Safety Data Sheet

Document group:	23-9311-4	**Version number:**	1.08
Issue Date:	12/01/2021	**Supersedes date:**	17/12/2020

This Safety Data Sheet has been prepared in accordance with the GHS guidelines & India Hazardous substances (Classification, Labeling & Packaging) Draft Rules 2011.

SECTION 1: Identification

1.1. Product identifier
Air Conditioner Cleaner Foam

Product Identification Numbers
IS-2601-0036-4 IS-2601-0041-4

1.2. Recommended use and restrictions on use

Recommended use
A/C Cleaner.

1.3. Supplier's details

Address:	3M India Limited, plot-48-51, Electronic city, Hosur road, Bangalore-560100
Telephone:	080-45543000, contact Product EHS team
E Mail:	productehs.in@mmm.com
Website:	http://solutions.3mindia.co.in

1.4. Emergency telephone number
080-45543000 (Contact hours: 8:00 AM to 5:00 PM)

SECTION 2: Hazard identification

Under MSIHC Rules, information is noted below on flammability, acute toxicity and explosivity relevant to this product. In line with international standards, information on other hazard classes and associated precautionary statements relevant to this product are included as well.

2.1. Classification of the substance or mixture
Flammable Aerosol: Category 1.
Acute Toxicity (inhalation): Category 5.
Skin Corrosion/Irritation: Category 3.
Skin Sensitizer: Category 1.
Specific Target Organ Toxicity (single exposure): Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.

2.2. Label elements
Signal Word

DANGER!

Symbols
Flame |Exclamation mark | Health Hazard |

Pictograms

HAZARD STATEMENTS:

H222	Extremely flammable aerosol.
H229	Pressurised container. may burst if heated.
H333	May be harmful if inhaled.
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H370	Causes damage to organs: cardiovascular system

PRECAUTIONARY STATEMENTS

General:

P102	Keep out of reach of children.
P103	Read label before use.
P101	If medical advice is needed, have product container or label at hand.

Prevention:

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280E	Wear protective gloves.

Response:

P304 + P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P308 + P311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.

Storage:

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.
P405	Store locked up.

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Other hazards
Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Water	7732-18-5	40 - 60
Petroleum gases, liquefied	68476-85-7	25 - 50
Terpenes and terpenoids, sweet orange oil	68647-72-3	5 - 30
Emulsifier	None	1 - 10

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Remove person to fresh air. Get medical attention.

Skin contact
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact
Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If swallowed
Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed
No critical symptoms or effects. See Section 11.1, information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: Fire-fighting measures

5.1. Suitable Extinguishing media
Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.

5.3. Special protective actions for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and

could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Do not use in a confined area with minimal air exchange. Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep container tightly closed. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Petroleum gases, liquefied	68476-85-7	ACGIH	Limit value not established:	asphyxiant

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Indirect vented goggles.

Skin/hand protection
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.
Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates
Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Aerosol
Color	Milky White
Odor	Typical Orange
Odour threshold	*No data available.*
pH	7 - 8
Melting point/Freezing point: NA	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	*No data available.*
Flash point	10 ºC
Evaporation rate	*No data available.*
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapor Density and/or Relative Vapor Density	*No data available.*
Density	*No data available.*
Relative density	0.9 - 1
Water solubility	Complete
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Autoignition temperature	*No data available.*

Decomposition temperature	*No data available.*
Viscosity/Kinematic Viscosity	6 - 9 mm^2/sec
Volatile organic compounds (VOC)	
Percent volatile	
VOC less H2O & exempt solvents	

Nanoparticles
This material does not contain nanoparticles.

SECTION 10: Stability and reactivity

10.1 Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability
Stable.

10.3 Possibility of hazardous reactions
Hazardous polymerisation will not occur.

10.4 Conditions to avoid
Temperatures above the boiling point.
Sparks and/or flames.

10.5 Incompatible materials
Amines.
Strong acids.
Strong bases.
Strong oxidising agents.
Water

10.6 Hazardous decomposition products

Substance	**Condition**
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation
May be harmful if inhaled. Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal.

