Safety Data Sheet

acc. to Hazardous Products Regulations (HPR)

STP - Octane Booster

Version number: GHS 4.1
Replaces version of: 2020-01-08 (GHS 3)

Revision: 2020-01-19

SECTION 1: Identification

1.1 Product identifier

Trade name **STP - Octane Booster**

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

Relevant identified uses General use

1.3 Details of the supplier of the safety data sheet

Energizer Manufacturing, Inc.
25225 Detroit Rd.
Westlake OH 44145
United States

Telephone: 800-383-7323; 314-985-2000 (USA / CANADA)
e-mail: energizer@custhelp.com
Website: http://data.energizer.com

1.4 Emergency telephone number

Emergency information service 1-314-985-1511 Int'l: 1-800-526-4727
This number is only available during the following office hours: Mon-Fri 09:00 AM - 05:00 PM

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.6	flammable liquid	3	Flam. Liq. 3	H226
3.1O	acute toxicity (oral)	4	Acute Tox. 4	H302
3.1I	acute toxicity (inhal.)	2	Acute Tox. 2	H330
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.6	carcinogenicity	2	Carc. 2	H351
3.8	specific target organ toxicity - single exposure	2	STOT SE 2	H371
3.9	specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
3.10	aspiration hazard	1	Asp. Tox. 1	H304

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure. The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labeling

- Signal word: danger

- Pictograms

GHS02, GHS06, GHS07, GHS08

- Hazard statements

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H330	Fatal if inhaled.
H351	Suspected of causing cancer.
H371	May cause damage to organs (respiratory system, blood).
H373	May cause damage to organs (blood, nervous system, eye) through prolonged or repeated exposure.

- Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves.
P284	In case of inadequate ventilation wear respiratory protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P352	IF ON SKIN: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P320	Specific treatment is urgent (see on this label).
P321	Specific treatment (see on this label).
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.

- Precautionary statements

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling — Naphthalene, Kerosene, Tricarbonyl(methylcyclopentadienyl)manganese, Solvent naphtha (petroleum), heavy arom.

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Kerosene	CAS No 8008-20-6	50 – < 75	Flam. Liq. 3 / H226 Acute Tox. 3 / H331 Asp. Tox. 1 / H304	
Naphthalene	CAS No 91-20-3	5 – < 10	Acute Tox. 4 / H302 Acute Tox. 1 / H330 Carc. 2 / H351 STOT SE 2 / H371 STOT RE 2 / H373	
Solvent naphtha (petroleum), light arom.	CAS No 64742-95-6	5 – < 10	Flam. Liq. 1 / H224 Skin Irrit. 2 / H315 STOT SE 3 / H336 Asp. Tox. 1 / H304	
2-ethylhexan-1-ol	CAS No 104-76-7	5 – < 10	Flam. Liq. 4 / H227 Acute Tox. 2 / H330	
Tricarbonyl(methylcyclopentadienyl)manganese	CAS No 12108-13-3	1 – < 5	Acute Tox. 3 / H301 Acute Tox. 2 / H310 Acute Tox. 1 / H330	
1,2,4 trimethylbenzene	CAS No 95-63-6	1 – < 5	Flam. Liq. 3 / H226 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335 Asp. Tox. 1 / H304	

STP - Octane Booster

Version number: GHS 4.1
Replaces version of: 2020-01-08 (GHS 3)

Revision: 2020-01-19

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Solvent naphtha (petroleum), heavy arom.	CAS No 64742-94-5	1 – < 5	Flam. Liq. 3 / H226 Acute Tox. 3 / H331 STOT SE 3 / H335 STOT SE 3 / H336 STOT RE 2 / H373 Asp. Tox. 1 / H304	
1,3,5-trimethylbenzene	CAS No 108-67-8	1 – < 5	Flam. Liq. 3 / H226 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335 Asp. Tox. 1 / H304	

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first- aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Ventilation requirements

Keep any substance that emits harmful vapors or gases in a place that allows these to be permanently extracted. Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

STP - Octane Booster

Version number: GHS 4.1
Replaces version of: 2020-01-08 (GHS 3)

