



# Injector and Intake Valve Cleaner

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 12/6/2021 Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Trade name : Injector and Intake Valve Cleaner  
Product code : 5045

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Gasoline additive

#### 1.3. Supplier

Bardahl Manufacturing Corporation  
1400 NW 52nd Street  
P.O. Box  
Seattle, WA 98107  
USA  
T 206-783-4851 - F 206-784-3219  
[www.bardahl.com](http://www.bardahl.com)  
Contact: Jackie Leung

#### 1.4. Emergency telephone number

Emergency number : 800-424-9300

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flammable liquids, Category 3	Flammable liquid and vapour.
Acute toxicity (inhalation:dust,mist) Category 4	Harmful if inhaled.
Skin corrosion/irritation, Category 2	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	Causes serious eye irritation.
Skin sensitisation, Category 1	May cause an allergic skin reaction.
Germ cell mutagenicity, Category 1B	May cause genetic defects.
Carcinogenicity, Category 1B	May cause cancer.
Aspiration hazard, Category 1	May be fatal if swallowed and enters airways.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	Toxic to aquatic life with long lasting effects.

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

Flammable liquid and vapour.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
Harmful if inhaled.

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

### Precautionary statements (GHS US)

May cause genetic defects.  
May cause cancer.  
Toxic to aquatic life with long lasting effects.  
: Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep container tightly closed.  
Ground/Bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Avoid breathing mist, vapours.  
Wash hands thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing must not be allowed out of the workplace.  
Avoid release to the environment.  
Wear eye protection, protective gloves.  
If swallowed: Immediately call a POISON CENTER.  
If on skin: Wash with plenty of water.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If exposed or concerned: Get medical advice/attention.  
Call a poison center or doctor if you feel unwell.  
Specific treatment (see supplemental first aid instruction on this label).  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/attention.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Wash contaminated clothing before reuse.  
In case of fire: Use alcohol resistant foam, BC-powder, carbon dioxide (CO<sub>2</sub>) to extinguish.  
Collect spillage.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Petroleum distillates (Diesel fuel no. 2)	CAS-No.: 68476-34-6	50 – 80	Flam. Liq. 4, H227 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Solvent naphtha (light aromatic)	CAS-No.: 64742-95-6	5 – 20	Flam. Liq. 2, H225 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304 Aquatic Acute 3, H402
Polyolefin alkyl phenol alkyl amine	CAS-No.: Confidential	5 – 10	Skin Irrit. 2, H315
1,2,4-Trimethyl benzene	CAS-No.: 95-63-6	1 – 10	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
1,3,5-Trimethyl benzene	CAS-No.: 108-67-8	1 – 5	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411
N-Propylbenzene	CAS-No.: 103-65-1	0.1 – 5	Flam. Liq. 3, H226 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
2-Ethylhexan-1-ol	CAS-No.: 104-76-7	0.1 – 5	Flam. Liq. 4, H227 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Xylene	CAS-No.: 1330-20-7	0.1 – 5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
1,2,3-Trimethyl benzene	CAS-No.: 526-73-8	0.1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Cumene	CAS-No.: 98-82-8	0.1 – 5	Flam. Liq. 3, H226 Carc. 2, H351 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

Name	Product identifier	%	GHS-US classification
o-Ethyltoluene	CAS-No.: 611-14-3	0.1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304
Long-chain alkyl acid	CAS-No.: 27859-58-1	0.01 – 1	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1A, H317

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung oedema.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

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

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

Fire hazard	: Flammable liquid and vapour.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe fume/vapours.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe fume/vapours. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

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

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Injector and Intake Valve Cleaner

