

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

## Section 1 –Identification: Product identifier and chemical identity

### •1.1 Product identifier

•Trade name: PU FOAM

### •1.2 Relevant identified uses of the substance or mixture and uses advised against application of the substance / the mixture Lacquer

General Purpose AEROSOL for insulation and sealing.

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

Manufacturer/Supplier:

ARISTO INDUSTRIES CORP. LTD.

XIAOXIANG INDUSTRIAL AREA, KUI SHU STR., WANJIANG, DONGGUAN, GUANGDONG, CHINA

Tele-Nr. (++86)- 755-22214189

Fax-Nr. (++86)- 755-22214186

### •1.4 Emergency telephone number: +86-755-22214189

## Section 2 –Hazard identification

### •2.1 Classification of the substance or mixture

#### •Classification according to Regulation (EC) No 487/2013



GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.

Flam. Aerosol 1 H229: Pressurised container: May burst if heated



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

#### •Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

#### •Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### •2.2 Label elements

#### •Labeling according to Regulation (EC) No 487/2013

The product is classified and labeled according to the CLP regulation.

#### •Hazard pictograms



GHS02 GHS07

#### •Signal word Danger

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

## •Hazard-determining components of labeling:

No Data Available

## •Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

## •Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 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..

P264 Wash hand thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 If swallowed: Call a poison center or doctor/physician if you feel unwell.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents / container in accordance with regional regulations.

## •Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

## •2.3 Other hazards

## •Results of PBT and vPvB assessment

•PBT: Not applicable.

•vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

| INGREDIENTS    | Annex VI Index Number | CAS NO INDEX | ENIECS    | Classification                                         | WT(%) |
|----------------|-----------------------|--------------|-----------|--------------------------------------------------------|-------|
| Dimethyl Ether | 603-019-00-8          | 115-10-6     | 204-065-8 | Flam. Gas 1:H220                                       | 5~10  |
| MDI            | N/A                   | 9016-87-9    | 618-498-9 | Skin Irrit.2: H315; Eye Irrit. 2:H319; STOT SE 3: H335 | 40~50 |
| Polyol         | N/A                   | 9003-11-6    | 618-355-0 | Skin Irrit.2: H315; Eye Irrit. 2:H319;                 | 30~40 |
| Butane         | 601-004-00-0          | 106-97-8     | 203-448-7 | Flam. Gas 1:H220                                       | 5~8   |
| Propane        | 601-003-00-5          | 74-98-6      | 200-827-9 | Flam. Gas 1:H220                                       | 3~6   |

## • Additional information:

For the wording of the listed risk phrases refer to section 16.

## Section 4 – First aid measures

### •4.1 Description of first aid measures

### • General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

hours after the accident.

- **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

## Section 5 - Fire-fighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:**

Water spray (large fires only), foam, dry chemical or carbon dioxide.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

- **5.3 Advice for firefighters -**

- **Protective equipment:** Mouth respiratory protective device.

## Section 6 - Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

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

Do not flush with water or aqueous cleansing agents

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## Section 7 - Handling and Storages

- **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

## · 7.2 Conditions for safe storage, including any incompatibilities

### · Storage:

#### · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packaging with pressurized containers.

#### · Information about storage in one common storage facility: Not required.

#### · Further information about storage conditions:

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

#### · Storage class: 2B

## · 7.3 Specific end use(s) No further relevant information available.

## Section 8 - Exposure controls and personal protection

### · 8.1 Control parameters

| · Ingredients with limit values that require monitoring at the workplace: |                                                           |
|---------------------------------------------------------------------------|-----------------------------------------------------------|
| Dimethyl Ether (CAS#115-10-6)                                             | TWA: 760 mg/m <sup>3</sup><br>STEL: 950 mg/m <sup>3</sup> |

### · 8.2 Exposure controls

#### · Personal protective equipment:

#### · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

#### · Respiratory protection:

Not necessary if room is well-ventilated.

Otherwise, filter class A / P2 or self contained.

#### · Protection of hands:

Protective gloves

Solvent resistant gloves

In case of contact with spray dust protective gloves made of butyl should be used (min. 0.4 mm thick), e.g.

KCL Camatril, article no. 898 or similar products

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves Butyl rubber, BR

#### · Penetration time of glove material

No information

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

## Section 9 - Physical and chemical properties

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Appearance:                                   | Viscous liquid                                                     |
| Odour:                                        | Solvent                                                            |
| Odour threshold:                              | Not determined                                                     |
| pH:                                           | Not determined                                                     |
| Self-igniting                                 | Product is not self-igniting.                                      |
| Melting point/freezing point:                 | <-20°C                                                             |
| Boiling point:                                | >60°C                                                              |
| Flash point:                                  | Not determined                                                     |
| Evaporation rate:                             | Not determined                                                     |
| Flammability (solid, gas):                    | Flammable                                                          |
| Upper/lower flammability or explosive limits: | Not determined                                                     |
| Vapour pressure:                              | Not determined                                                     |
| Vapour density:                               | Not determined                                                     |
| Foam density:                                 | 20g/cm <sup>3</sup>                                                |
| Solubility:                                   | Not water soluble. Re-dispersible in aromatic solvents or ketones. |
| Auto-ignition temperature:                    | Not determined                                                     |
| Decomposition temperature:                    | Not determined                                                     |
| Viscosity:                                    | Not determined                                                     |
| Explosive properties:                         | Not determined                                                     |
| Oxidising properties:                         | Not determined                                                     |
| Partition coefficient (n-octanol/water)       | Not determined                                                     |
| Thermo conductivity                           | 0.031w(m.k) at 35C                                                 |
| Dimension Stability:                          | 3% at 23°C±2 °C, 48h                                               |
| Shear strength:                               | 172kpa                                                             |
| Foam expansion:                               | 51 times                                                           |
| Elongation at break:                          | 8-20%                                                              |
| Cutting time:                                 | 60min                                                              |
| Closed Cells:                                 | 60-70%                                                             |
| Water absorption:                             | 0.03% volume                                                       |
| Storage life:                                 | 10-12months at 20C                                                 |