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact
Sprayed material may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Additional Health Effects:

Single exposure may cause target organ effects:
Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness. Cardiac sensitisation: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Toxicological Data
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Petroleum gases, liquefied	Inhalation-Gas (4 hours)	Rat	LC50 227,000 ppm
Terpenes and terpenoids, sweet orange oil	Inhalation-Vapor (4 hours)	Mouse	LC50 > 3.14 mg/l
Terpenes and terpenoids, sweet orange oil	Dermal	Rabbit	LD50 > 5,000 mg/kg
Terpenes and terpenoids, sweet orange oil	Ingestion	Rat	LD50 4,400 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Petroleum gases, liquefied	Professional judgement	No significant irritation
Terpenes and terpenoids, sweet orange oil	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Petroleum gases, liquefied	Professional judgement	No significant irritation
Terpenes and terpenoids, sweet orange oil	Rabbit	Mild irritant

Sensitization:

Skin Sensitisation

Name	Species	Value
Terpenes and terpenoids, sweet orange oil	Mouse	Sensitising

Respiratory Sensitisation

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Petroleum gases, liquefied	In Vitro	Not mutagenic
Terpenes and terpenoids, sweet orange oil	In Vitro	Not mutagenic
Terpenes and terpenoids, sweet orange oil	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Terpenes and terpenoids, sweet orange oil	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Terpenes and terpenoids, sweet orange oil	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	premating & during gestation
Terpenes and terpenoids, sweet orange oil	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Petroleum gases, liquefied	Inhalation	cardiac sensitization	Causes damage to organs	similar compounds	NOAEL Not available	
Petroleum gases, liquefied	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Petroleum gases, liquefied	Inhalation	respiratory irritation	Not classified		NOAEL Not available	
Terpenes and terpenoids, sweet orange oil	Ingestion	nervous system	Not classified		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Petroleum gases, liquefied	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL Not available	
Terpenes and terpenoids, sweet orange oil	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
Terpenes and terpenoids, sweet orange oil	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Terpenes and terpenoids, sweet orange oil	Ingestion	heart | endocrine system | bone, teeth, nails, and/or hair |	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks

		hematopoietic system | immune system | muscles | nervous system | respiratory system				

Aspiration Hazard

Name	Value
Terpenes and terpenoids, sweet orange oil	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:
Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:
Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Petroleum gases, liquefied	68476-85-7		Data not available or insufficient for classification			N/A
Terpenes and terpenoids, sweet orange oil	68647-72-3		Data not available or insufficient for classification			N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Petroleum gases, liquefied	68476-85-7	Estimated Photolysis		Photolytic half-life (in air)	21.4 days (t 1/2)	Non-standard method
Terpenes and terpenoids, sweet orange oil	68647-72-3	Data not available-insufficient			N/A	

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Petroleum gases, liquefied	68476-85-7	Estimated Bioconcentrati		Log Kow	2.8	Non-standard method

		on				
Terpenes and terpenoids, sweet orange oil	68647-72-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other Adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

Air Transport (IATA)Regulations

UN No UN1950
Proper Shipping Name AEROSOLS, FLAMMABLE (Contains Propellant)
Hazard Classs/Division 2.1
Subsidiary Risk Not applicable
Packing Group: Not applicable

Marine Transport (IMDG)
UN No UN1950
Proper Shipping Name AEROSOLS, FLAMMABLE (Contains Propellant)
Hazard Classs/Division 2.1
Subsidiary Risk Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

SECTION 15: Regulatory information

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

Global inventory status
Contact 3M for more information.

Applicable Environmental, Health and Safety Regulations
The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989
Hazardous Waste(Management , Handling & Transboundary) Rules, 2008
Hazardous Chemicals (Classification, Packaging and Labelling Draft Rules), 2011
Central Motor Vehicle Rules, 1989

The following ingredients are listed as hazardous on Part II of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules
Petroleum gases, liquefied

The following ingredients are classified as hazardous based on the criteria listed under Part I of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules:
Product is classified as Extremely Flammable (Aerosol).

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 **Flammability:** 4 **Instability:** 1 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision information:
Section 04: Information on toxicological effects information was deleted.
Section 9: Flash point information information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M India SDSs are available at http://solutions.3mindia.co.in