Revision: 2020-01-19

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
CA	2-methylcyclopentadienyl manganese tricarbonyl	12108-13-3	OEL (AB)		0.2					Mn	OHS Code
CA	2-methylcyclopentadienyl manganese tricarbonyl	12108-13-3	OEL (BC)		0.2					Mn	"BC Regulation"
CA	2-methylcyclopentadienyl manganese tricarbonyl	12108-13-3	OEL (ONMoL)		0.2					Mn	MoL
CA	manganese-methylcyclopentadienyltricarbonyl	12108-13-3	PEV/VEA		0.2					Mn	Regulation OHS
CA	jet fuels, JP 5	8008-20-6	OEL (AB)		200					HyCarb, i, vap	OHS Code
CA	Kerosine (petroleum)	8008-20-6	OEL (BC)		200					HyCarb, i, vap	"BC Regulation"
CA	Kerosine (petroleum) (jet fuels, JP 5)	8008-20-6	OEL (ONMoL)		200					HyCarb, i, vap	MoL
CA	naphthalene	91-20-3	OEL (AB)	10	52	15	79				OHS Code
CA	naphthalene	91-20-3	OEL (BC)	10							"BC Regulation"
CA	naphthalene	91-20-3	OEL (ONMoL)	10							MoL
CA	naphthalene	91-20-3	PEV/VEA	10	52	15	79				Regulation OHS

Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
HyCarb	calculated as hydrocarbons

STP - Octane Booster

Version number: GHS 4.1
Replaces version of: 2020-01-08 (GHS 3)

Revision: 2020-01-19

Notation

i	inhalable fraction
Mn	calculated as Mn (manganese)
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified
vap	as vapors

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Naphthalene	91-20-3	DNEL	25 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Naphthalene	91-20-3	DNEL	25 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Naphthalene	91-20-3	DNEL	3.57 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2-ethylhexan-1-ol	104-76-7	DNEL	12.8 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2-ethylhexan-1-ol	104-76-7	DNEL	53.2 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
2-ethylhexan-1-ol	104-76-7	DNEL	53.2 mg/m³	human, inhalatory	worker (industry)	acute - local effects
2-ethylhexan-1-ol	104-76-7	DNEL	23 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	DNEL	0.6 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	DNEL	0.11 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
1,2,4 trimethlybenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
1,2,4 trimethlybenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
1,2,4 trimethlybenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
1,2,4 trimethlybenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	acute - local effects
1,2,4 trimethlybenzene	95-63-6	DNEL	16,171 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
2-ethylhexan-1-ol	104-76-7	PNEC	0.017 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
2-ethylhexan-1-ol	104-76-7	PNEC	0.002 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
2-ethylhexan-1-ol	104-76-7	PNEC	10 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-ethylhexan-1-ol	104-76-7	PNEC	0.284 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
2-ethylhexan-1-ol	104-76-7	PNEC	0.028 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
2-ethylhexan-1-ol	104-76-7	PNEC	0.047 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	PNEC	0.21 $^{µg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	PNEC	0.021 $^{µg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	PNEC	16 $^{µg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
1,2,4 trimethlybenzene	95-63-6	PNEC	0.12 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
1,2,4 trimethlybenzene	95-63-6	PNEC	0.12 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
1,2,4 trimethlybenzene	95-63-6	PNEC	2.41 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
1,2,4 trimethlybenzene	95-63-6	PNEC	13.56 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
1,2,4 trimethlybenzene	95-63-6	PNEC	13.56 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
1,2,4 trimethlybenzene	95-63-6	PNEC	2.34 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	various
Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	≥-20 °C at 101.3 kPa
Flash point	42 °C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)

Explosive limits

- Lower explosion limit (LEL)	1.4 vol%
- Upper explosion limit (UEL)	7.6 vol%

Vapor pressure	≤240 kPa at 37.8 °C
Density	not determined
Vapor density	this information is not available
Relative density	information on this property is not available
Solubility(ies)	not determined

Partition coefficient

- n-octanol/water (log KOW)	this information is not available

Auto-ignition temperature	220 °C (auto-ignition temperature (liquids and gases))
Viscosity	not determined
Explosive properties	not explosive (GHS of the United Nations, annex 4)
Oxidizing properties	none

9.2 Other information

Solvent content	92.75 %
Solid content	7.246 %
Temperature class (USA, acc. to NEC 500)	T2D (maximum permissible surface temperature on the equipment: 215°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Harmful if swallowed. Fatal if inhaled.

