

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

1.1 Product identifier:

320200201 Aster THD SAE 20W

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

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Dyade Lubricants B.V. Typograaf 16 6921 VB Duiven - The Netherlands Phone.: 0031316745745 info@dyade-lubricants.com http://www.dyade-lubricants.com

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

The product is not classified as hazardous according to CLP Regulation (EC) No 1272/2008.

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Hazard statements:

Non-applicable

Precautionary statements:

Non-applicable

Supplementary information:

Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts. May produce an allergic reaction Safety data sheet available on request

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture based on hydrocarbons and additives

Components:

None of the substances contained in the mixture are above the values fixed in Annex II of Regulation (EC) No 1907/2006

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Consult a doctor in case of discomfort showing the SDS for the product.

By inhalation:

In case of symptoms, move the person affected into fresh air.

By skin contact:



SECTION 4: FIRST AID MEASURES (continued)

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety data Sheet

By eye contact:

Rinse with water until the product has been eliminated. In case of problems, consult a doctor showing the SDS for the product.

By ingestion/aspiration:

In case of consumption in large quantities, it is recommended to seek medical assistance.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable, with a low risk of fire due to the flammabliity characteristics of the product in normal conditions of storage, handling and use. In the case of the existence of sustained combustion as a result of improper handling, storage or use any type of extinguishing agent can be used (ABC Powder, water,...)

5.2 Special hazards arising from the substance or mixture:

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.



SECTION 7: HANDLING AND STORAGE (continued)

B.- Technical recommendations for the prevention of fires and explosions

It is recommended to transfer at a slow speed to avoid the creation of electrostatic charges that could affect flammable products. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

- D.- Technical recommendations to prevent environmental risks
- It is not necessary to take special measures to prevent environmental risks. For more information see subsection 6.2

7.2 Conditions for safe storage, including any incompatibilities:

- A.- Technical measures for storage
- Maximum time: 60 Months
- B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

There are no occupational exposure limits for the substances contained in the product

DNEL (Workers):

Non-applicable

DNEL (General population):

Non-applicable

PNEC:

Non-applicable

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|------------------------------|---------------------------------------|-----------|--------------|---|
| Mandatory hand protection | Protective gloves against minor risks | CATI | | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+ A1:2009 and EN ISO 374-1:2016 |

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection



| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---|--|---------------------------------|--|
| Mandatory face protection | Panoramic glasses against splash/projections. | | EN 166:2001 EN ISO 4007:2018 | Clean daily and disinfect periodically according the manufacturer's instructions. Use if there is risk of splashing. |
| E Body protection | | | | |
| Pictogram | PPE | Labelling | CEN Standard | Remarks |
| | Work clothing | CATI | | Replace before any evidence of deterioration. F periods of prolonged exposure to the product fo professional/industrial users CE III is recommended, in accordance with the regulatio in EN ISO 6529:2013, EN ISO 6530:2005, EN IS 13688:2013, EN 464:1994. |
| | Anti-slip work shoes | CAT II | EN ISO 20347:2012 | Replace before any evidence of deterioration. F periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulatio in EN ISO 20345:2012 y EN 13832-1:2007 |
| F Additional emer | gency measures | | | - |
| It is not necessa | ary to take additional emer | gency measures | 5. | |
| Environmental expo | osure controls: | | | |
| spillage of both the Volatile organic cor | product and its container. npounds: | For additional ir | formation see subsectio | recommended to avoid environmental n 7.1.D |
| - | ctive 2010/75/EU, this proc | | owing characteristics: | |
| V.O.C. (Supply): 0 % weight | | | | |
| | | | | |
| V.O.C. density a | - | m³ (0 g/L) | | |
| | n number: Non- | m³ (0 g/L) applicable applicable | | |

| Appearance: | | |
|---|---|--|
| Physical state at 20 °C: | Liquid | |
| Appearance: | Oily | |
| Colour: | Amber | |
| Odour: | Characteristic | |
| Odour threshold: | Non-applicable * | |
| Volatility: | | |
| Boiling point at atmospheric pressure: | Non-applicable * | |
| Vapour pressure at 15 °C: | Non-applicable * | |
| Vapour pressure at 50 °C: | <300000 Pa (300 kPa) | |
| Evaporation rate at 15 °C: | Non-applicable * | |
| Product description: | | |
| Density at 15 °C: | 880 kg/m³ | |
| Relative density at 15 °C: | Non-applicable * | |
| Dynamic viscosity at 15 °C: | Non-applicable * | |
| *Not relevant due to the nature of the product, not providing | ng information property of its hazards. | |
| | | |



