



## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 1: IDENTIFICATION

**1.1 GHS Product identifier:** UNITED SILVER ARROW OCTANE BOOSTER

**Other means of identification:**

Non-applicable

**1.2 Recommended use of the chemical and restrictions on use:**

Relevant uses: Gasoline additive

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

**1.3 Manufacturer's or supplier's details:**

UNITED OIL COMPANY PTE LTD  
14 Tuas Drive 2, Singapore 638647  
638647 Singapore - Singapore - Singapore  
Phone.: +65 6861 1157 - Fax: +65 6861 3101  
enquiry@united-oil.com  
<http://www.united-oil.com/default.aspx?uc=14>

**1.4 Emergency phone number:** +65 68611157

### SECTION 2: HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture:**

**SS 586:Part 2:2014:**

Classification of this product has been carried out in accordance with SS 586 : Part 2 : 2014

Asp. Tox. 1: Aspiration hazard, Category 1, H304

Flam. Liq. 4: Flammable liquids, Category 4, H227

**2.2 GHS label elements, including precautionary statements:**

**SS 586:Part 2:2014:**

**Danger**



**Hazard statements:**

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

Flam. Liq. 4: H227 - Combustible liquid.

**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.

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

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P370+P378: In case of fire: Use ABC powder extinguisher to put it out.

P403: Store in a well-ventilated place.

P501: Dispose of contents and / or their container according to the separated collection system used in your municipality.

**Substances that contribute to the classification**

Distillates (petroleum), hydrotreated light (60 °C < fp < 93 °C)

**2.3 Other hazards which do not result in classification:**

Non-applicable

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances:**

Non-applicable

**3.2 Mixtures:**

**Chemical description:** Mixture based on hydrocarbons and additives

**Components:**

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## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

In accordance with SS 586:Part 3:2008 (2014), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 64742-47-8	<b>Distillates (petroleum), hydrotreated light (60 °C &lt; fp &lt; 93 °C)</b> Asp. Tox. 1: H304; Flam. Liq. 4: H227 - Danger	75 - <100 %
CAS: 64742-95-6	<b>Hydrocarbons, C9, aromatics</b> Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT SE 3: H335; STOT SE 3: H336 - Danger	2.5 - <10 %
CAS: Non-applicable	<b>Alkaryl polyether</b> Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	1 - <2.5 %
CAS: 95-63-6	<b>1,2,4-trimethylbenzene</b> Acute Tox. 4: H332; Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335 - Warning	1 - <2.5 %

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

### SECTION 4: FIRST-AID MEASURES

#### 4.1 Description of necessary first-aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

##### By inhalation:

This product is not classified as hazardous through inhalation, however, it is recommended in case of intoxication symptoms to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

##### By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or shower the person affected if necessary thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

##### By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

##### By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

#### 4.2 Most important symptoms/effects, acute and delayed:

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

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Non-applicable

### SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1 Suitable extinguishing media:

##### Suitable extinguishing media:

Combustible liquid. If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>).

##### Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

#### 5.2 Specific hazards arising from the chemical:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

#### 5.3 Special protective actions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

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## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 5: FIRE-FIGHTING MEASURES (continued)

#### **Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

#### **6.2 Environmental precautions:**

Avoid spillage into the aquatic environment as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into the aquatic environment notify the relevant authority.

#### **6.3 Methods and materials 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.

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid splashes and pulverizations. 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 recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

#### **7.2 Conditions for safe storage, including any incompatibilities:**

##### **A.- Technical measures for storage**

Minimum Temp.: 5 °C  
Maximum Temp.: 30 °C  
Maximum time: 6 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.

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## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters/Occupational exposure limits:

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

Workplace Safety and Health (General Provisions) Regulations:

Identification	Occupational exposure limits		
1,2,4-trimethylbenzene CAS: 95-63-6	PEL (Long Term)	25 ppm	123 mg/m <sup>3</sup>
	PEL (Short Term)		
Mesitylene CAS: 108-67-8	PEL (Long Term)	25 ppm	123 mg/m <sup>3</sup>
	PEL (Short Term)		
2-ethylhexanol CAS: 104-76-7	PEL (Long Term)	50 ppm	266 mg/m <sup>3</sup>
	PEL (Short Term)		
1,2,3-trimethylbenzene CAS: 526-73-8	PEL (Long Term)	25 ppm	123 mg/m <sup>3</sup>
	PEL (Short Term)		
Cumene CAS: 98-82-8	PEL (Long Term)	50 ppm	246 mg/m <sup>3</sup>
	PEL (Short Term)		
Naphthalene CAS: 91-20-3	PEL (Long Term)	10 ppm	52 mg/m <sup>3</sup>
	PEL (Short Term)	15 ppm	79 mg/m <sup>3</sup>