- Acute toxicity estimate (ATE)

Oral	1,511 $^{mg}/_{kg}$
Inhalation: vapour	1.574 $^{mg}/_{l}$/4h
Inhalation: dust/mist	0.069 $^{mg}/_{l}$/4h

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Kerosene	8008-20-6	inhalation: vapour	5.28 $^{mg}/_{l}$/4h
Naphthalene	91-20-3	oral	710 $^{mg}/_{kg}$
Naphthalene	91-20-3	inhalation: vapour	0.4 $^{mg}/_{l}$/4h
Naphthalene	91-20-3	inhalation: dust/mist	0.005 $^{mg}/_{l}$/4h
2-ethylhexan-1-ol	104-76-7	inhalation: vapour	0.89 $^{mg}/_{l}$/4h

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	oral	51.8 $^{mg}/_{kg}$
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	dermal	140 $^{mg}/_{kg}$
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	inhalation: vapour	0.1235 $^{mg}/_{l}$/4h
1,2,4 trimethlybenzene	95-63-6	inhalation: vapour	11 $^{mg}/_{l}$/4h
Solvent naphtha (petroleum), heavy arom.	64742-94-5	inhalation: vapour	5.28 $^{mg}/_{l}$/4h
1,3,5-trimethylbenzene	108-67-8	inhalation: vapour	10.2 $^{mg}/_{l}$/4h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause damage to organs (respiratory system, blood).

Hazard category	Target organ	Exposure route
2	respiratory system	if exposed
2	blood	if exposed

Specific target organ toxicity - repeated exposure

May cause damage to organs (blood, nervous system, eye) through prolonged or repeated exposure.

Hazard category	Target organ	Exposure route
2	blood	if exposed
2	nervous system	if exposed

Hazard category	Target organ	Exposure route
2	eye	if exposed

Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Kerosene	8008-20-6	LL50	5 $^{mg}/_{l}$	fish	96 h
Kerosene	8008-20-6	EL50	1.4 $^{mg}/_{l}$	aquatic invertebrates	48 h
Naphthalene	91-20-3	LC50	1.6 $^{mg}/_{l}$	fish	96 h
Naphthalene	91-20-3	EC50	2.16 $^{mg}/_{l}$	aquatic invertebrates	48 h
Solvent naphtha (petroleum), light arom.	64742-95-6	LL50	8.2 $^{mg}/_{l}$	fish	96 h
Solvent naphtha (petroleum), light arom.	64742-95-6	EL50	4.5 $^{mg}/_{l}$	aquatic invertebrates	48 h
2-ethylhexan-1-ol	104-76-7	LC50	17.1 $^{mg}/_{l}$	fish	96 h
2-ethylhexan-1-ol	104-76-7	EC50	39 $^{mg}/_{l}$	aquatic invertebrates	48 h
2-ethylhexan-1-ol	104-76-7	ErC50	16.6 $^{mg}/_{l}$	algae	72 h
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	LC50	0.21 $^{mg}/_{l}$	fish	96 h
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	EC50	0.94 $^{mg}/_{l}$	aquatic invertebrates	24 h
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	ErC50	1.7 $^{mg}/_{l}$	algae	48 h
1,2,4 trimethlybenzene	95-63-6	LC50	7.72 $^{mg}/_{l}$	fish	96 h
1,2,4 trimethlybenzene	95-63-6	EC50	2.356 $^{mg}/_{l}$	algae	96 h
Solvent naphtha (petroleum), heavy arom.	64742-94-5	LL50	5 $^{mg}/_{l}$	fish	96 h

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Solvent naphtha (petroleum), heavy arom.	64742-94-5	EL50	1.4 $^{mg}/_{l}$	aquatic invertebrates	48 h
Solvent naphtha (petroleum), heavy arom.	64742-94-5	LC50	2 $^{mg}/_{l}$	rainbow trout (Oncorhynchus mykiss)	96 h
Solvent naphtha (petroleum), heavy arom.	64742-94-5	LC50	3 $^{mg}/_{l}$	fathead minnow	72 h
Solvent naphtha (petroleum), heavy arom.	64742-94-5	EC50	1.1 $^{mg}/_{l}$	water flea (Daphnia)	48 h
Solvent naphtha (petroleum), heavy arom.	64742-94-5	EC50	1.1 $^{mg}/_{l}$	algae	96 h
1,3,5-trimethylbenzene	108-67-8	LC50	20.57 $^{mg}/_{l}$	fish	24 h
1,3,5-trimethylbenzene	108-67-8	EC50	50 $^{mg}/_{l}$	aquatic invertebrates	24 h
1,3,5-trimethylbenzene	108-67-8	ErC50	53 $^{mg}/_{l}$	algae	48 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Kerosene	8008-20-6	EL50	0.89 $^{mg}/_{l}$	aquatic invertebrates	21 d
Naphthalene	91-20-3	EC50	2.96 $^{mg}/_{l}$	algae	4 h
Solvent naphtha (petroleum), light arom.	64742-95-6	EL50	10 $^{mg}/_{l}$	fish	21 d
Solvent naphtha (petroleum), light arom.	64742-95-6	EC50	15.41 $^{mg}/_{l}$	microorganisms	40 h
Solvent naphtha (petroleum), heavy arom.	64742-94-5	EL50	0.89 $^{mg}/_{l}$	aquatic invertebrates	21 d

