TYGRIS TECHNICAL DATA SHEET

Precision Aerosols

Green Mould Protector

CODE: **IS70**

Spray on protection against moisture for moulds and metal tooling

An effective moisture repellent, formulated to provide an ultra-thin green film for protection from corrosion of moulds and tooling whilst in store.

Benefits:	Suitable for use on all metals
	De-watering capability
	Protects from oxidisation and rusting
	Ultra-fine film does not interfere with
	precision-fit parts or with gauging and
	measurement
	Green colour to show treated parts
	Resists creeping into ejector pins
	Moulds off quickly
Technical Data:	

film.

i echnical Data:

Appearance:

Odour: Contents:

Storage: Solubility: Flash Point: Temperature range: Specific Gravity: Pack Sizes: Directions for Use:

Dark green viscous liquid drying to a thin green coating Slightly sweet Blend of refined mineral oils, sarcosine and imidazoline surfactants, sulphonate modified hydrocarbon and paraffin waxes in white spirit and naphtha calcium sulfanate, methanol, dye hydrocarbon and propellants Below 50°C Insoluble in water <0°C Ambient temperatures 0.755 12 x 400ml cans Shake can well before use. Spray an even coating onto surface from 30cm. Do not over-apply. Leave to dry to an even, visible





1. Identification of the substance/mixture and of the company/undertaking

Trade name:	IS70 GREEN MOULD PROTECTOR
Article number:	IS70

Article number:

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

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: **Tygris Industrial**

Further information Technical Department obtainable from:

1.4 Emergency telephone Tel +44 (0) 1294 311 066 number:

2. Hazards identification

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R38. F+;R12. N;R51/53. R67.

2.2. Label elements

Labelling





Extremely flammable



Dangerous for the environment

Risk Phrases	R12 Extremely flammable. R38 Irritating to skin. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R67 Vapours may cause drowsiness and dizziness.
Safety Phrases	 S16 Keep away from sources of ignition - No smoking. S23 Do not breathe vapour/spray. S24 Avoid contact with skin. S60 This material and its container must be disposed of as hazardous waste. P14 Contains CALCIUM SULFONATE. May produce an allergic reaction. S2 Keep out of the reach of children. S51 Use only in well-ventilated areas.

2.3. Other hazards



3. Composition/information on ingredients

3.2. Mixtures

BUTANE	5-10%
CAS-No.: 106-97-8	EC No.: 203-448-7
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12
CALCIUM SULFONATE	< 1%
CAS-No.:	EC No.: 263-093-9
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xi;R36. R43,R53.
ISOBUTANE	1-5%
CAS-No.: 75-28-5	EC No.: 200-857-2
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12
MINERAL OIL (REFINED)	1-5%
CAS-No.: 64742-52-5	EC No.: 265-155-0
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.
NAPHTHA (PETROLEUM) , HYDROTREATED LIGHT	30-60%
CAS-No.: 64742-49-0	EC No.: 265-151-9
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. Xi;R38. F;R11. N;R51/53. R67.
n-OLEOYL SARCOSINE	< 1%
CAS-No.: 110-25-8	EC No.: 203-749-3
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xi;R38,R41. N;R50/53.
OLEYL HYDROXYETHYL IMIDAZOLINE	< 1%
CAS-No.: 95-38-5	EC No.: 202-414-9
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xn;R22. C;R34. N;R50/53.
PROPANE	10-30%
CAS-No.: 74-98-6	EC No.: 200-827-9
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12

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



4. First aid measures

4.1. Description of first aid measures

General information	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues
Inhalation	Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.
Ingestion	DO NOT INDUCE VOMITING! Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues.
Skin contact	Wash the skin immediately with soap and water. Get medical attention if any discomfort continues
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

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

5. Firefighting measures	3
5.1 Extinguishing Media	Use: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.
5.2 Unusual Fire & Explosion Hazards:	Aerosol cans may explode in a fire
5.3 Special Fire Fighting Procedures:	Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Let evaporate. Keep out of confined spaces because of explosion risk. If leakage cannot be stopped, evacuate area.

