

TKO 2000

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 07/10/2017

Revision date: 07/10/2017

Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : TKO 2000
Product code : 835

1.2. Recommended use and restrictions on use

Recommended uses and restrictions : Gasoline Additive

1.3. Supplier

Kleen-Flo Tumbler ind. Ltd.
75 Advance Boulevard
L6T 4N1 Brampton - CANADA
T 905-793-4311

1.4. Emergency telephone number

Emergency number : CANUTEC (613) 996-6666

Guidelines for SDS Use: The product described in this SDS is a consumer product. It is safe for use by consumers as described on the product label under normal foreseeable conditions. This SDS is designed to provide additional valuable safety and handling information.

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS-CA)

Flam. Liq. 3 H226
Acute Tox. 4 (Inhalation:vapour) H332
Skin Irrit. 2 H315
Eye Dam. 1 H318
Carc. 2 H351
Asp. Tox. 1 H304

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms (GHS-CA) :



Signal word (GHS-CA) : Danger

Hazard statements (GHS-CA) : H226 - Flammable liquid and vapour
H332 - Harmful if inhaled
H315 - Causes skin irritation
H318 - Causes serious eye damage
H351 - Suspected of causing cancer
H304 - May be fatal if swallowed and enters airways

Precautionary statements (GHS-CA) : P201 - Obtain special instructions before use
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
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take action to prevent static discharges
P261 - Avoid breathing dust, fume, gas, mist, spray, vapours
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P308+P313 - IF exposed or concerned: Get medical advice/attention
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P331 - Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
P363 - Wash contaminated clothing before reuse

TKO 2000

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

P332+P313 - If skin irritation occurs: Get medical advice/attention
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - 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

No additional information available

2.4. Unknown acute toxicity (GHS-CA)

91.23% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Stoddard solvent	(CAS-No.) 8052-41-3	80-100
Petroleum distillates, hydrotreated light	(CAS-No.) 64742-47-8	5-10
Poly[oxy(1,2-propanediyl)], .alpha.-(3-aminopropyl)-.omega.-hydroxy-, C12-15 alkyl ethers	(CAS-No.) Not available	5-10
Solvent naphtha, petroleum, heavy aromatic	(CAS-No.) 64742-94-5	3-7
Distillates, petroleum, hydrotreated light naphthenic	(CAS-No.) 64742-53-6	1-5
Distillates, petroleum, hydrotreated middle	(CAS-No.) 64742-46-7	1-5

Hazardous constituents of Stoddard Solvent

Benzene, 1,2,4-trimethyl-	(CAS-No.) 95-63-6	4.87
Nonane	(CAS-No.) 111-84-2	4.07
Naphthalene	(CAS No) 91-20-3	1.21
Ethylbenzene	(CAS No) 100-41-4	0.41

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash clothing before re-using. Get medical attention if irritation develops and persists.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

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

Symptoms/effects after inhalation	: Harmful if inhaled. May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	: Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
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TKO 2000

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use water jet.

5.3. Specific hazards arising from the hazardous product

Fire hazard : Flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon.

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

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition.

6.2. Methods and materials for containment and cleaning up

For containment : Stop leak if safe to do so. Eliminate every possible source of ignition. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Take precautionary measures against static discharge. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

7.2. Conditions for safe storage, including any incompatibilities

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

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Keep away from sources of ignition.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Stoddard solvent (8052-41-3)

USA - ACGIH	ACGIH TWA (ppm)	100 ppm
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Nonane (111-84-2)

USA - ACGIH	ACGIH TWA (ppm)	200 ppm
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Naphthalene (91-20-3)

USA - ACGIH	ACGIH TWA (ppm)	10 ppm
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Ethylbenzene (100-41-4)

USA - ACGIH	ACGIH TWA (ppm)	20 ppm
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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:

Wear suitable gloves resistant to chemical penetration

TKO 2000

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear
Colour	: Light amber
Odour	: Strong, Solvent
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 158 - 195 °C
Flash point	: 39 °C TCC
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable liquid and vapour
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative density	: 0.798 - 0.804
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Viscosity, kinematic	: 2 cSt
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	: No dangerous reactions known under normal conditions of use.
Chemical stability	: Stable under normal conditions. May form flammable/explosive vapour-air mixture.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Heat. Sources of ignition. Direct sunlight. Incompatible materials.
Incompatible materials	: Strong oxidizing agents.
Hazardous decomposition products	: May include, and are not limited to: oxides of carbon. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