No additional information available

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

<b>o-Ethyltoluene (611-14-3)</b>	
No additional information available	
<b>Long-chain alkyl acid (27859-58-1)</b>	
No additional information available	
<b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Diesel fuel as total
ACGIH OEL TWA	100 mg/m <sup>3</sup>
<b>N-Propylbenzene (103-65-1)</b>	
No additional information available	
<b>2-Ethylhexan-1-ol (104-76-7)</b>	
No additional information available	
<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA [ppm]	25 ppm
<b>Xylene (1330-20-7)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Xylene
ACGIH OEL TWA [ppm]	100 ppm
ACGIH OEL STEL [ppm]	150 ppm
Remark (ACGIH)	URT & eye irr; CNS impair
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Xylenes (o-, m-, p-isomers)
OSHA PEL TWA [1]	435 mg/m <sup>3</sup>
OSHA PEL TWA [2]	100 ppm
<b>1,2,3-Trimethyl benzene (526-73-8)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA [ppm]	25 ppm
<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
No additional information available	
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
No additional information available	
<b>Cumene (98-82-8)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA [ppm]	5 ppm
<b>Polyolefin alkyl phenol alkyl amine (Confidential)</b>	
No additional information available	

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

#### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

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

Physical state : Liquid  
Colour : Colourless amber  
Odour : characteristic  
Odour threshold : No data available  
pH : No data available  
Melting point : Not applicable  
Freezing point : No data available  
Boiling point : No data available  
Flash point : 56 °C PMCC Typical  
Relative evaporation rate (butylacetate=1) : No data available  
Flammability (solid, gas) : Not applicable.  
Vapour pressure : No data available  
Relative vapour density at 20 °C : No data available  
Relative density : No data available  
Density : 0.858 Typical  
Solubility : No data available  
Partition coefficient n-octanol/water (Log Pow) : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Viscosity, kinematic : 4.4 mm<sup>2</sup>/s @ 40 C typical  
Viscosity, dynamic : No data available  
Explosive limits : No data available  
Explosive properties : No data available  
Oxidising properties : No data available

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Harmful if inhaled.

Injector and Intake Valve Cleaner	
ATE US (dust,mist)	1.955 mg/l/4h
Petroleum distillates (Diesel fuel no. 2) (68476-34-6)	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 5 mg/l (4 h, Rat, Inhalation)
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h
N-Propylbenzene (103-65-1)	
LD50 oral rat	6040 mg/kg (Rat, Literature study, Oral)
ATE US (oral)	6040 mg/kg bodyweight



# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

<b>2-Ethylhexan-1-ol (104-76-7)</b>	
LD50 oral rat	2047 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 3000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	0.89 – 5.3 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (mixture of vapour and aerosol), 7 day(s))
ATE US (oral)	2047 mg/kg bodyweight
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h
<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
LD50 oral rat	6000 mg/kg bodyweight (Equivalent or similar to EU Method B.1, Rat, Male, Read-across, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bw/day (24 h, Rat, Male / female, Read-across, Dermal)
LC50 Inhalation - Rat	> 10.2 mg/l air (4 h, Rat, Male / female, Read-across, Inhalation, 14 day(s))
ATE US (oral)	6000 mg/kg bodyweight
<b>Xylene (1330-20-7)</b>	
LD50 oral rat	> 4000 mg/kg bodyweight (Equivalent or similar to EU Method B.1, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 4200 mg/kg bodyweight (4 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	29.09 mg/l (Equivalent or similar to EU Method B.2, 4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h
<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
LD50 oral rat	> 2000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit, Dermal)
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
LD50 oral rat	6000 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male, Experimental value, Oral, 014 day(s))
LD50 dermal rat	3440 mg/kg (24 h, Rat, Male / female, Read-across, Dermal)
LC50 Inhalation - Rat	> 10.2 mg/l air (4 h, Rat, Male / female, Read-across, Inhalation (vapours), 14 day(s))
ATE US (oral)	6000 mg/kg bodyweight
ATE US (dermal)	3440 mg/kg bodyweight
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

<b>Cumene (98-82-8)</b>	
LD50 oral rat	2700 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 014 day(s))
LD50 dermal rabbit	> 3160 mg/kg bodyweight (24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	39 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	2700 mg/kg bodyweight
ATE US (vapours)	39 mg/l/4h
ATE US (dust,mist)	39 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
<b>Cumene (98-82-8)</b>	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
<b>o-Ethyltoluene (611-14-3)</b>	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.
<b>N-Propylbenzene (103-65-1)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>2-Ethylhexan-1-ol (104-76-7)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>1,2,3-Trimethyl benzene (526-73-8)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>Cumene (98-82-8)</b>	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: 4.4 mm <sup>2</sup> /s @ 40 C typical
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung oedema.

