facilities to prevent soil and water pollution in the event of spillage. Earth container and transfer equipment to eliminate sparks from static electricity. Storage tanks and other containers must be earthed. Keep away from food, drink and animal feeding stuffs. Only store in correctly labelled containers, Suitable container materials: Carbon Steel. Mild steel. Stainless steel. Unsuitable containers: aluminium. May attack some plastics, rubber and coatings.

**Storage class** Flammable liquid storage

**7.3 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**

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

**Ingredient comments**
WEL = Workplace Exposure Limits

DNEL
Industry-Dermal; Long term systemic effects: 888mg/kg/day
Industry-Inhalation; Long term systemic effects: 500 mg/m3
Consumer-Dermal; Long term systemic effects: 319 mg/kg/day
Consumer-Inhalation; Long term systemic effects: 89 mg/m3
Consumer-Oral; Long term systemic effects: 26 mg/kg/day

PNEC
Industry-Fresh water; Long term 140.9 mg/l
Industry-marine water; Long term 140.9 mg/l
Industry-Sediment (Freshwater); Long term 552 mg/kg
Industry-Sediment (Marinewater); Long term 552 mg/kg
Industry-Soil; Long term 28 mg/l

**8.2 Exposure controls**

**Protective equipment**

**Appropriate engineering controls**

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. Ensure the ventilation system is regularly maintained and tested. Use explosion proof electrical, ventilating and lighting equipment. This product must not be handled in a confined space without adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

**Eye/face protection** Wear eye protection. If risk of splashing, wear safety goggles or face

shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

**Hand protection**

Wear protective gloves. The selected gloves should have breakthrough time of at least 8 hours. It is recommended that gloves are made of the following material: Butyl rubber. Polyethylene. Viton rubber (fluoro rubber) For short-term/splash protection the following are recommended Neoprene. To protect hands from chemicals, gloves should comply with European Standard EN374. 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.

**Other skin and body protection**

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower.

**Hygiene measures**

Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Contaminated clothing should be placed in a closed container for disposal or decontamination.

**Respiratory protection**

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapour filter. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Gas and combination filter cartridges should comply with European Standard EN14387. Change filter cartridge on respirator daily. Check that the respirator fits tightly and the filter is changed regularly. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. When spraying, wear a suitable supplied-air respirator.

**Environmental exposure controls**

Keep container tightly sealed when not in use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | Liquid |
| **Colour** | Colourless |
| **Odour** | Alcoholic |
| **Melting point** | -89'C°C |
| **Initial boiling point/range** | 82'C°C@1013 hPa |
| **Flash point** | 12°C CC (Closed cup) |
| **Evaporation rate** | 1.5 BuAc=1 |
| **Upper/lower flammability or explosive limits** | Lower flammable/explosive limit: 2% V Upper flammable/explosive limit: 12 % V |
| **Vapour pressure** | 42 hPa @ 20°C 62 hPa @ 25°C |
| **Vapour density** | 2 |
| **Bulk density** | 785 kg/m³ @ 20'C |
| **Solubility(ies)** | Soluble in water. Miscible with the following materials: Organic solvents |
| **Partition coefficient** | log Pow: 0.05 |
| **Auto-ignition temperature** | 425°C |
| **Viscosity** | 2.5 mPa s@20°C 2.1 mPa s@25°C |

### 9.2 Other information

| | |
|---|---|
| **Refractive index** | 1.377 |
| **Molecular weight** | 60.09 |
| **Volatility** | 100% |
| **Saturation concentration** | 105 |

## SECTION 10 : STABILITY AND REACTIVITY

**10.1 Reactivity** The following materials may react with the product. Strong oxidising agents. Acids.

**10.2 Chemical stability**

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

**10.3 Possibility of hazardous reactions**

Reacts with strong oxidising agents, reacts with strong acids

**10.4 Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid heat. Avoid contact with the following materials: Strong oxidising agents. Avoid contact with acids.

**10.5 Incompatible materials**

**Materials to avoid** Strong oxidising agents. Strong acids. Alkali metals. Aluminium Amines.

**10.6 Hazardous decomposition products**

Oxides of carbon. Acrid smoke or fumes.

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

| | |
|---|---|
| **Acute toxicity – oral** | LD50 5,045 mg/kg, Oral, Rat |
| **Acute toxicity – dermal** | LD50 12,800 mg/kg, Dermal, Rabbit |
| **Acute toxicity – inhalation** | LC50>20mg/l/4hr/day, Inhalation, Rat |
| **Skin corrosion/irritation** | **Animal data:** Not classified as irritating to skin |
| **Serious eye damage/irritation** | Classified as irritating to eyes |
| **Respiratory sensitisation** | Not classified as a respiratory sensitiser |
| **Skin sensitisation** | Not classified as a skin sensitiser |
| **Germ cell mutagenicity** | |
| **Genotoxicity – in vitro** | Does not contain any substances known to be mutagenic |
| **Carcinogenicity** | Does not contain any substances known to be carcinogenic |
| **Reproductive toxicity** | **Fertility-**Based on available data the classification criteria are not met<br>**Development –** This substance has no evidence of toxicity to reproduction |
| **Specific target organ toxicity** | **Single exposure- STOT :** May cause drowsiness or dizziness |
| **Target organs** | Brain. Central nervous system |
| **Specific target organ toxicity** | **Repeated exposure STOT –**Based on available data the classification criteria are not met. |
| **Aspiration hazard** | Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. |
| **General information** | Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. |
| **Inhalation** | Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system. Overexposure may depress the central nervous system, causing dizziness and intoxication. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations. |
| **Ingestion** | May cause discomfort if swallowed. Gastrointestinal symptoms, including upset stomach. May cause nausea, headache, dizziness and intoxication. Diarrhoea. |