ATE CA (vapours)	19.9959151602 mg/l/4h
Unknown acute toxicity (GHS-CA)	91.23% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

TKO 2000

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5.2 mg/l/4h
Benzene, 1,2,4-trimethyl- (95-63-6)	
LD50 oral rat	3280 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat	18 g/m ³ (Exposure time: 4 h)
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2 ml/kg
LC50 inhalation rat	> 590 mg/m ³ (Exposure time: 4 h)
Nonane (111-84-2)	
LC50 inhalation rat	3200 ppm/4h
Distillates, petroleum, hydrotreated light naphthenic (64742-53-6)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	2180 mg/m ³ (Exposure time: 4 h)
Distillates, petroleum, hydrotreated middle (64742-46-7)	
LD50 oral rat	7400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	4.6 mg/l/4h
Naphthalene (91-20-3)	
LD50 oral rat	1110 mg/kg
LD50 dermal rabbit	1120 mg/kg
LC50 inhalation rat	> 340 mg/m ³ (Exposure time: 1 h)
Ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	15400 mg/kg
LC50 inhalation rat	17.4 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.
STOT-repeated exposure	: Not classified.
Aspiration hazard	: May be fatal if swallowed and enters airways.

TKO 2000	
Viscosity, kinematic (calculated value)	2 mm ² /s

Symptoms/effects after inhalation	: Harmful if inhaled. May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
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Petroleum distillates, hydrotreated light (64742-47-8)	
LC50 fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

TKO 2000

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Petroleum distillates, hydrotreated light (64742-47-8)	
LC50 fish 2	2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
Benzene, 1,2,4-trimethyl- (95-63-6)	
LC50 fish 1	7.19 - 8.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
LC50 fish 1	19 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
LC50 fish 2	2.34 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	0.95 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Distillates, petroleum, hydrotreated light naphthenic (64742-53-6)	
LC50 fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Distillates, petroleum, hydrotreated middle (64742-46-7)	
LC50 fish 1	35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	> 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Naphthalene (91-20-3)	
LC50 fish 1	5.74 - 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 1	2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 2	1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])
Ethylbenzene (100-41-4)	
LC50 fish 1	11.0 - 18.0 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
LC50 fish 2	4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
EC50 Daphnia 1	1.8 - 2.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)
12.2. Persistence and degradability	
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Persistence and degradability	Not established.
12.3. Bioaccumulative potential	
TKO 2000	
Bioaccumulative potential	Not established.
Petroleum distillates, hydrotreated light (64742-47-8)	
BCF fish 1	61 - 159
Benzene, 1,2,4-trimethyl- (95-63-6)	
Partition coefficient n-octanol/water	3.63
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
BCF fish 1	61 - 159
Partition coefficient n-octanol/water	2.9 - 6.1
Naphthalene (91-20-3)	
BCF fish 1	30 - 430
Partition coefficient n-octanol/water	3.6
Ethylbenzene (100-41-4)	
BCF fish 1	15
Partition coefficient n-octanol/water	3.2
12.4. Mobility in soil	
Benzene, 1,2,4-trimethyl- (95-63-6)	
Partition coefficient n-octanol/water	3.63
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
Partition coefficient n-octanol/water	2.9 - 6.1
Naphthalene (91-20-3)	
Partition coefficient n-octanol/water	3.6
Ethylbenzene (100-41-4)	
Partition coefficient n-octanol/water	3.2

TKO 2000

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. The generation of waste should be avoided or minimized wherever possible.

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

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods

Not regulated for transport. Exempted under TDG section 1.33.

14.2. Transport information/DOT

No additional information available

14.3. Air and sea transport

No additional information available

SECTION 15: Regulatory information

15.1. National regulations

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories

15.2. International regulations

No additional information available

SECTION 16: Other information

Date of issue : 07/10/2017

Revision date : 07/10/2017

Other information : None.

Prepared by : Kleen-Flo Tumbler Ind. Ltd.

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