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential

None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	**UN number**	1268
14.2	**UN proper shipping name**	PETROLEUM DISTILLATES, N.O.S.
14.3	**Transport hazard class(es)**	
	Class	3 (flammable liquids)
14.4	**Packing group**	III (substance presenting low danger)
14.5	**Environmental hazards**	hazardous to the aquatic environment
	Environmentally hazardous substance (aquatic environment)	Kerosene

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport information - National regulations - Additional information (UN RTDG)

UN number	1268
Proper shipping name	PETROLEUM DISTILLATES, N.O.S.
Class	3
Environmental hazards	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3, fish and tree

Special provisions (SP)	223 (UN RTDG)
Excepted quantities (EQ)	E1 (UN RTDG)
Limited quantities (LQ)	5 L (UN RTDG)

International Maritime Dangerous Goods Code (IMDG)

UN number	1268
Proper shipping name	PETROLEUM DISTILLATES, N.O.S.
Class	3
Marine pollutant	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3, fish and tree

Special provisions (SP)	223, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-E
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	1268
Proper shipping name	Petroleum distillates, n.o.s.
Class	3
Environmental hazards	yes (hazardous to the aquatic environment)
Packing group	III

Danger label(s)	3

Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

SECTION 15: Regulatory information

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

National regulations (United States)

Toxic Substance Control Act (TSCA) all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities

Name acc. to inventory	CAS No	Notes	Reportable quantity (pounds)	Threshold planning quantity (pounds)
Manganese, Tricarbonyl Methylcyclopentadienyl	12108-13-3	d	100	100

Legend

d	Revised TPQ based on new or re-evaluated toxicity data, April 22, 1987.

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name acc. to inventory	CAS No	Remarks	Effective date
1,2,4-trimethylbenzene	95-63-6		1987-01-01
naphthalene	91-20-3		1987-01-01

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
Naphthalene	91-20-3		1 2 3 4	100 (45,4)

Legend
1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act
2 "2" indicates that the source is section 307(a) of the Clean Water Act
3 "3" indicates that the source is section 112 of the Clean Air Act
4 "4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA)

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
Kerosene	8008-20-6	solvents	ATSDR Neurotoxicants CWA 303(d)
Solvent naphtha (petroleum), light arom.	64742-95-6	solvents	EC Annex VI CMRs - Cat. 1B
Naphthalene	91-20-3	nonfunctional con-taminant	ATSDR Neurotoxicants CA NLs CA TACs CDC 4th National Exposure Report CWA 303(c) CWA 303(d) IARC Carcinogens - 2B NTP 13th RoC - reasonable OEHHA RELs Prop 65 US EPA NWMP PBTs
Tricarbonyl(methylcyclopentadienyl)man-ganese			ATSDR Neurotoxicants CA NLs CA TACs CDC 4th National Exposure Report CWA 303(d) IRIS Neurotoxicants OEHHA RELs
1,2,4 trimethlybenzene	95-63-6		CA NLs IRIS Neurotoxicants
Solvent naphtha (petroleum), heavy arom.	64742-94-5	solvents	
1,3,5-trimethylbenzene	108-67-8		CA NLs IRIS Neurotoxicants

Name of substance	CAS No	Functionality	Authoritative Lists
Ethylbenzene	100-41-4	fuel additive	ATSDR Neurotoxicants CA MCLs CA TACs CDC 4th National Exposure Report CWA 303(c) CWA 303(d) IARC Carcinogens - 2B OEHHA RELs Prop 65

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
Ethylbenzene	100-41-4				0.1 %
1,2,4 trimethlybenzene	95-63-6				1.0 %
Naphthalene	91-20-3				0.1 %
Tricarbonyl(methylcyclopentadienyl)manganese		1027			1.0 %

- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
1,2,4 trimethlybenzene	25551-13-7	A	
Naphthalene	91-20-3	A, O	
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	A	skin
1,3,5-trimethylbenzene	25551-13-7	A	

Legend

A	American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
O	Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division
skin	If a potential for absorption from skin contact merits special consideration, the word "skin" follows the substance name.

