Report Date : 19/11/2012 Revision Date 24/10/2012 Revision 3 Supersedes date 28/03/2012



SAFETY DATA SHEET RAIN REPELLENT

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product nameRAIN REPELLENTProduct No.CRR250, RR250, BRA2501.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Supplier	TETROSYL LIMITED BEVIS GREEN WORKS WALMERSLEY BURY
	BL9 6RE
	0161 764 5981
	0161 797 5899
	info@tetrosyl.com
Manufacturer	TETROSYL LIMITED
	BEVIS GREEN WORKS
	WALMERSLEY
	BURY
	BL9 6RE
	0161 764 5981
	0161 797 5899
	info@tetrosyl.com

1.4. Emergency telephone number

0161 764 5981

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36. F;R11. R67.

2.2. Label elements

Labelling

Risk Phrases



Irritant



Highly flammable

	R11 R36	Highly flammable Irritating to eyes.
Cofety Dhreece	R67	Vapours may cause drowsiness and dizziness.
Safety Phrases	S2	Keep out of the reach of children.

S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S46	If swallowed, seek medical advice immediately and show this container or label.
S51	Use only in well-ventilated areas.
S56	Dispose of this material and its container to hazardous or special waste collection point.
S64	If swallowed, rinse mouth with water (only if the person is conscious).

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

IPA		60-100%
CAS-No.: 67-63-0	EC No.: 200-661-7	Registration Number: 01-2119457558-25-XXXX
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336		Classification (67/548/EEC) F;R11 Xi;R36 R67
SULPHURIC ACID%		<1%
CAS-No.: 7664-93-9	EC No.: 231-639-5	
Classification (EC 1272/2008) Skin Corr. 1A - H314		Classification (67/548/EEC) C;R35

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove affected person from source of contamination. NOTE! 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 the exposed person to fresh air at once. NOTE! Keep affected person away from heat, sparks and flames! Perform artificial respiration if breathing has stopped. Place unconscious person on the side in the recovery position and ensure breathing can take place.

Inhalation

Remove victim immediately from source of exposure. Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions. Place unconscious person on the side in the recovery position and ensure breathing can take place. Perform artificial respiration if breathing has stopped.

Ingestion

Get medical attention immediately! Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions. Do not give victim anything to drink if he is unconscious. NOTE! Keep affected person away from heat, sparks and flames! When risk of unconsciousness, place and transport the victim in secured side position.

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. Eve contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Do not rub eye. Get medical attention if any discomfort continues.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure. NOTE! 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. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use: Foam, carbon dioxide or dry powder. Water. Use fire-extinguishing media appropriate for surrounding materials.

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

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

HIGHLY FLAMMABLE! Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground to sources of ignition. May travel considerable distance to source of ignition and flash back. Specific hazards

Vapours may form explosive air mixtures even at room temperature. Vapours are heavier than air and may travel along the floor and in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember. **5.3. Advice for firefighters**

Special Fire Fighting Procedures

Avoid breathing fire vapours. Keep up-wind to avoid fumes. Be aware of risk of fire re-starting, and risk of explosion. Cool containers exposed to flames with water until well after the fire is out. Use water SPRAY only to cool containers! Do not put water on leaked material.

Protective equipment for fire-fighters

Leave danger zone immediately.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. In case of inadequate ventilation, use respiratory protection. Take precautionary measures against static discharges. Do not smoke, use open fire or other sources of ignition. Do not breathe vapour. Avoid contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Prevent entry into drains. Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

For waste disposal, see section 13. Stop leak if possible without risk. Collect with absorbent, non-combustible material into suitable containers. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Provide ventilation and confine spill. Do not allow runoff to sewer. Cover large spillages with alcohol-resistant foam.

6.4. 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

Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Risk of vapour concentration 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. Observe good chemical hygiene practices. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Mechanical ventilation or local exhaust ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

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

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

Name	STD	TWA	- 8 Hrs	STEL ·	- 15 Min	Notes
IPA	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	
SULPHURIC ACID%	WEL		0,05 mg/m3		-	

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash station.

