

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 09/25/2017 Supersedes:09/15/2017

Version: 1.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : JOHNSEN'S FUEL STABILIZER 16 FL.OZ.

Product code : 4690

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

Use of the substance/mixture : Fuel Stabilizer

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 4 H227 Carc. 1B H350 Asp. Tox. 1 H304

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H227 - Combustible liquid

H304 - May be fatal if swallowed and enters airways

H350 - May cause cancer

Precautionary statements (GHS-US) : P201 - Obtain special instructions

P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat,sparks,open flames,hot surfaces. - No smoking P280 - Wear protective gloves,protective clothing,eye protection,face protection P301+P310 - If swallowed: Immediately call a poison control center, doctor,physician,

P308+P313 - If exposed or concerned: Get medical advice/attention

P331 - Do NOT induce vomiting

P370+P378 - In case of fire: See Section 5.1 Extinguishing Media

P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with

local, regional, national, international regulations.

2.3. Other hazards

Other hazards not contributing to the

classification

: None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS-US classification |
|---|---------------------|---------------|-----------------------|
| Distillates (Petroleum), Hydrotreated Light | (CAS No) 64742-47-8 | 85 - 95 | Asp. Tox. 1, H304 |
| Distillates (Petroleum), Sweetened Middle | (CAS No) 64741-86-2 | 1.16 - 1.7342 | Not classified |

25/09/2017 EN (English US) 1/12

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Name | Product identifier | % | GHS-US classification |
|---|-----------------------|----------------------|--|
| Naphtha, Heavy Aromatic | (CAS No) 64742-94-5 | <= 1.1542 | Carc. 1B, H350 Asp. Tox. 1, H304 |
| 2-Methylnaphthalene | (CAS No) 91-57-6 | < 0.300092 | Acute Tox. 4 (Oral), H302 |
| Polyether Amine | (CAS No) Confidential | 0.058 - 0.2842 | Not classified |
| 1-Methylnaphthalene | (CAS No) 90-12-0 | < 0.144275 | Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 |
| Naphtha, Hydrotreated Heavy | (CAS No) 64742-48-9 | 0.01456 - 0.13608 | Asp. Tox. 1, H304 |
| Paraffins (Petroleum), Normal C5-20 | (CAS No) 64771-72-8 | <1 | Not classified |
| Naphthalene | (CAS No) 91-20-3 | < 1 | Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |
| Xylene, Mixture of Isomers | (CAS No) 1330-20-7 | <= 0.08698 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 |
| Distillates, Hydrotreated Light | (CAS No) 64742-47-8 | < 1 | Flam. Liq. 3, H226 Asp. Tox. 1, H304 |
| Distillates (Petroleum), Hydrotreated Light Naphthenic | (CAS No) 64742-53-6 | 0.01 - 0.012 | Not classified |
| 2-Naphthalenol, 1-((4-(phenylazo)phenyl)azo)-,ar-heptyl ar',ar' Methyl deriviatives | (CAS No) 92257-31-3 | 0.008 - 0.01 | Not classified |

The exact percentage is a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

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

Symptoms/injuries : If you feel unwell, seek medical advice. May cause cancer.

Symptoms/injuries after inhalation : May cause cancer by inhalation.

Symptoms/injuries after skin contact : May cause slight irritation . Itching. Red skin. Skin rash/inflammation.

Symptoms/injuries after eye contact : May cause slight eye irritation . Inflammation/damage of the eye tissue. Irritation of the eye

tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smoking

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

25/09/2017 EN (English US) 2/12

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Dam up the liquid spill. Contain released substance, pump into suitable containers. Plug the

leak, cut off the supply.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable. Keep away from heat, sparks, open flames, hot surfaces. - No smoking.

Precautions for safe handling

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Obtain special instructions. Do not handle until all safety precautions have been read and understood.

Hygiene measures

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Remove contaminated clothes. Wash contaminated clothing before reuse. Always wash hands after handling the product. Wash affected areas thoroughly after handling. Separate working clothes from town clothes. Launder separately. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Proper grounding procedures to avoid static electricity should be followed.

Storage conditions

: Keep only in the original container in a cool, well ventilated place away from : Keep container

0.5 ppm (1-methylnaphthalene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

closed when not in use. Keep in fireproof place.

Strong bases. Strong acids.