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
Ethylbenzene	100-41-4		CA F3
Kerosene	8008-20-6		F2
1,2,4 trimethlybenzene	95-63-6		F2
Naphthalene	91-20-3		CA F2
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3		F2
Tricarbonyl(methylcyclopentadienyl)manganese			
1,3,5-trimethylbenzene	25551-13-7		F2

Legend

CA	Carcinogenic
F2	Flammable - Second Degree
F3	Flammable - Third Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name of substance	CAS No	Classification
Ethylbenzene	100-41-4	E
Kerosene	8008-20-6	
1,2,4 trimethlybenzene	95-63-6	E
Naphthalene	91-20-3	E
2-ethylhexan-1-ol	104-76-7	
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	E
Tricarbonyl(methylcyclopentadienyl)manganese	7439-96-5	*, E
1,3,5-trimethylbenzene	25551-13-7	

Legend

*	Any compound of this substance is also an environmental hazard
E	Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
Ethylbenzene	100-41-4	T, F
Kerosene	8008-20-6	F
1,2,4 trimethlybenzene	25551-13-7	T
Naphthalene	91-20-3	T, F
Tricarbonyl(methylcyclopentadienyl)manganese	12108-13-3	T
1,3,5-trimethylbenzene	25551-13-7	T

Legend
F Flammability (NFPA®)
T Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals

Name acc. to inventory	CAS No	Remarks	Type of the toxicity
naphthalene	91-20-3		cancer

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	4	material that, under emergency conditions, can be lethal
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National regulations (Canada)

Domestic Substances List (DSL)

All ingredients are listed.

National inventories

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.3	Statement of Hazardous Nature: This product is classified as: Not classified as hazardous according to the criteria of SWA Australia. Not a Dangerous according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria. SUSMP Classification: None allocated. ADG Classification: None allocated. Not a Dangerous Good.	Other hazards	yes
2.3	Additional information: HSNO Approval: HSR002530, Cleaning Products (Subsidiary Hazard) Group Standard 2017. New Zealand Hazchem Code: NA Uses: cleaner for headlight restoration- part of Armor All Headlight Restorer Kit This product has been approved under the Hazardous Substances and New Organism Act (HSNO, Approval HSR002530, Cleaning Products (Subsidiary Hazard) Group Standard 2017, and is classified as follows: Classes: 6.3B .		yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK): change in the listing (table)	yes
15.1		Toxic or Hazardous Substance List (MA-TURA): change in the listing (table)	yes
15.1		Hazardous Substance List (NJ-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (Chapter 323) (PA-RTK): change in the listing (table)	yes

STP - Octane Booster

Version number: GHS 4.1
Replaces version of: 2020-01-08 (GHS 3)

Revision: 2020-01-19

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relev-ant
15.1		Hazardous Substance List (RI-RTK): change in the listing (table)	yes
15.1	VOC content: Regulated Volatile Organic Compounds (VOC-EPA): 89.86 % Regulated Volatile Organic Compounds (VOC-Cal ARB): 89.86 %		yes
16		Abbreviations and acronyms: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
"BC Regulation"	OHS Regulation: Section 5.48 (British Columbia)
ACGIH®	American Conference of Governmental Industrial Hygienists
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye

STP - Octane Booster

Abbr.	Descriptions of used abbreviations
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LHS	Lower hazard substance
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
MoL	Ministry of Labor: Current Occupational Exposure Limits for Ontario Workplaces Required under Regulation 833
NFPA®	National Fire Protection Association (United States)
NLP	No-Longer Polymer
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OHS Code	Occupational Health and Safety Code: Occupational exposure limits for chemical substances (Alberta)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Regulation OHS	Regulation respecting occupational health and safety: Permissible exposure values for airborne contaminants (Quebec)
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Hazardous Products Regulations (HPR).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H224	Extremely flammable liquid and vapour.
H226	Flammable liquid and vapour.
H227	Combustible liquid.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H371	May cause damage to organs (respiratory system, blood).
H373	May cause damage to organs (blood, nervous system, eye) through prolonged or repeated exposure.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.