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Toxic to aquatic life. Harmful to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.

<b>N-Propylbenzene (103-65-1)</b>	
LC50 - Fish [1]	1.55 mg/l (96 h, Salmo gairdneri, Literature study)
EC50 - Crustacea [1]	2 mg/l (24 h, Daphnia magna, Literature study, Locomotor effect)
<b>2-Ethylhexan-1-ol (104-76-7)</b>	
LC50 - Fish [1]	17.1 mg/l (EU Method C.1, 96 h, Leuciscus idus, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	39 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	16.6 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
LC50 - Fish [1]	12.52 mg/l (96 h, Carassius auratus, Flow-through system, Fresh water, Experimental value, Nominal concentration)
ErC50 algae	53 mg/l (DIN 38412-9, 48 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
<b>Xylene (1330-20-7)</b>	
LC50 - Fish [1]	2.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static renewal, Fresh water, Read-across, Lethal)
ErC50 algae	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
LC50 - Fish [1]	18 mg/l (Pisces)
EC50 - Crustacea [1]	21 mg/l (Daphnia sp.)
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
LC50 - Fish [1]	7.72 mg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
<b>Cumene (98-82-8)</b>	
LC50 - Fish [1]	4.8 mg/l (EPA OTS 797.1400, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	2.14 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	2.01 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

#### 12.2. Persistence and degradability

<b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b>	
Persistence and degradability	Inherently biodegradable.

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

<b>N-Propylbenzene (103-65-1)</b>	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
<b>2-Ethylhexan-1-ol (104-76-7)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
Persistence and degradability	Biodegradable in the soil. Biodegradable in water.
Biochemical oxygen demand (BOD)	0.0957 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.319 g O <sub>2</sub> /g substance
ThOD	3.19 g O <sub>2</sub> /g substance
<b>Xylene (1330-20-7)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
<b>1,2,3-Trimethyl benzene (526-73-8)</b>	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
Persistence and degradability	Not readily biodegradable in water.
Chemical oxygen demand (COD)	0.44 g O <sub>2</sub> /g substance
<b>Cumene (98-82-8)</b>	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.28 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.42 g O <sub>2</sub> /g substance
ThOD	3.2 g O <sub>2</sub> /g substance
<b>12.3. Bioaccumulative potential</b>	
<b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b>	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6
<b>N-Propylbenzene (103-65-1)</b>	
Partition coefficient n-octanol/water (Log Pow)	3.69 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>2-Ethylhexan-1-ol (104-76-7)</b>	
Partition coefficient n-octanol/water (Log Pow)	2.9 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
BCF - Fish [1]	161 (Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.42 (Experimental value)

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>Xylene (1330-20-7)</b>	
BCF - Fish [1]	7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>1,2,3-Trimethyl benzene (526-73-8)</b>	
BCF - Fish [1]	133 – 259 (Cyprinus carpio, Literature study)
Partition coefficient n-octanol/water (Log Pow)	3.66 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>Solvent naphtha (light aromatic) (64742-95-6)</b>	
Partition coefficient n-octanol/water (Log Pow)	2.1 – 6
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
BCF - Fish [1]	243 (Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.63 (Experimental value, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>Cumene (98-82-8)</b>	
BCF - Other aquatic organisms [1]	94.69 l/kg (BCFBAF v3.00, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	3.55 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>12.4. Mobility in soil</b>	
<b>Petroleum distillates (Diesel fuel no. 2) (68476-34-6)</b>	
Surface tension	25 mN/m
Ecology - soil	No (test)data on mobility of the component(s) available.
<b>N-Propylbenzene (103-65-1)</b>	
Ecology - soil	Adsorbs into the soil.
<b>2-Ethylhexan-1-ol (104-76-7)</b>	
Surface tension	47 mN/m (20 °C, 0.81 g/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.5475 – 2.1177 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
Surface tension	27550 mN/m (25 °C, 100 vol %)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.87 (log Koc, Calculated value)