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

## Section 10 - Stability and reactivity

- **10.1 Reactivity:** Stable under recommended storage and handling conditions.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## Section 11 - Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity:**

| • LD/LC50 values relevant for classification: |        |       |
|-----------------------------------------------|--------|-------|
| <b>115-10-6 Dimethyl Ether</b>                |        |       |
| Oral                                          | LD50   | 8700  |
| Dermal                                        | LD50   | >2000 |
| Inhalative                                    | LC50/4 | h     |

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful, Irritant, Vapours have narcotic effect.

## Section 12 - Ecological information

- **12.1 Toxicity**

| <b>Ingredient:</b> | <b>Persistence - Water/Soil:</b> | <b>Persistence – Air:</b> | <b>Bioaccumulation:</b> | <b>Mobility:</b> |
|--------------------|----------------------------------|---------------------------|-------------------------|------------------|
| Dimethyl Ether     | Low                              | No Data Available         | Low                     | High             |

- **12.2 Persistence and degradability**

### **DIMETHYL ETHER**

Water solubility (g/l): 35300

log Kow (Sangster 1997): 0.1

Most ethers are very resistant to hydrolysis, and the rate of cleavage of the carbon-oxygen bond by abiotic processes is expected to be insignificant. Direct photolysis will not be an important removal process since aliphatic ethers do not absorb light at wavelengths >290 nm. DO NOT discharge into sewer or waterways.

log Kow: 0.1-0.12

Koc: 14

Half-life (hr) air: 528

Half-life (hr) H2O surface water: 2.6-30

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

Henry's atm m<sup>3</sup> /mol: 9.78E-04

BCF: 1.7

processes Abiotic: RxnOH\*

## • 12.3 Bioaccumulative potential

DIMETHYL ETHER:

Bioaccumulation: not significant

## • 12.4 Mobility in soil Very slow

## • Additional ecological information:

### • General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

## • 12.5 Results of PBT and vPvB assessment

• PBT: Not applicable.

• vPvB: Not applicable.

## • 12.6 Other adverse effects No further relevant information available.

## Section 13 - Disposal considerations

### • 13.1 Waste treatment methods

#### • Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

| • European waste catalogue |                                                                                                                           |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 08 01 11*                  | waste paint and varnish containing organic solvents or other dangerous substances                                         |
| 15 01 04                   | metallic packaging                                                                                                        |
| 15 01 11*                  | metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers |

#### • Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

## Section 14 - Transport information

|                                                                                                                                                         |                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| • 14.1 UN-Number<br>• ADR, IMDG, IATA                                                                                                                   | UN1950                      |
| • 14.2 UN proper shipping name<br>• ADR<br>• IMDG                                                                                                       | UN1950 AEROSOLS<br>AEROSOLS |
| • IATA                                                                                                                                                  | AEROSOLS, flammable         |
| • 14.3 Transport hazard class(es)<br>• ADR<br><br>• Class<br>• Label | 2 5F Gases.<br>2.1          |

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

|                                                                                                                                                                                                                                       |                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <br>• IMDG, IATA                                                                                                                                     |                                                                                                                            |
| • Class<br>• Label                                                                                                                                                                                                                    | 2.1<br>2.1                                                                                                                 |
| • 14.4 Packing group<br>• ADR, IMDG, IATA                                                                                                                                                                                             | Void                                                                                                                       |
| • 14.5 Environmental hazards:<br>• Marine pollutant:                                                                                                                                                                                  | No                                                                                                                         |
| • 14.6 Special precautions for user<br>• Danger code (Kemler): -<br>• EMS Number:                                                                                                                                                     | Warning: Gases.<br>-<br>F-D,S-U                                                                                            |
| • 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code                                                                                                                                                        | Not applicable.                                                                                                            |
| • Transport/Additional information:<br>• ADR<br>• Limited quantities (LQ)<br>• Excepted quantities (EQ)<br><br>• Transport category<br>• Tunnel restriction code<br>• IMDG<br>• Limited quantities (LQ)<br>• Excepted quantities (EQ) | 1L<br>Code: E0<br>Not permitted as Excepted Quantity<br>2<br>D<br><br>1L<br>Code: E0<br>Not permitted as Excepted Quantity |
| • UN "Model Regulation":                                                                                                                                                                                                              | UN1950, AEROSOLS, 2.1                                                                                                      |

## Section 15 - Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture .**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## Section 16 - Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### • Relevant phrases

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 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.

# Safety Data Sheet (SDS)

According to NO. 487/2013/EC

Printing Date: 18.08.2016

Version Number 6

Revision date: 16/12/2021

P251 Do not pierce or burn, even after use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray..

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 If swallowed: Call a poison center or doctor/physician if you feel unwell.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents / container in accordance with regional regulations.

• **Contact:** Dipl.-Chem. G. Heller oder Dipl.-Ing. U. Voetter

• **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the

International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Eye Irrit. 2: Eye corrosion/irritation, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

STOT RE 3: Specific target organ toxicity - Repeated exposure, Hazard Category 3