Incompatible products

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Ethylbenzene (100-41-4) | | |
|-------------------------|-------------------------|-----------|
| USA ACGIH | ACGIH TWA (ppm) | 100 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 125 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 435 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 100 |
| USA OSHA | OSHA PEL (STEL) (mg/m³) | 545 mg/m³ |
| USA OSHA | OSHA PEL (STEL) (ppm) | 125 ppm |

Distillates (Petroleum), Hydrotreated Light (64742-47-8) USA ACGIH ACGIH ACGIH TWA (ppm)

| USA ACGIH | ACGIH TWA (ppm) | 200 ppm 8 Hours |
|-----------------------------|-----------------|-----------------|
| 1-Methylnaphthalene (90-12- | 0) | |

ACGIH TWA (ppm)

USA ACGIH

 2-Methylnaphthalene (91-57-6)

 USA ACGIH
 ACGIH TWA (ppm)
 0.5 ppm (2-methylnaphthalene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

Naphtha, Heavy Aromatic (64742-94-5

| Naphtha, Heavy Aromatic (64742-94-5) | | |
|--------------------------------------|-------------------|------------------------------|
| USA ACGIH | ACGIH TWA (mg/m³) | 25 mg/m³ 1-METHYLNAPHTHALENE |
| USA ACGIH | ACGIH TWA (ppm) | 0.5 ppm 1-METHYLNAPHTHALENE |

2-Naphthalenol, 1-((4-(phenylazo)phenyl)azo)-,ar-heptyl ar',ar' Methyl deriviatives (92257-31-3)USA ACGIH ACGIH TWA (mg/m³) 0.14 mg/m³

| 25/09/2017 | EN (English US) | 3/12 |
|------------|-----------------|------|

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| 2-Naphthalenol, 1-((4-(phenylazo)phenyl)azo)-,ar-heptyl ar',ar' Methyl deriviatives (92257-31-3) | | |
|--|--------------------|------------------------------|
| USA ACGIH ACGIH TWA (ppm) 0.008 ppm | | |
| USA ACGIH | ACGIH STEL (mg/m³) | 0.42 mg/m³ Absorbed via skin |
| USA ACGIH | ACGIH STEL (ppm) | 0.02 ppm |

Exposure controls

: Local exhaust venilation, vent hoods . Ensure good ventilation of the work station. Appropriate engineering controls

Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.





Materials for protective clothing : GIVE EXCELLENT RESISTANCE:

Hand protection : Wear protective gloves.

Eye protection Chemical goggles or safety glasses. Wear suitable protective clothing. Skin and body protection Respiratory protection Wear respiratory protection. Environmental exposure controls : Avoid release to the environment.

Consumer exposure controls : Avoid contact during pregnancy/while nursing.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Liquid Appearance : Liquid. Color : Red.

Odor : Gasoline like. : No data available Odor threshold No data available pΗ Relative evaporation rate (butyl acetate=1) No data available Melting point : No data available Freezing point : No data available : 222 - 249 °C **Boiling point** : 85 °C Flash point Auto-ignition temperature : 232 °C

Decomposition temperature : No data available : No data available Flammability (solid, gas) Vapor pressure 0.013 kPa Relative vapor density at 20 °C : No data available

Relative density . 0.805

Insoluble in water. Solubility Water: 1.5 g/l

· No data available Log Pow No data available Log Kow Viscosity, kinematic : 1.92 cSt @ 40 deg C : No data available Viscosity, dynamic : No data available Explosive properties No data available Oxidizing properties : No data available **Explosion limits**

9.2. Other information

VOC content : < 1 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

Chemical stability

Combustible liquid. May form flammable/explosive vapor-air mixture.

25/09/2017 EN (English US) 4/12

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.3. Possibility of hazardous reactions

Not established.

