



## Safety Data Sheet

Prepared according to GHS

### 1. Identification

**Product Name** Automatic Transmission Fluid – Type F - Red  
**Product Code(s)** 7422  
**Recommended Use** Automatic Transmission Fluid  
**Company** American Refining Group, Inc.  
77 North Kendall Avenue  
Bradford, PA 16701  
www.amref.com  
msds@amref.com  
**Emergency Telephone Number(s)** Chemtrec 1-800-424-9300 (24 HRS)  
ARG: 814-368-1297 (24 HRS)  
**Revision Date** 4/1/2015

### 2. Hazards Identification

**GHS Classification** This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
**Signal Word** Not applicable  
**Hazard Statements** Not applicable  
**Other Hazard Information** Not applicable  
**GHS Pictogram** Not applicable  
**Precautionary Statements** Not applicable

### 3. Composition / Information on Ingredients

CAS No.	Component	Common Name	Percent
<i>This product does not contain ingredients that are hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)</i>			

### 4. First Aid Measures

**Eyes** Check for and remove any contact lenses. Flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Get medical attention if irritation develops.

**Skin** In case of contact, flush skin with plenty of soap and water while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops.

**Inhalation** Move exposed person to fresh air. Get medical attention if irritation develops.

**Ingestion** First aid is normally not required. Get medical attention if discomfort develops.

**Note to Physicians** No specific treatment. Treat symptomatically. Contact poison

#### 4. First Aid Measures

treatment specialist if large quantities have been ingested or inhaled.

#### 5. Fire Fighting Measures

##### Suitable Extinguishing Media

Use dry chemical, CO<sub>2</sub>, water spray (FOG) or foam

##### Unsuitable Extinguishing Media

Avoid solid water stream as it may scatter and spread fire.

##### Specific Hazards Arising from Chemical

Elevated temperatures can lead to the formation of irritating vapors. Decomposing products may include the following materials: Carbon dioxide and Carbon monoxide.

##### Protective Equipment and Precautions for Firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### 6. Accidental Release Measures

##### Personal Precautions

Put on appropriate personal protective equipment.

##### Environmental Precautions

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

##### Methods for Containment

Stop leak if without risk.

##### Methods for Cleanup

Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled container

#### 7. Handling and Storage

##### Handling Procedures

Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist.

##### Shipping and Storing Procedures

Keep container tightly closed in a dry place. Keep away from heat. Protect from light. Keep in properly labeled containers. Keep out of the reach of children.

##### Incompatibilities:

Oxidizing Agents

#### 8. Exposure Controls / Personal Protection

##### Component Exposure Limits\*

When mists/aerosols can occur the following are recommended: 5 mg/m<sup>3</sup> - ACGIH TLV (inhalable fraction), 5 mg/m<sup>3</sup> - OSHA PEL.

\*Product has 0 kPa pressure at 68°F and is not expected to present any inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. Oil mist, if generated, is considered hazardous according to the OSHA Hazard Communication Standard.

##### Engineering Controls

Material should be handled in enclosed vessels and equipment only if aerosolized and/or misted. Use only in adequate ventilation if this occurs. Use process enclosures, local exhaust ventilation or other

**8. Exposure Controls / Personal Protection**

engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Eye/Face Protection** Safety glasses

**Skin Protection** Normal work gloves are appropriate

**Respiratory Protection** No special requirements under ordinary conditions of use and with adequate ventilation.

**General Hygiene** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

**9. Physical and Chemical Properties**

*Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Please see the Product Specification Sheet for further information.*

<b>Appearance</b>	Red	<b>Flammability</b>	Not available
<b>Physical State</b>	Liquid	<b>Upper/Lower Flammability Limits</b>	Not available
<b>Odor</b>	Mild	<b>Vapor Pressure (kPa at 20°C)</b>	0
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	Not available
<b>pH</b>	Not available	<b>Relative Density (lbs/gal)</b>	7.2
<b>Melting/Freezing Point (°F)</b>	Not available	<b>Water Soluble</b>	No
<b>Initial Boiling Point (°F)</b>	Not available	<b>Partition Coefficient: n-octanol/water</b>	Not available
<b>Boiling Range (°F)</b>	Not available	<b>Auto-ignition Temperature (°F)</b>	Not available
<b>Flash Point (°F)</b>	380	<b>Decomposition Temperature (°F)</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Viscosity (40°C mm<sup>2</sup>/s)</b>	39.5