6.4. Reference to other sections



7. Handling and storage

7.1 Precautions for safe handling	Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.
7.2 Conditions for safe storage, including any incompatibilities	Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C
7.3. Specific end use(s)	

8. Exposure controls/personal protection

8.1. Control parameters

Name	STD	TWA	- 8 Hrs	STEL	- 15 Min
BUTANE	WEL	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3
ISOBUTANE	WEL	800 ppm		800 ppm	
MINERAL OIL (REFINED)			5 mg/m3		10 mg/m3
NAPHTHA (PETROLEUM) , HYDROTREATED LIGHT			1200 mg/m3	60 ppm	216 mg/m3
WHITE SPIRIT			600 mg/m3		

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective Equipment



Engineering measures:	Provide adequate general and local exhaust ventilation
Respiratory equipment	No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use chemical cartridge protection with appropriate cartridge
Hand protection	Use protective gloves
Eye protection	Use approved safety goggles or face shield
Other Protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke



9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol
Colour:	Typical
Odour:	Characteristic.
Flammability Limit - Lower(%)	0.8
Flammability Limit - Upper(%)	9.0
9.2. Other information	

10. Stability and	l reactivity
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10.1. ReactivityStable under normal temperature conditions10.2. Chemical stabilityStable under normal temperature conditions10.3. Possibility of hazardousreactions10.4. Conditions to avoidAvoid heat, flames and other sources of ignition. Avoid contact with: Strong
oxidising agents. Strong alkalis. Strong mineral acids.10.5. Incompatible materialsFire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide
(CO2).

11. Toxicological information

11.1. Information on toxicological effects

Inhalation	May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach.
Skin contact	Prolonged or repeated exposure may cause severe irritation. Acts as a defatting agent on skin. May cause cracking of skin, and eczema
Eye contact	Irritating to eyes. May cause chemical eye burns
Route of entry	Inhalation. Skin and/or eye contact



12. Ecological information

Ecotoxicity

Dangerous for the environment if discharged into watercourses.

- 12.1. Toxicity
- 12.2. Persistence and degradability
- 12.3. Bioaccumulative potential
- 12.4. Mobility in soil
- 12.5. Results of PBT and vPvB assessment
- 12.6. Other adverse effects

13. Disposal considerations

13.1. Waste treatment
methodsEmpty containers must not be burned because of explosion hazard. Dispose of
waste and residues in accordance with local authority requirements

14. Transport information		
14.1. UN number		
UN No. (ADR/RID/ADN)	1950	
UN No. (IMDG)	1950	
UN No. (ICAO)	1950	
14.2. UN proper shipping name		
Proper Shipping Name	AEROSOLS	
14.3. Transport hazard class(es)		
ADR/RID/ADN Class	2	
ADR/RID/ADN Class	Class 2: Gases	
ADR Label No.	2.1	
IMDG Class	2.1	
ICAO Class/Division	2.1	
14.4. Packing group		
ADR/RID/ADN Packing group	N/A	
IMDG Packing group	N/A	
ICAO Packing group	N/A	
14.5. Environmental hazards	Environmentally Hazardous Substance/Marine Pollutant No.	
14.6. Special precautions for user		
EMS	F-D, S-U	
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		

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15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture		
UK Regulatory References	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. The Control of Substances Hazardous to Health Regulations 2002	
Statutory Instruments	The Control of Substances Hazardous to Health Regulations 2002. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002	
Approved Code Of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply	
Guidance Notes	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).	

16. Other information

Risk Phrases In Full	 R34 Causes burns. R12 Extremely flammable. R10 Flammable. R22 Harmful if swallowed. R65 Harmful: may cause lung damage if swallowed. R11 Highly flammable R36 Irritating to eyes. R38 Irritating to skin. R53 May cause long-term adverse effects in the aquatic environment. R43 May cause sensitisation by skin contact. R66 Repeated exposure may cause skin dryness or cracking. R41 Risk of serious damage to eyes. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R67 Vapours may cause drowsiness and dizziness. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard Statements In Full	EUH066 Repeated exposure may cause skin dryness or cracking. H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.