IARC group

IARC group

Naphtha, Heavy Aromatic (64742-94-5)

National Toxicology Program (NTP) Status

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

| Acute toxicity | . Not diassified |
|---|---|
| Xylene, Mixture of Isomers (1330-20-7) | |
| LD50 oral rat | 3523 - 8600 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 3523 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value; >4000 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value) |
| LD50 dermal rabbit | > 4200 mg/kg (Rabbit; Experimental value,Rabbit; Experimental value) |
| LC50 inhalation rat (mg/l) | 29 mg/l/4h (Rat; Experimental value; 27.57 mg/l/4h; Rat; Experimental value) |
| Ethylbenzene (100-41-4) | |
| LD50 oral rat | 3500 mg/kg (Rat; Other; Experimental value) |
| LD50 dermal rabbit | 15415 mg/kg (Rabbit; Literature study; Other; 15432 mg/kg; Rabbit; Experimental value) |
| LC50 inhalation rat (mg/l) | 17.8 mg/l/4h (Rat; Literature study) |
| LC50 inhalation rat (ppm) | 4000 ppm/4h (Rat; Literature study) |
| Paraffins (Petroleum), Normal C5-20 (6 | 4771-72-8) |
| LD50 oral rat | > 5000 mg/kg (Rat) |
| LD50 dermal rabbit | > 2000 mg/kg (Rabbit) |
| Distillates (Petroleum), Hydrotreated L | ight (64742-47-8) |
| LD50 oral rat | > 5000 mg/kg body weight |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | > 5.28 mg/l/4h Based on lack of mortality and systemic effects |
| 1-Methylnaphthalene (90-12-0) | |
| LD50 oral rat | 1840 mg/kg (Rat; Literature study) |
| LD50 dermal rabbit | > 5000 mg/kg (Rabbit; Literature study) |
| 2-Methylnaphthalene (91-57-6) | |
| LD50 oral rat | 1630 mg/kg (Rat) |
| Naphthalene (91-20-3) | |
| ATE CLP (oral) | 500 mg/kg body weight |
| Naphtha, Heavy Aromatic (64742-94-5) | |
| LD50 oral rat | > 5000 mg/kg (Rat) |
| LD50 dermal rabbit | > 2000 mg/kg (Rabbit) |
| LC50 inhalation rat (mg/l) | > 5 mg/l/4h (Rat) |
| 2-Naphthalenol, 1-((4-(phenylazo)phen | yl)azo)-,ar-heptyl ar',ar' Methyl deriviatives (92257-31-3) |
| LD50 oral rat | > 5000 mg/kg |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified Based on available data, the classification criteria are not met |
| Carcinogenicity | : May cause cancer. |
| Xylene, Mixture of Isomers (1330-20-7) | |
| IARC group | 3 |
| Ethylbenzene (100-41-4) | |
| 14.00 | |

25/09/2017 EN (English US) 5/12

2B

2B

3

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Reproductive toxicity : Not classified Specific target organ toxicity – single exposure : Not classified Specific target organ toxicity – repeated : Not classified

exposure

Aspiration hazard : May be fatal if swallowed and enters airways.

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause cancer by inhalation.

Symptoms/injuries after skin contact : May cause slight irritation . Itching. Red skin. Skin rash/inflammation.

Symptoms/injuries after eye contact : May cause slight eye irritation . Inflammation/damage of the eye tissue. Irritation of the eye

tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

| Ethylbenzene (100-41-4) | |
|--------------------------------------|--|
| LC50 fish 2 | 4.2 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Salmo gairdneri; Semi-static system; Fresh water; Experimental value) |
| 1-Methylnaphthalene (90-12-0) | |
| LC50 fish 1 | 8.4 mg/l (LC50; 48 h; Salmo fario) |
| EC50 Daphnia 1 | 1.848 mg/l (LC50; 48 h) |
| LC50 fish 2 | 9 mg/l (LC50; 96 h; Pimephales promelas) |
| EC50 Daphnia 2 | 1.2 mg/l (EC50; 48 h) |
| Threshold limit algae 1 | 1.71 - 5.12,EC50; 3 h |
| Threshold limit algae 2 | 1200 μg/l (EC50; 14 days) |
| 2-Methylnaphthalene (91-57-6) | |
| LC50 fish 1 | 8 mg/l (LC50; 96 h) |
| Naphtha, Heavy Aromatic (64742-94-5) | |
| EC50 Daphnia 1 | 0.95 mg/l (EC50; 48 h) |
| LC50 fish 2 | 2.34 mg/l (LC50; 96 h; Oncorhynchus mykiss) |
| Threshold limit algae 2 | 2.5 mg/l (EC50; 72 h) |

12.2. Persistence and degradability

| JOHNSEN'S FUEL STABILIZER 16 FL.OZ. | |
|--|---|
| Persistence and degradability | Not established. |
| Xylene, Mixture of Isomers (1330-20-7) | |
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available. Photolysis in the air. |
| Ethylbenzene (100-41-4) | |
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil. |
| Biochemical oxygen demand (BOD) | 1.44 g O ₂ /g substance (20d.) |
| Chemical oxygen demand (COD) | 2.1 g O ₂ /g substance |
| ThOD | 3.17 g O ₂ /g substance |
| BOD (% of ThOD) | 45.4 (20 days) |
| Paraffins (Petroleum), Normal C5-20 (64771-72-8) | |
| Persistence and degradability | Readily biodegradable in water. |

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

Persistence and degradability Not established.