| CTION 9: PHYSICAL AND CHEMICAL | PROPERTIES (continued) |
|--|--------------------------------|
| Kinematic viscosity at 15 °C: | Non-applicable * |
| Kinematic viscosity at 40 °C: | 54 cSt |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 15 °C: | Non-applicable * |
| Partition coefficient n-octanol/water 15 °C: | Non-applicable * |
| Solubility in water at 15 °C: | Non-applicable * |
| Solubility properties: | Slightly soluble in cold water |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |
| Flammability: | |
| Flash Point: | 220 °C |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | Non-applicable * |
| Lower flammability limit: | Non-applicable * |
| Upper flammability limit: | Non-applicable * |
| Explosive: | |
| Lower explosive limit: | Non-applicable * |
| Upper explosive limit: | Non-applicable * |
| Other information: | |
| Surface tension at 15 °C: | Non-applicable * |
| Refraction index: | Non-applicable * |

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|--------------------|------------------|-------------------------|----------------|----------------|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

10.5 Incompatible materials:

| Acids | Water | Oxidising materials | Combustible materials | Others |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Not applicable | Not applicable | Avoid alkalis or strong bases |

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.



SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

LD50 oral > 2000 mg/kg (rat)

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met
- B- Inhalation (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Based on available data, the classification criteria are not met
 - Contact with the eyes: Based on available data, the classification criteria are not met
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met IARC: Non-applicable
 - Mutagenicity: Based on available data, the classification criteria are not met
 - Reproductive toxicity: Based on available data, the classification criteria are not met
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met
 - Cutaneous: Based on available data, the classification criteria are not met
- F- Specific target organ toxicity (STOT) single exposure:

Based on available data, the classification criteria are not met

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met
 - Skin: Based on available data, the classification criteria are not met
- H- Aspiration hazard:

Based on available data, the classification criteria are not met

Other information:

Non-applicable

Specific toxicology information on the substances:

Not available

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

| 12.1 | Toxicity: |
|------|-----------|
|------|-----------|

Not available

12.2 Persistence and degradability:

Not available

- 12.3 Bioaccumulative potential: Not available
- 12.4 Mobility in soil:
 - Not available



SECTION 12: ECOLOGICAL INFORMATION (continued)

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|----------|--|---|
| 16 05 09 | discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08 | Non dangerous |

Type of waste (Regulation (EU) No 1357/2014):

Non-applicable

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

| 5.1 | Safety, health and environmental regulations/legislation specific for the substance or mixture: |
|------|---|
| | Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable |
| | Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable |
| | Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable |
| | Article 95, REGULATION (EU) No 528/2012: Non-applicable |
| | REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable |
| | Seveso III: |
| | Non-applicable |
| | Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc): |
| | Non-applicable |
| | Specific provisions in terms of protecting people or the environment: |
| | It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product. |
| | |
| | The product could be affected by sectorial legislation |
| 15.2 | Chemical safety assessment: |
| | The supplier has not carried out evaluation of chemical safety. |



| egislation related to safet | y data sheets: |
|--|--|
| This safety data sheet has | been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of |
| Regulation (EC) No 1907/2 | 2006 (Regulation (EC) No 2015/830) |
| Modifications related to the | previous Safety Data Sheet which concerns the ways of managing risks.: |
| Non-applicable | |
| Texts of the legislative phra | ases mentioned in section 3: |
| The phrases indicated do r ndividual components whi | not refer to the product itself; they are present merely for informative purposes and refer to the ch appear in section 3 |
| CLP Regulation (EC) No 1 | 272/2008: |
| Non-applicable | |
| Classification procedure: | |
| Non-applicable | |
| Advice related to training: | |
| v | ended in order to prevent industrial risks for staff using this product and to facilitate their retation of this safety data sheet, as well as the label on the product. |
| Principal bibliographical so | |
| http://echa.europa.eu | |
| nttp://eur-lex.europa.eu | |
| Abbreviations and acronyn | 1S.' |
| ADR: European agreemen | t concerning the international carriage of dangerous goods by road |
| MDG: International maritin | ne dangerous goods code |
| ATA: International Air Trai | |
| CAO: International Civil Av | viation Organisation |
| COD: Chemical Oxygen D | emand |
| BOD5: 5-day biochemical | oxygen demand |
| BCF: Bioconcentration fact | or |
| D50: Lethal Dose 50 | |
| C50: Lethal Concentration | n 50 |
| EC50: Effective concentrat | ion 50 |
| _og-POW: Octanol-water p | partition coefficient |
| Koc: Partition coefficient of | organic carbon |

Product safety information sheet prepared in accordance with Article 32 of Regulation (EC) 1907/2006 (REACH); this document does not constitute a Safety Data Sheet under Article 31 of Regulation (EC) No. 1907/2006, as a Safety Data Sheet is not mandatory for this product

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.