| | |
|---|---|
| **Skin Contact** | Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Product has a defatting effect on skin. May cause skin sensitisation or allergic reactions in sensitive individuals. |
| **Eye contact** | Causes serious eye irritation. Repeated exposure may cause chronic eye irritation. Risk of serious damage to eyes. |
| **Acute and chronic Health hazards** | Irritating to eyes |
| **Route of entry** | Inhalation Ingestion Skin and/or eye contact |
| **Target organs** | Central nervous system. Eyes. Gastro-intestinal tract. Skin |
| **Medical symptoms** | Central nervous system depression. Confusion, agitation and/or excitation. Gastrointestinal symptoms, including upset stomach. Diarrhoea. Dizziness. Intoxication. Nausea, vomiting. Irritation of eyes and mucous membranes. |
| **Medical considerations** | Central nervous system depression. Splash in eye requires examination by eye specialist. Persons with rash are directed to skin expert for examination of allergic eczema. |

## SECTION 12 : ECOLOGICAL INFORMATION

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|---|---|
| **Eco-toxicity** | The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment. |
| **12.1 Toxicity** | |
| **Acute toxicity – fish** | $LC_{50}$, 96 hours: 9640 mg/l, Pimephales promelas (Fat heat Minnow) |
| **– aquatic invertebrates** | $EC_{50}$, 24 hours>10000 mg/l, Daphnia magna |
| **– aquatic plants** | $EC_{50}$, 7 days: 1800 mg/l Selenastrum capricornutum |

**12.2 Persistence and degradability**

| | |
|---|---|
| **Persistence & degradability** | Readily biodegradable Oxidises rapidly by photochemical reactions in air. |
| **12.3 Bio-accumulative Potential** | Not expected to bio-accumulate significantly |
| **Partition coefficient** | log Pow: 0.05 |

**12.4 Mobility in soil**

| | |
|---|---|
| **Mobility** | The product is water soluble and may spread in water systems. Large volumes may penetrate soil and could contaminate groundwater if product enters soil it will be mobile and may contaminate groundwater. |
| **Surface tension** | 22.7 mN/m @ 20°C |

**12.5 Results of PBT and vPvB assessement**

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

**12.6 Other adverse effects**

The product contains a substance or substances that will contribute to global warming (greenhouse effect) Not expected to have ozone depletion potential.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**General information** Waste in classified as hazardous waste. Disposal to licensed waste Disposal site in accordance with the local Waste Disposal Authority. Contaminated packages must be completely emptied before sending away for laundering and re-use. When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal Methods** Collect and place in suitable waste disposal containers and seal securely. Empty containers or liners may retain some product residues and hence be potentially hazardous. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements. Confirm disposal procedures with environmental engineer and local regulations. Avoid the spillage or runoff entering drains, sewers or watercourses.

## 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 |
| **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 |
| **ICAO packing group** | II |
| **ADN 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 ident. Number (ADR/RID)** | 33 |
| **Tunnel restriction code** | **(D/E)** |

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

Ship type:3 Cat Z Special precautions: Refer to chapter 7, Handling and storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

## SECTION 15 : REGULATORY INFORMATION

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

| | |
|---|---|
| **National regulations** | Health and Safety at Work etc. Act 1974 (as amended) Control of Substances Hazardous to Health Regulations 2002 (as amended) Dangerous Substances and Explosive Atmospheres Regulations 2002. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"] |
| **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). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended) Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. |
| **Guidance** | Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. Safety Data Sheets for Substances and Preparations. |

**Authorisations (Title VII Regulation 1907/2006) –** No specific authorisations are known for this product

**Restrictions (Title VIII Regulation 1907/2006) –** No specific restrictions on use are known for this product.

**15.2 Chemical Safety assessment**

A chemical safety assessment has been carried out.

**Inventories**

| | |
|---|---|
| **EU – EINECS/ELINCS** | All the ingredients are listed or exempt |
| **Canada – DSL/NDSL** | All the ingredients are listed or exempt |
| **US-TCSA** | All the ingredients are listed or exempt |
| **US-TSCA 12(b) Export Notification –** | All the ingredients are listed or exempt |
| **Australia – AICS** | All the ingredients are listed or exempt |
| **Japan-MITI** | All the ingredients are listed or exempt |
| **Korea-KECI** | All the ingredients are listed or exempt |
| **China-IECSC** | All the ingredients are listed or exempt |

| | |
|---|---|
| **Philippines-PICCS** | All the ingredients are listed or exempt |
| **New Zealand-NZIOC** | All the ingredients are listed or exempt |

## SECTION 16 : OTHER HEALTH AND SAFETY INFORMATION

**Key literature references and sources for data**

Dangerous Properties of Industrial Materials Report, N. Sax et.al. ECHA

| | |
|---|---|
| **Revision date** | 15/02/2017 |
| **Revision** | 1 |
| **SDS status** | Approved |
| **Risk phrases in full** | R11 – Highly flammable<br>R36 – Irritating to eyes<br>R67 – Vapours may cause drowsiness and dizziness |
| **Hazard statements in full** | H225 – Highly flammable liquid and vapour<br>H319 – Causes serious eye irritation<br>H336 – May cause drowsiness or dizziness |

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