Distillates (Petroleum), Sweetened Middle (64741-86-2)

Persistence and degradability Not established.

1-Methylnaphthalene (90-12-0)

Persistence and degradability

Not readily biodegradable in water. Forming sediments in water. Not established.

2-Methylnaphthalene (91-57-6)

Persistence and degradability Inherently biodegradable. Not readily biodegradable in water. Not established.

Naphthalene (91-20-3)

Persistence and degradability

May cause long-term adverse effects in the environment.

Naphtha, Heavy Aromatic (64742-94-5)

Persistence and degradability Not readily biodegradable in water.

25/09/2017 EN (English US) 6/12

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| coording to rederal Register 7 vol. 77, No. 307 Monday, N | .a.s., 20, 20, 27, 14, 35 d.i.d. 10gdatao.is |
|---|--|
| Polyether Amine (Confidential) | |
| Persistence and degradability | Not established. |
| Distillates (Petroleum), Hydrotreated Light Na | phthenic (64742-53-6) |
| Persistence and degradability | Not established. |
| 2-Naphthalenol, 1-((4-(phenylazo)phenyl)azo)- | -,ar-heptyl ar',ar' Methyl deriviatives (92257-31-3) |
| Persistence and degradability | Not established. |
| Naphtha, Hydrotreated Heavy (64742-48-9) | |
| Persistence and degradability | Not established. |
| 12.3. Bioaccumulative potential | |
| JOHNSEN'S FUEL STABILIZER 16 FL.OZ. | |
| Bioaccumulative potential | Not established. |
| Xylene, Mixture of Isomers (1330-20-7) | |
| BCF fish 2 | 7 - 26 (BCF; 8 weeks; Oncorhynchus mykiss; Flow-through system; Fresh water) |
| Log Pow | 3.2 (Conclusion by analogy; 20 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |
| Ethylbenzene (100-41-4) | |
| BCF fish 1 | 1 (BCF; Other; 6 weeks; Oncorhynchus kisutch; Flow-through system; Salt water; Literature study) |
| BCF fish 2 | 15 - 79 (BCF) |
| BCF other aquatic organisms 1 | 4.68 (BCF) |
| Log Pow | 3.15 (Experimental value; 3.6; Experimental value; EU Method A.8: Partition Coefficient; 20 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |
| Paraffins (Petroleum), Normal C5-20 (64771-7 | 2-8) |
| Bioaccumulative potential | No bioaccumulation data available. |
| Distillates (Petroleum), Hydrotreated Light (64 | 1742-47-8) |
| Bioaccumulative potential | Not established. |
| Distillates (Petroleum), Sweetened Middle (64 | 741-86-2) |
| Bioaccumulative potential | Not established. |
| 1-Methylnaphthalene (90-12-0) | |
| BCF fish 1 | 20 (BCF; 5 weeks) |
| BCF fish 2 | 113-2000,BCF; 1 - 2 weeks |
| Log Pow | 3.87 (Experimental value) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). Not established. |
| 2-Methylnaphthalene (91-57-6) | |
| BCF fish 1 | 407 (BCF; 624 h; Lepomis macrochirus) |
| BCF fish 2 | 190 (BCF; 840 h; Oncorhynchus kisutch) |
| Log Pow | 3.86 (Experimental value) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). Not established. |
| Naphthalene (91-20-3) | |
| Bioaccumulative potential | Not established. |
| Naphtha, Heavy Aromatic (64742-94-5) | |
| Log Pow | 2.9 - 6.1 |
| Bioaccumulative potential | Bioaccumable. |
| Polyether Amine (Confidential) | |
| Bioaccumulative potential | Not established. |
| Distillates (Petroleum), Hydrotreated Light Na | |
| Bioaccumulative potential Not established. | |
| | ar-heptyl ar',ar' Methyl deriviatives (92257-31-3) |
| Bioaccumulative potential | Not established. |
| Naphtha, Hydrotreated Heavy (64742-48-9) | |
| Bioaccumulative potential | Not established. |
| 12.4. Mobility in soil | |
| Xylene, Mixture of Isomers (1330-20-7) | |
| Ecology - soil | May be harmful to plant growth, blooming and fruit formation. |
| | |