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

<b>1,3,5-Trimethyl benzene (108-67-8)</b>	
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.
<b>Xylene (1330-20-7)</b>	
Surface tension	28.01 – 29.76 mN/m (25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.
<b>1,2,3-Trimethyl benzene (526-73-8)</b>	
Ecology - soil	Adsorbs into the soil.
<b>1,2,4-Trimethyl benzene (95-63-6)</b>	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.04 (log Koc, Calculated value)
Ecology - soil	Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.
<b>Cumene (98-82-8)</b>	
Surface tension	28.2 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.946 (log Koc, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

### 14.1. UN number

DOT NA No : Not applicable  
UN-No. (TDG) : Not applicable  
UN-No. (IMDG) : 1993  
UN-No. (IATA) : Not applicable

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable  
Proper Shipping Name (TDG) : Not applicable  
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

Proper Shipping Name (IATA) : Not applicable

### 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : Not applicable

#### TDG

Transport hazard class(es) (TDG) : Not applicable

#### IMDG

Transport hazard class(es) (IMDG) : 3

Danger labels (IMDG) : 3



#### IATA

Transport hazard class(es) (IATA) : Not applicable

### 14.4. Packing group

Packing group (DOT) : Not applicable

Packing group (TDG) : Not applicable

Packing group (IMDG) : III

Packing group (IATA) : Not applicable

### 14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes



Other information : No supplementary information available.

### 14.6. Special precautions for user

#### DOT

No data available

#### TDG

No data available

#### IMDG

Special provisions (IMDG) : 223, 274, 955

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P001, LP01

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

EmS-No. (Spillage) : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER

Stowage category (IMDG) : A

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

Flash point (IMDG) : 56 C

### IATA

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Injector and Intake Valve Cleaner	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
o-Ethyltoluene	611-14-3	Not present	-	
Long-chain alkyl acid	27859-58-1	Not present	-	
Petroleum distillates (Diesel fuel no. 2)	68476-34-6	Present	Active	
N-Propylbenzene	103-65-1	Present	Active	
2-Ethylhexan-1-ol	104-76-7	Present	Active	
1,3,5-Trimethyl benzene	108-67-8	Present	Active	
Xylene	1330-20-7	Present	Active	
1,2,3-Trimethyl benzene	526-73-8	Present	Active	
Solvent naphtha (light aromatic)	64742-95-6	Present	Active	
1,2,4-Trimethyl benzene	95-63-6	Present	Active	
Cumene	98-82-8	Present	Active	
Polyolefin alkyl phenol alkyl amine	Confidential	Not present	-	

### Xylene (1330-20-7)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	100 lb
-----------	--------

### 1,2,4-Trimethyl benzene (95-63-6)

Subject to reporting requirements of United States SARA Section 313

### Cumene (98-82-8)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	5000 lb
-----------	---------



# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

##### Cumene (98-82-8)

Listed on IARC (International Agency for Research on Cancer)

### 15.3. US State regulations

##### Cumene (98-82-8)

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	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

Component	State or local regulations
N-Propylbenzene(103-65-1)	U.S. - New Jersey - Right to Know Hazardous Substance List
Xylene(1330-20-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
1,2,4-Trimethyl benzene(95-63-6)	U.S. - New Jersey - Right to Know Hazardous Substance List
Cumene(98-82-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

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

NFPA health hazard

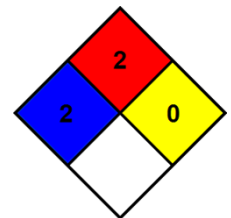
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

: B - Safety glasses, Gloves

Safety Data Sheet (SDS), USA

# Injector and Intake Valve Cleaner

## Safety Data Sheet

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

---

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.