

## MRO 1009 – 123 DL

### Section 1: Product & Company Identification

**Product Name / Trade Name**  
MRO 1011 – 123 DL

**Product Use**  
Dry film lubricant

**Manufacturers / Suppliers Information**  
MRO INFRA LLP, VADODARA, INDIA

**Pack Type / Size(s)**  
500 ml Aerosol

**Emergency Telephone Number** (91) 9586789992

**Fax Number**

**Website**

www.mroinfra.com

Revision Date 18<sup>th</sup> October 2018

Revision Number 1

### Section 2: Composition / Information On Ingredients

Component	CAS Number	Percent By Weight
Trade secret mixture of ingredients	NA	Trade secret
Trade secret solvents blend	NA	Trade secret
Hydrocarbon propellant	68476-85-7	20-70

### Section 3: Hazards Identification

#### Emergency Overview

**Warning:** Danger. Extremely Flammable. Contents Under Pressure. May Cause Skin Irritation. Harmful Or Fatal If Swallowed. Do not use on energized equipment.

#### Potential Health Effects

**Eyes** Irritation to eyes including burning and redness.

**Skin** Repeated or prolonged contact may produce defatting of the skin leading to irritation, dermatitis or dryness.

**Ingestion** May result in gastrointestinal irritation, vomiting, nausea, abdominal discomfort or diarrhea.

**Inhalation** Small quantities may cause mild irritation to the respiratory tract. Repeated and prolonged exposure may cause irritation to the respiratory tract, headaches, nausea, dizziness.

### Section 4: First Aid Measures

**Eyes** Flush with large amounts of water for 15 minutes. Obtain medical attention if soreness or redness persists.

**Skin** Remove contaminated clothing. Clean contaminated area by washing thoroughly with soap and water. Obtain medical attention if irritation persists.

**Ingestion** Do not induce vomiting if a large amount is ingested. If vomiting occurs naturally, lean victim forward to minimize risk of asphyxiation. Never give anything by mouth to an unconscious person. Call a physician.

**Inhalation** Remove person to fresh air immediately. Give artificial respiration if necessary. If there is difficulty in breathing, obtain medical attention immediately.

## Section 5: Fire Fighting Measures

<b>Flash Point (°C)</b>	TCC Closed Cup: <-17°C (0°F) aerosol
<b>Extinguishing Media</b>	Carbon dioxide, dry chemical powder, foam, water spray or fog
<b>Products of Combustion</b>	Carbon monoxide and carbon dioxide
<b>Explosion Hazards</b>	Up on exposure to high heat from fire, aerosol containers may explode.
<b>Protective Measures For Fire Fighters</b>	Firefighters must wear protective gear for body, eyes and wear self contained breathing apparatus for protection from suffocation arising due to lack of oxygen and to protect from possible hazardous decomposition products. Use water to cool fire exposed containers to prevent pressure build up and from exploding.

## Section 6: Accidental Release Measures

<b>Containment Procedures -Spill / Leak Clean Up</b>	Try to contain and recover spilled product. Area should be ventilated with fresh air. Absorbent should be used to pick up by using earth, sand or other inert material. Transfer into suitable waste containers for disposal. In case of confined areas with limited air ventilation / circulation, use proper protective wear during cleanup.
<b>Environmental Precautions</b>	Try to prevent the material from entering drains or water body. Do not flush into drains or water bodies.
<b>Personal Precautions</b>	Refer to Section 8

## Section 7: Handling & Storage

<b>Handling</b>	Avoid contact with skin and eyes. Do not breathe vapors or mists. Use with well ventilation. Wear protective equipment during handling. Wash thoroughly after handling. Do not spray into or around energized surfaces or sources of ignition. Read instructions on label.
<b>Storage</b>	Store in a cool, dry area. Store away from strong oxidizing agents or combustible material. Aerosol cans must be stored below 50°C to prevent from exploding.