#### 8.2 Appropriate engineering control measures:

A.- Individual protection measures, such as personal protective equipment (PPE)


As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection 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	Remarks
 Mandatory hand protection	Protective gloves against minor risks	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using chemical protection gloves

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

D.- Ocular and facial protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration.
	Anti-slip work shoes	Replace before any evidence of deterioration.



F.- Additional emergency measures

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## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

#### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Not available
Color:	Not available
Odor:	Not available
Odour threshold:	Non-applicable *

##### Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 40 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
Evaporation rate at 40 °C:	Non-applicable *

##### Product description:

Density at 40 °C:	784.4 kg/m <sup>3</sup>
Relative density at 40 °C:	0.784
Dynamic viscosity at 40 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 40 °C:	Non-applicable *
Partition coefficient n-octanol/water 40 °C:	Non-applicable *
Solubility in water at 40 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

##### Flammability:

Flash Point:	~80 °C
Heat of combustion:	Non-applicable *
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

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## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

**Explosive:**

Lower explosive limit: Non-applicable \*

Upper explosive limit: Non-applicable \*

**9.2 Other information:**

Surface tension at 40 °C: Non-applicable \*

Refraction index: Non-applicable \*

\*Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: STABILITY AND REACTIVITY

**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	Risk of combustion	Avoid direct impact	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	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 (CO<sub>2</sub>), carbon monoxide and other organic compounds.

### SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects:**

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

**Dangerous health implications:**

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

**A- Ingestion (acute effect):**

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

**B- Inhalation (acute effect):**

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.

**C- Contact with the skin and the eyes (acute effect):**

- Contact with the skin: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

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## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

#### D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.  
IARC: Hydrocarbons, C9, aromatics (3); Cumene (2B); Hydrocarbons, C10-C13, aromatics, < 1% naphthalene (3); Naphthalene (2B); Distillates (petroleum), hydrotreated light (60 °C < fp < 93 °C) (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

#### E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

#### F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.

#### 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, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

#### H- Aspiration hazard:

The consumption of a considerable dose can cause pulmonary damage.

#### Other information:

Non-applicable

#### Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Hydrocarbons, C9, aromatics CAS: 64742-95-6	LD50 oral	>5000 mg/kg	
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
1,2,4-trimethylbenzene CAS: 95-63-6	LD50 oral	3400 mg/kg	Rat
	LD50 dermal	3160 mg/kg	Rabbit
	LC50 inhalation	11 mg/L (4 h)	Rat
Alkaryl polyether CAS: Non-applicable	LD50 oral	>5000 mg/kg	
	LD50 dermal	2120 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Distillates (petroleum), hydrotreated light (60 °C < fp < 93 °C) CAS: 64742-47-8	LD50 oral	>5000 mg/kg	
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	

#### Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	>5000 mg/kg (Calculation method)	Non-applicable
Dermal	>5000 mg/kg (Calculation method)	Non-applicable
Inhalation	889.65 mg/L (4 h) (Calculation method)	0 %

### SECTION 12: ECOLOGICAL INFORMATION

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

#### 12.1 Toxicity:

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**UNITED SILVER ARROW OCTANE BOOSTER**

**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Identification	Acute toxicity		Species	Genus
Hydrocarbons, C9, aromatics CAS: 64742-95-6	LC50	>1 - 10 mg/L (96 h)		Fish
	EC50	>1 - 10 mg/L (48 h)		Crustacean
	EC50	>1 - 10 mg/L (72 h)		Algae
Alkaryl polyether CAS: Non-applicable	LC50	>1 - 10 mg/L (96 h)		Fish
	EC50	>1 - 10 mg/L (48 h)		Crustacean
	EC50	>1 - 10 mg/L (72 h)		Algae
1,2,4-trimethylbenzene CAS: 95-63-6	LC50	7.72 mg/L (96 h)	Pimephales promelas	Fish
	EC50	6.14 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

**12.2 Persistence and degradability:**

Identification	Degradability		Biodegradability	
1,2,4-trimethylbenzene CAS: 95-63-6	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	18 %

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
1,2,4-trimethylbenzene CAS: 95-63-6	BCF	154
	Pow Log	3.78
	Potential	High

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
1,2,4-trimethylbenzene CAS: 95-63-6	Koc	537	Henry	624.16 Pa·m <sup>3</sup> /mol
	Conclusion	Low	Dry soil	Yes
	Surface tension	2.919E-2 N/m (25 °C)	Moist soil	Yes

**12.5 Results of PBT and vPvB assessment:**

Non-applicable

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Disposal methods:**

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations. 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 epigraph 6.2.