Engineering measures

Provide explosion proof ventilation for high concentrations. Observe occupational exposure limits and minimize the risk of inhalation of vapours. All handling to take place in well-ventilated area.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Check that mask fits tight and change filter regularly. Use respiratory equipment with gas filter, type AX.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

Wear approved, tight fitting safety glasses where splashing is probable.

Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke. Isolate contaminated clothing and wash before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Colour Odour Solubility Initial boiling point and boiling range	Clear liquid. Yellow. Strong. Odour of alcohol. Miscible with water 82°C
Melting point (°C)	
Scientifically unjustified.	
Relative density	0.80 g/cm ³ 20°C
Vapour density (air=1)	
Scientifically unjustified.	
Vapour pressure	
Scientifically unjustified.	
Evaporation rate	
Scientifically unjustified.	
Viscosity	<50 cps 20°C
Decomposition temperature (°	C)
Scientifically unjustified.	

Odour Threshold, Lower Scientifically unjustified. Odour Threshold, Upper Scientifically unjustified. Flash point 12°C Auto Ignition Temperature (°C) Scientifically unjustified. Flammability Limit - Lower(%) Scientifically unjustified. Flammability Limit - Upper(%) Scientifically unjustified. Partition Coefficient (N-Octanol/Water) Scientifically unjustified. Oxidising properties Not available. 9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product may form explosive vapours/air mixtures even at normal room temperatures. **10.2. Chemical stability**

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not relevant 10.4. Conditions to avoid

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

Materials To Avoid Strong acids. Chemically active metals. Strong oxidising substances. <u>10.6. Hazardous decomposition products</u>

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50 4710-5500 (IPA) mg/kg (oral rat) Toxic Dose 2 - LD 50 6410 (IPA) mg/kg (oral-rbt) Toxic Conc. - LC 50 16000 (IPA) ppm/-- (ihl-rat) Toxicological information No information available.

General information

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

Inhalation

Vapours may irritate throat and respiratory system and cause headache, dizziness and dullness. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. Contains organic solvents which in case of 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 and may cause redness and pain. Spray and vapour in the eyes may cause irritation and smarting.

Health Warnings

This chemical can be hazardous when inhaled and/or touched. This chemical may cause skin/eye irritation and burns (corrosive). May cause severe internal injury. Vapour from this chemical can be hazardous when inhaled.

Route of entry

Inhalation. Ingestion. Skin and/or eye contact. Skin absorption.

Medical Symptoms

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

Medical Considerations

Risk of chemical pneumonia after aspiration.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l 4200-9640 (IPA) Acute Toxicity - Fish Not available. EC 50, 48 Hrs, Daphnia, mg/l 2285 (IPA) Acute Toxicity - Aquatic Invertebrates Not available. IC 50, 72 Hrs, Algae, mg/l 1000-18000 (IPA)

12.2. Persistence and degradability

Degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Scientifically unjustified.

12.4. Mobility in soil

Adsorption/Desorption Coefficient Not available.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

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

13.1. Waste treatment methods

Confirm disposal procedures with environmental engineer and local regulations. Make sure containers are empty before discarding (explosion risk). Empty containers must not be burned because of explosion hazard. Recover and reclaim or recycle, if practical.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1219
UN No. (IMDG)	1219
UN No. (ICAO)	1219

14.2. UN proper shipping name

Proper Shipping Name ISOPROPANOL (ISOPROPYL ALCOHOL)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3
Transport Labels	



14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	П
ICAO Packing group	П

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant No.

14.6. Special precautions for user

F-E, S-D
•2YE
33
(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

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	24/10/2012		
Revision	3		
Supersedes date	28/03/2012		
Safety Data Sheet Stat	us Approved.		
Risk Phrases In Full			
R35	Causes severe burns.		
R11	Highly flammable		
R36	Irritating to eyes.		
R67	Vapours may cause drowsiness and dizziness.		
Hazard Statements In Full			
H319	Causes serious eye irritation.		
H314	Causes severe skin burns and eye damage.		
H225	Highly flammable liquid and vapour.		
H336	May cause drowsiness or dizziness.		