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## Section 1: Chemical Product and Company Identification

**Product Name** : **Micro Crystalline Wax**

**Company Identification** : 4 Silicon Road,  
Mariann Industrial Park,  
Pinetown,  
4147

**Health Emergency Telephone** : 10111

**Contact Info** : info@jagpetroleum.co.za

**JAG Website** : www.jagpetroleum.com

## Section 2: Composition and Information on Ingredients

Classification of the substance or mixture

Classification

Physical hazards : Flam. Sol. 1 - H228  
Health hazards : Elicitation - EUH208 STOT RE 1 - H372  
Environmental hazards : Aquatic Chronic 2 - H411  
Classification (67/548/EEC or 1999/45/EC) : F; R11. T; R48/23/24/25. N; R51/53. R66

Pictogram



**Signal word** : **Danger**

**Hazard statements** : H228 Flammable solid.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.  
EUH208 Contains Pine, Pinus sylvestris, ext.. May produce an allergic reaction.

**Precautionary statements** : P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P264 Wash contaminated skin thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P314 Get medical advice/attention if you feel unwell.  
P501 Dispose of contents/container in accordance with national regulations.

**Supplemental label Information** : EUH066 Repeated exposure may cause skin dryness or cracking.

Contains : Naphtha (petroleum), hydro desulfurized heavy <0.1%benzene.

Supplementary precautionary Statements : P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical equipment.  
P260 Do not breathe vapour/spray.  
P270 Do not eat, drink or smoke when using this product.  
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.  
P391 Collect spillage.

Other hazards  
This product does not contain any substances classified as PBT or vPvB.

### Section 3: Hazards Identification

Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene CAS number: 64742-82-1	50 - 100%
Classification Flam. Liq. 3 - H226 STOT RE 1 - H372 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) T; R48/23/24/25. Xn; R65. N; R51/53. R10, R66
Pine, Pinus sylvestris, ext. CAS number: 8023-99-2 M factor (Acute) = 1	0.5 - <1%
Classification Flam. Liq. 3 - H226 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) Xn; R65. N; R50/53. R10, R43

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### Section 4: First Aid Measures

General information : Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation : Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

Ingestion : Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.

Skin contact : Remove contamination with soap and water or recognised skin cleansing agent. In the event of any sensitisation symptoms developing, ensure further exposure is avoided. Get medical attention if symptoms are severe or persist after washing.

Eye contact : Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.

Protection of first aiders : First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information	:	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	:	Upper respiratory irritation.
Ingestion	:	May cause discomfort if swallowed.
Skin contact	:	May cause skin sensitisation or allergic reactions in sensitive individuals. Repeated exposure may cause skin dryness or cracking.
Eye contact	:	May be slightly irritating to eyes.
Notes for the doctor	:	Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.

### Section 5: Fire-Fighting Measures

Suitable extinguishing media	:	The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing Media	:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	:	Flammable solid. Fire-water run-off in sewers may create fire or explosion hazard.
Hazardous combustion Products	:	Hydrocarbons. Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).
Protective actions during Firefighting	:	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	:	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

### Section 6: Accidental Release Measures

Personal precautions	:	Evacuate area. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Promptly remove any clothing that becomes contaminated.
Environmental precautions	:	Insoluble in water. Avoid discharge into drains or watercourses or onto the ground.
Methods for cleaning up	:	Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Wear protective clothing as described in Section 8 of this safety data sheet. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Do not empty into drains. For

waste disposal, see Section 13. Wash thoroughly after dealing with a spillage.

Reference to other sections : For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## Section 7: Handling and Storage

Usage precautions : Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Do not handle broken packages without protective equipment. Keep container tightly sealed when not in use. Avoid discharge to the aquatic environment. Do not reuse empty containers.

Advice on general occupational hygiene : Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

Storage precautions : Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Keep away from oxidising materials, heat and flames. Alkalis. Acids. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep containers upright. Protect containers from damage.

Storage class : Flammable solid storage.

## Section 8: Exposure Controls/Personal Protection

Control parameters  
Ingredient comments : No exposure limits known for ingredient(s).  
Exposure controls  
Protective equipment



Appropriate engineering Controls : Provide adequate ventilation.

Eye/face protection : Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Wear chemical splash goggles.

Hand protection : Wear protective gloves made of the following material: Nitrile rubber. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body Protection : May cause skin sensitisation or allergic reactions in sensitive individuals. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

Respiratory protection	:	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapour filter.
Environmental exposure Controls	:	Keep container tightly sealed when not in use. Avoid release to the environment.

### Section 9: Physical and Chemical Properties

Appearance	:	Wax.
Colour	:	Orange.
Odour	:	Solvent.
Odour threshold	:	Not available.
pH	:	Not available.
Melting point	:	Not available.
Initial boiling point and range	:	150°C
Flash point	:	37°C CC (Closed cup).
Evaporation rate	:	Not available.
Upper/lower flammability or explosive limits	:	Lower flammable/explosive limit: 1.4% Upper flammable/explosive limit: 8%
Vapour pressure	:	Not available.
Vapour density	:	>1
Relative density	:	0.85
Solubility(ies)	:	Insoluble in water.
Partition coefficient	:	Not available.
Auto-ignition temperature	:	>230°C
Decomposition Temperature	:	Not available.
Viscosity	:	Not applicable.
Explosive properties	:	Not considered to be explosive.
Oxidising properties	:	Does not meet the criteria for classification as oxidising.
Volatile organic compound	:	This product contains a maximum VOC content of 600 g/l.