**Regulations related to waste management:**

Legislation related to waste management:

Environmental Public Health (Toxic Industrial Waste) Regulations.  
Hazardous Waste (Control of Export, Import and Transit) Act.

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to SS 586-1 (2014):

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## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 14: TRANSPORT INFORMATION (continued)

- |   |                |
|---|----------------|
| <b>14.1 UN number:</b>  | Non-applicable |
| <b>14.2 UN proper shipping name:</b>  | Non-applicable |
| <b>14.3 Transport hazard class(es):</b>   | Non-applicable |
| Labels:   | Non-applicable |
| <b>14.4 Packing group, if applicable:</b>   | Non-applicable |
| <b>14.5 Environmental hazard:</b>   | No             |
| <b>14.6 Special precautions for user</b>  |                |
| Physico-Chemical properties:  | see section 9  |
| <b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:</b> | Non-applicable |

#### Transport of dangerous goods by sea:

With regard to IMDG 39-18:

- |   |                |
|---|----------------|
| <b>14.1 UN number:</b>  | Non-applicable |
| <b>14.2 UN proper shipping name:</b>  | Non-applicable |
| <b>14.3 Transport hazard class(es):</b>   | Non-applicable |
| Labels:   | Non-applicable |
| <b>14.4 Packing group, if applicable:</b>   | Non-applicable |
| <b>14.5 Marine pollutant:</b>   | No             |
| <b>14.6 Special precautions for user</b>  |                |
| Special regulations:  | Non-applicable |
| EmS Codes:  |                |
| Physico-Chemical properties:  | see section 9  |
| Limited quantities:   | Non-applicable |
| Segregation group:  | Non-applicable |
| <b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:</b> | Non-applicable |

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2021:

- |   |                |
|---|----------------|
| <b>14.1 UN number:</b>  | Non-applicable |
| <b>14.2 UN proper shipping name:</b>  | Non-applicable |
| <b>14.3 Transport hazard class(es):</b>   | Non-applicable |
| Labels:   | Non-applicable |
| <b>14.4 Packing group, if applicable:</b>   | Non-applicable |
| <b>14.5 Environmental hazard:</b>   | No             |
| <b>14.6 Special precautions for user</b>  |                |
| Physico-Chemical properties:  | see section 9  |
| <b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:</b> | Non-applicable |

### SECTION 15: REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations specific for the product in question:

##### Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

##### Other legislation:

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## UNITED SILVER ARROW OCTANE BOOSTER

### SECTION 15: REGULATORY INFORMATION (continued)

Environmental Protection and Management (Hazardous Substances) Regulations.  
Environmental Protection and Management Act.  
Environmental Public Health Act.  
Fire Safety Act.  
Workplace Safety and Health Act.  
Workplace Safety and Health (General Provisions) Regulations.

### SECTION 16: OTHER INFORMATION

#### Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with SS 586:Part 3:2008 (2014) - Specification for hazard communication for hazardous chemicals and dangerous goods - Part 3 : Preparation of safety data sheets (SDS).

#### Texts of the legislative phrases mentioned in section 2:

H304: May be fatal if swallowed and enters airways.

H227: Combustible liquid.

#### Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

#### SS 586:Part 2:2014:

Acute Tox. 4: H332 - Harmful if inhaled.

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Flam. Liq. 3: H226 - Flammable liquid and vapour.

Flam. Liq. 4: H227 - Combustible liquid.

Skin Irrit. 2: H315 - Causes skin irritation.

STOT SE 3: H335 - May cause respiratory irritation.

STOT SE 3: H336 - May cause drowsiness or dizziness.

#### Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

#### Principal bibliographical sources:

<http://www.nea.gov.sg>

#### Abbreviations and acronyms:

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

CL50: Lethal Concentration 50

EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient

Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, 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.

END OF SAFETY DATA SHEET