## Section 8: Exposure Controls / Personal Protection

<b>Engineering Control Measures</b>	Adequate to prevent accumulation of vapors. Use mechanical means if necessary to maintain levels below the exposure limits.
<b>Eyes &amp; Face Protection</b>	Avoid eye contact. Wear chemical safety glasses / eye wear / goggles.
<b>Hand Protection</b>	Under normal circumstance, not required. Use as needed to prevent prolonged or repeated contact. Protective gloves made from nitrile, neoprene or n-butyl rubber are suitable.
<b>Respiratory Protection</b>	Use respirators or self-contained breathing apparatus in confined areas and for emergencies. If good ventilation is maintained, none are required.
<b>Skin Protection</b>	Use protective body gear in the event of prolonged or repeated exposure. Wash hands with soap and water after use and before breaks, lunch and at the end of work periods.

## Section 9: Physical & Chemical Properties

<b>Appearance</b>	Liquid	<b>Odor</b>	Characteristic solvent
<b>Color</b>	Black	<b>Boiling Point</b>	+61°C
<b>Specific Gravity (g/cm<sup>3</sup>)</b>	0.80-0.90	<b>Freezing Point</b>	ND
<b>Flash Point , TCC</b>	<-17°C aerosol	<b>Vapor Density (air = 1)</b>	~3
<b>Vapor Pressure</b>	350 mmHg (38°C)	<b>Decomposition Temperature</b>	ND
<b>Flammability Limits - Lower %</b>	0.6	<b>Evaporation Rate (ethyl ether = 1)</b>	<1
<b>- Upper %</b>	7	<b>Auto Ignition Temperature</b>	+300°C
<b>Viscosity (at 25°C), cSt</b>	ND	<b>pH</b>	NA
<b>Solubility In Water %</b>	Negligible		
TCC = Tag Closed Cup		ND = Not determined      NA = Not applicable	

## Section 10: Chemical Stability & Reactivity

<b>Stability</b>	Stable under normal conditions
<b>Conditions To Avoid</b>	Keep away from heat and sources of ignition
<b>Chemical Incompatibility</b>	Strong oxidizing agents, alkalis and acids

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**Hazardous Decomposition** Carbon monoxide and carbon dioxide; metal oxides

**Hazardous Polymerization** No

## Section 11: Toxicological Information

Acute toxicity of this product has not been conducted

## Section 12: Ecological Information

Ecological studies have not been conducted for this product.

**Mobility** Product is semi volatile / gaseous state and may partly be absorbed into soil. It will float partially if released into water

**Persistence / Degradability** Slightly / partially biodegradable

**Bioaccumulation** Not expected to bioaccumulate

## Section 13: Disposal Considerations

**Product Disposal** This material if discarded may be hazardous waste. Empty aerosol cans thoroughly before discarding as waste. All disposal activities must meet governing, state and local regulations. Do not dump into sewers, on the ground or into water.

**Packaging Disposal** Dispose of in accordance with local regulations.

## Section 14: Transportation Information

### Road / Rail Transport

<b>UN Number</b>	1950	<b>Class</b>	2
<b>Packing Group</b>	NA	<b>Classification Code</b>	5F
<b>Name &amp; Description</b>	Aerosols, Flammable	<b>Hazard ID Number</b>	NA
<b>Labeling</b>	2.1		

### Sea Transport (IMDG)

<b>UN Number</b>	1950	<b>Class</b>	2
<b>Shipping Name</b>	Aerosols	<b>Subsidiary Risk</b>	2.1
<b>Packing Instructions</b>	NA	<b>Packing Group</b>	NA
<b>Marine Pollutant</b>	No	<b>EmS</b>	F-D, S-U

### Air Transport (IATA)

<b>UN Number</b>	1950	<b>Class</b>	2.1
<b>Shipping Name</b>	Aerosols, Flammable	<b>Subclass</b>	NA
<b>Packing Group</b>	NA	<b>Packing Instructions</b>	203, Y203 (Ltd.Qty.)
<b>Labeling</b>	Flammable gas		

## Section 15: Regulatory Information

Does not contain any ingredients or any listed substance as per Standard For Uniform Scheduling Of drugs & Poisons

## Section 16: Other Information

None

To the best of our knowledge, the information contained herein is accurate. This MSDS, therefore, forms a component only of a risk assessment carried out by, or on behalf of, the user. It is not intended to constitute performance information concerning the product. No express warranty or implied warranty of merchant ability or fitness for a particular purpose is made with respect to the product

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**Product Use** For Industrial Use Only

**Prepared By**

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