### Section 10: Stability and Reactivity Data

Reactivity	:	See the other subsections of this section for further details.
Stability used	:	Stable at normal ambient temperatures and when as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous Reactions	:	The following materials may react strongly with the product: Oxidising agents.
Conditions to avoid	:	Avoid heat, flames and other sources of ignition. Static electricity and formation of sparks must be prevented.
Materials to avoid	:	Oxidising materials. Strong alkalis. Strong acids.
Hazardous decomposition Products	:	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances:
Harmful	:	gases or vapours.

### Section 11: Toxicological Information

Acute toxicity – oral Notes (oral LD <sub>50</sub> )	:	Based on available data the classification criteria are not met.
Acute toxicity – dermal Notes (dermal LD <sub>50</sub> )	:	Based on available data the classification criteria are not met.

Acute toxicity – inhalation Notes (inhalation LC <sub>50</sub> )	:	Based on available data the classification criteria are not met.
Skin corrosion/irritation Animal data	:	Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation Serious eye damage/irritation	:	Based on available data the classification criteria are not met.
Respiratory sensitisation Respiratory sensitisation	:	Based on available data the classification criteria are not met.
Skin sensitisation Skin sensitisation	:	May cause skin sensitisation or allergic reactions in sensitive individuals.
Genotoxicity - in vitro	:	Based on available data the classification criteria are not met.
Carcinogenicity	:	Based on available data the classification criteria are not met.
IARC carcinogenicity	:	None of the ingredients are listed or exempt.
Reproductive toxicity - fertility	:	Based on available data the classification criteria are not met.
Reproductive toxicity - Development	:	Based on available data the classification criteria are not met.
Specific target organ toxicity - single exposure STOT - single exposure	:	Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxicity - repeated exposure STOT - repeated exposure	:	STOT RE 1 - H372 Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	:	Not relevant. Solid.
General information	:	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	:	Upper respiratory irritation.
Ingestion	:	May cause discomfort if swallowed.
Skin contact	:	May cause skin sensitisation or allergic reactions in sensitive individuals. Repeated exposure may cause skin dryness or cracking.
Eye contact	:	May be slightly irritating to eyes.
Route of entry	:	Ingestion Inhalation Skin and/or eye contact
Target organs	:	No specific target organs known.
Medical considerations	:	Skin disorders and allergies.

Toxicological information on ingredients.

Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene

Acute toxicity – oral Notes (oral LD <sub>50</sub> )	:	LD <sub>50</sub> >5000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
Acute toxicity – dermal Notes (dermal LD <sub>50</sub> )	:	LD <sub>50</sub> >2000 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
Acute toxicity – inhalation Notes (inhalation LC <sub>50</sub> )	:	LD <sub>50</sub> >5610 mg/m <sup>3</sup> , Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation		
Animal data	:	Repeated exposure may cause skin dryness or cracking.
Skin sensitisation	:	Buehler test - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vitro	:	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	:	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - Fertility	:	Two-generation study - NOAEC >20000 mg/m <sup>3</sup> , Inhalation, Rat P, F1 REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - Development	:	Fetotoxicity: , Maternal toxicity: - NOAEL: 23900 mg/m <sup>3</sup> , Inhalation, Rat REACH dossier information. Based on available data the classification criteria are Not met.
Specific target organ toxicity - repeated exposure		
STOT - repeated exposure	:	STOT RE 1 - H372 Causes damage to organs through prolonged or repeated exposure.
Target organs	:	Central nervous system.
Aspiration hazard	:	Aspiration hazard if swallowed.

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

Ecological information on ingredients.

Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene

Toxicity	:	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.
Acute toxicity - fish	:	LL <sub>50</sub> , 96 hours: 8.2 mg/l, Pimephales promelas (Fat-head Minnow).
Acute toxicity – aquatic Invertebrates	:	EL <sub>50</sub> , 48 hours: 4.5 mg/l, Daphnia magna
Acute toxicity – aquatic Plants	:	EL <sub>50</sub> , 72 hours: 3.1 mg/l, Selenastrum capricornutum
Chronic toxicity - fish early life stage	:	NOELR, 14 days: 2.6 mg/l, Pimephales promelas (Fat-head Minnow).
Chronic toxicity – aquatic Invertebrates	:	NOELR, 21 days: 2.6 mg/l, Daphnia magna
Persistence and degradability	:	The degradability of the product is not known.
Persistence and Degradability	:	The product is readily biodegradable.
Biodegradation	:	Water - Degradation 77%: 28 days.
Bioaccumulative potential	:	No data available on bioaccumulation.
Partition coefficient	:	Not available.

Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene

Bioaccumulative potential BCF: 10-2500, Estimated value.

Mobility	:	The product is insoluble in water. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.
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Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene

Mobility	:	The product is insoluble in water.
Adsorption/desorption Coefficient	:	Soil - log Koc: 1.78-2.36 @ 25°C Estimated value.

## Section 12: Ecological Information

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

Ecological information on ingredients.

Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene

Toxicity	:	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.
Acute toxicity - fish	:	LL <sub>50</sub> , 96 hours: 8.2 mg/l, Pimephales promelas (Fat-head Minnow).
Acute toxicity – aquatic Invertebrates	:	EL <sub>50</sub> , 48 hours: 4.5 mg/l, Daphnia magna
Acute toxicity – aquatic Plants	:	EL <sub>50</sub> , 72 hours: 3.1 mg/l, Selenastrum capricornutum
Chronic toxicity - fish early life stage	:	NOELR, 14 days: 2.6 mg/l, Pimephales promelas (Fat-head Minnow).
Chronic toxicity – aquatic Invertebrates	:	NOELR, 21 days: 2.6 mg/l, Daphnia magna
Persistence and degradability	:	The degradability of the product is not known.
Persistence and Degradability	:	The product is readily biodegradable.
Biodegradation	:	Water - Degradation 77%: 28 days.
Bioaccumulative potential	:	No data available on bioaccumulation.
Partition coefficient	:	Not available.

Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene

Bioaccumulative potential BCF: 10-2500, Estimated value.		
Mobility	:	The product is insoluble in water. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene

Mobility	:	The product is insoluble in water.
Adsorption/desorption	:	Soil - log K <sub>oc</sub> : 1.78-2.36 @ 25°C Estimated value

Results of PBT and vPvB assessment

Results of PBT and vPvB Assessment	:	This product does not contain any substances classified as PBT or vPvB.
Other adverse effects	:	None known.

## Section 13: Disposable Considerations

Waste treatment methods

General information	:	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	:	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.



## Section 14: Transport Information

General	:	For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.
UN number		
UN No. (ADR/RID)	:	3175.
UN No. (IMDG)	:	3175.
UN No. (ICAO)	:	3175.
UN No. (ADN)	:	3175.
UN proper shipping name		
Proper shipping name	:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (CONTAINS Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene, Pine, Pinus sylvestris, ext.) (ADR/RID).
Proper shipping name	:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (CONTAINS Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene, Pine, Pinus sylvestris, ext.) (IMDG).
Proper shipping name (ICAO)	:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (CONTAINS Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene, Pine, Pinus sylvestris, ext.).
Proper shipping name (ADN)	:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (CONTAINS Naphtha (petroleum), hydrodesulfurized heavy <0.1%benzene, Pine, Pinus sylvestris, ext.).
Transport hazard class(es)		
ADR/RID class	:	4.1
ADR/RID classification code	:	F1
ADR/RID label	:	4.1
IMDG class	:	4.1
ICAO class/division	:	4.1
ADN class	:	4.1
Transport labels		



Packing group		
ADR/RID packing group	:	II
IMDG packing group	:	II
ADN packing group	:	II
ICAO packing group	:	II
Environmental hazards		
Environmentally hazardous substance/marine pollutant		



Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS : F-A, S-I  
ADR transport category : 2  
Emergency Action Code : 1Z  
Hazard Identification Number : 40  
(ADR/RID)  
Tunnel restriction code : (E)  
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code  
Transport in bulk according to : Not applicable.  
Annex II of MARPOL 73/78  
and the IBC Code

### Section 15: Other Regulatory Information

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

National regulations : Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.

EU legislation : Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Dangerous Preparations Directive 1999/45/EC. Dangerous Substances Directive 67/548/EEC.

Chemical safety assessment  
No chemical safety assessment has been carried out.

Inventories  
EU - EINECS/ELINCS : None of the ingredients are listed or exempt.

### Section 16: Other Information

Classification procedures according to Regulation (EC) 1272/2008 : STOT RE 1 - H372: : Calculation method. Aquatic  
: Chronic 2 - H411: : Calculation method.  
Flam. Sol. 1 - H228: : Expert judgement.

Training advice : Read and follow manufacturer's recommendations.

Revision comments : Classification according to EC 1272/2008 (CLP).

Revision date : 26/05/2015

Revision : 2

Supersedes date : 25/09/2014

SDS number : 2880

Risk phrases in full : R10 Flammable.  
R11 Highly flammable.  
R43 May cause sensitisation by skin contact.  
R48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.  
R66 Repeated exposure may cause skin dryness or cracking.

Hazard statements in full :

EUH208 Contains Pine, *Pinus sylvestris*, ext.. May produce an allergic reaction.  
H226 Flammable liquid and vapour.  
H228 Flammable solid.  
H304 May be fatal if swallowed and enters airways.  
H317 May cause an allergic skin reaction.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H372 Causes damage to organs (Central nervous system) through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the

best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.