25/09/2017 EN (English US) 7/12

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Ethylbenzene (100-41-4) | |
|-------------------------------|--|
| Surface tension | 0.029 N/m |
| Log Koc | log Koc,PCKOCWIN v1.66; 2.71; Calculated value; Koc; PCKOCWIN v1.66; 517.8; Calculated value |
| 1-Methylnaphthalene (90-12-0) | |
| Log Koc | Koc,2300 |

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to appropriate waste disposal facility, in accordance with local, regional,

national, international regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): Not Regulated, ICAO/IATA (air): Not regulated, IMO/IMDG (water): Not regulated,

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not Regulated

Subject to reporting requirements of United States SARA Section 313

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

| o_o non for regulatory information | | |
|---|---|--|
| 15.1. US Federal regulations | | |
| JOHNSEN'S FUEL STABILIZER 16 FL.OZ. | | |
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard | |
| Xylene, Mixture of Isomers (1330-20-7) | | |
| SARA Section 311/312 Hazard Classes | Fire hazard | |
| Ethylbenzene (100-41-4) | | |
| Subject to reporting requirements of United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Fire hazard Delayed (chronic) health hazard | |
| Distillates (Petroleum), Hydrotreated Light (64742-47-8) | | |
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Delayed (chronic) health hazard | |
| Naphthalene (91-20-3) | | |
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard Immediate (acute) health hazard | |
| Naphtha, Heavy Aromatic (64742-94-5) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |

25/09/2017 EN (English US) 8/12

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Naphtha, Heavy Aromatic (64742-94-5) | | |
|---------------------------------------|---------------------------------|--|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard | |
| SARA Section 313 - Emission Reporting | 14 % Naphthalene (CAS 91-20-3) | |

15.2. International regulations

CANADA

| JOHNSEN'S FUEL STABILIZER 16 FL.OZ. | | | | |
|--|---|--|--|--|
| WHMIS Classification | Class B Division 3 - Combustible Liquid | | | |
| Distillates, Hydrotreated Light (64742-47-8) | | | | |
| Listed on the Canadian DSL (Domestic Substances List) | | | | |
| WHMIS Classification | Class B Division 2 - Flammable Liquid | | | |
| Ethylbenzene (100-41-4) | | | | |
| Listed on the Canadian DSL (Domestic Substances List) | | | | |
| Distillates (Petroleum), Hydrotreated Light (64742-47-8) | | | | |
| Listed on the Canadian DSL (Domestic Substances List) | | | | |
| WHMIS Classification Uncontrolled product according to WHMIS classification criteria | | | | |
| Naphthalene (91-20-3) | | | | |
| WHMIS Classification | Class B Division 4 - Flammable Solid Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects | | | |
| Naphtha, Heavy Aromatic (64742-94-5) | | | | |

EU-Regulations

Naphtha, Heavy Aromatic (64742-94-5)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.2; R45 Muta.Cat.2; R46

Full text of R-phrases: see section 16

15.2.2. National regulations

Ethylbenzene (100-41-4)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Naphtha, Heavy Aromatic (64742-94-5)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

| JOHNSEN'S FUEL STABILIZER 16 FL.OZ. | | |
|--|---------------------------------|--|
| U.S California - Proposition 65 - Carcinogens List | No | |
| U.S California - Proposition 65 - Developmental Toxicity | No | |
| U.S California - Proposition 65 - Reproductive Toxicity - Female | No | |
| U.S California - Proposition 65 - Reproductive Toxicity - Male | No | |
| State or local regulations | U.S California - Proposition 65 | |

| Distillates, Hydrotreated Light (64742-47-8) | | | | |
|--|------------------------|-------------------------|-------------------------|----------------------------|
| U.S California - | U.S California - | U.S California - | U.S California - | Non-significant risk level |
| Proposition 65 - | Proposition 65 - | Proposition 65 - | Proposition 65 - | (NSRL) |
| Carcinogens List | Developmental Toxicity | Reproductive Toxicity - | Reproductive Toxicity - | |
| _ | | Female | Male | |
| | | | | |

25/09/2017 EN (English US) 9/12

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Distillates, Hydrotreate | ed Light (64742-47-8) | | | |
|--|--|---|---|-------------------------------------|
| No | No | No | No | |
| Xylene, Mixture of Ison | ners (1330-20-7) | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk leve (NSRL) |
| No | No | No | No | |
| Ethylbenzene (100-41-4 | 4) | | | |
| U.S California - | U.S California - | U.S California - | U.S California - | Non-significant risk leve |
| Proposition 65 - Carcinogens List | Proposition 65 - Developmental Toxicity | Proposition 65 - Reproductive Toxicity - Female | Proposition 65 - Reproductive Toxicity - Male | (NSRL) |
| Yes | No | No | No | |
| Paraffins (Petroleum), | Normal C5-20 (64771-72-8) | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk leve (NSRL) |
| No | No | No | No | |
| Distillates (Petroleum), | Hydrotreated Light (64742-47- | 8) | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk leve (NSRL) |
| No | No | No | No | |
| Distillates (Petroleum), | Sweetened Middle (64741-86-2 | 2) | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk leve (NSRL) |
| No | No | No | No | |
| 1-Methylnaphthalene (| 90-12-0) | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk leve (NSRL) |
| No | No | No | No | |
| 2-Methylnaphthalene (| 91-57-6) | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk leve (NSRL) |
| No | No | No | No | |
| Naphthalene (91-20-3) | | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk leve (NSRL) |
| Yes | No | No | No | |
| Naphtha, Heavy Aroma | atic (64742-94-5) | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk leve (NSRL) |
| Yes | No | Yes | Yes | |
| Polyether Amine (Conf | idential) | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - | U.S California - Proposition 65 - Reproductive Toxicity - | Non-significant risk leve (NSRL) |

25/09/2017 EN (English US) 10/12

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Polyether Amine (Confidential) | | | | |
|--|--|---|---|-----------------------------------|
| | | Female | Male | |
| | | | | |
| No | No | No | No | |
| Distillates (Petroleum), | Hydrotreated Light Naphthenio | c (64742-53-6) | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk level (NSRL) |
| No | No | No | No | |
| 2-Naphthalenol, 1-((4-(p | phenylazo)phenyl)azo)-,ar-hept | yl ar',ar' Methyl deriviatives (92 | 2257-31-3) | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk level (NSRL) |
| No | No | No | No | |
| Naphtha, Hydrotreated Heavy (64742-48-9) | | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk level (NSRL) |
| No | No | No | No | |
| Ethylbenzene (100-41-4 | 1 | <u> </u> | | |
| State or local regulations | | | | |

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List U.S. California Proposition 65

Naphthalene (91-20-3)

State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List
- U.S. California Proposition 65

Naphtha, Heavy Aromatic (64742-94-5)

State or local regulations

U.S. - California - Proposition 65

Illinois Right to Know

Louisiana Right to Know

Michigan Right to Know

Minnesota Right-to-Know

New Jersey Right-to-Know

U.S. - Pennsylvania - RTK (Right to Know) List

Rhode Island Right to Know

SECTION 16: Other information

: Revision - See : *. Indication of changes

Other information : None.

Full text of H-phrases:

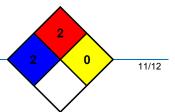
| At of 11 philades. | | | |
|------------------------|--|--|--|
| H226 | Flammable liquid and vapor | | |
| H227 | Combustible liquid | | |
| H302 | Harmful if swallowed | | |
| H304 | May be fatal if swallowed and enters airways | | |
| H315 | Causes skin irritation | | |
| H350 | May cause cancer | | |
| H351 | Suspected of causing cancer | | |
| H400 | Very toxic to aquatic life | | |
| H410 | Very toxic to aquatic life with long lasting effects | | |
| | | | |

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

incapacitation or possible residual injury unless prompt

medical attention is given.

25/09/2017 EN (English US)



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high

temperature before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 2 Moderate Hazard Physical : 0 Minimal Hazard

Personal Protection : B

SDS US (GHS HazCom 2012) - TCC

The Supplier identified in Section 1 of this SDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

25/09/2017 EN (English US) 12/12