**10. Chemical Stability & Reactivity Information**

**Reactivity** Polymerization will not occur

**Chemical Stability** Stable under normal conditions

**Hazardous Reactions** None, under normal processing.

**Conditions to Avoid** High temperatures

**Incompatibility** Strong acids and oxidizing materials

**Hazardous Decomposition Products** Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

**11. Toxicological Information**

**Acute Exposure**

**Respiratory Irritation** Not expected to pose respiratory irritation. An inhalation hazard may only arise if product is aerosolized or if heated up. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes

**11. Toxicological Information**

	and upper respiratory tract. Based on data from similar materials.
Eye Irritation	Not expected to cause irritation under normal use.
Skin Irritation	Not expected to cause irritation under normal use.
Sensitization	Not expected to cause skin or respiratory sensitization.
Aspiration Hazards	Not expected to pose an aspiration hazard if swallowed.
<b>Chronic Exposure</b>	
Target Organ Effects	No data available to indicate product or components at greater than 1% are chronic health hazards.
Carcinogenicity	No data available to indicate product or any components present at greater than .1% are carcinogenic.
Mutagenicity	No data available to indicate product or any components present at greater than .1% are mutagenic or genotoxic.
Reproductive Toxicity	No data available to indicate either product or components present at greater than .1% that may cause reproductive toxicity.
Teratogenicity	No data available to indicate product or any components contained at greater than .1% may cause birth defects.

**Component Analysis – LD50 / LC50**

Inhalation LC50 Rat	>20 mg/L 4h
Oral LD50 Rat	>5000 mg/kg
Dermal LD50 Rabbit	>2000 mg/kg

**12. Ecological Information**

**Component Analysis- Ecotoxicity – Aquatic Life**

Duration/Test/Species	Concentration/Conditions
96 Hr LC50 Pimephales promelas	Not available mg/L

Persistence & Degradability	Not determined
Bioaccumulation Potential	Not determined
Soil Mobility	Not determined
Other Adverse Effects	Not determined

**13. Disposal Considerations**

**Disposal Instructions**

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

**14. Transportation Information**

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<b>Emergency Response Guide No.</b>		171	<i>North American Emergency Response Guide Book</i>	
	<b>UN Number</b>	<b>Shipping Name (technical name)</b>	<b>Hazard Class</b>	<b>Packing Group</b>
<b>U.S. DOT Bulk</b>		Not Regulated		
<b>U.S. DOT Non-Bulk</b>		Not Regulated		
<b>IATA</b>		Not Regulated		
<b>IMDG</b>		Not Regulated		

**15. Regulatory Information****SARA Extremely Hazardous Substances (Sections 302 & 304)**

This product does not contain greater than 1% of any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA Section 313**

This product does not contain greater than 1.0% of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**SARA Section 311 & 312 Classifications**

**Acute Hazard** No  
**Chronic Hazard** No  
**Fire Hazard** No  
**Reactivity Hazard** No

**CERCLA**

This product does not contain any “hazardous substances” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

**California Prop 65**

This product is not routinely tested to determine chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components.

**Global Chemical Inventories**

<b>Inventory</b>	
US TSCA	Listed
EU	Listed
Japan	Not available
Australia	Listed
New Zealand	Not available
Canada	Listed
Switzerland	Not available
Korea	Listed
Philippines	Listed
China	Listed
Taiwan	Not available

**16. Other Information**

**16. Other Information**

**US NFPA Ratings**

Health	Fire	Reactivity
0	1	0

**HMIS Ratings**

Health	Fire	Physical Hazards
0	1	0

**Revision Date**

12 May 2015

**Revision Reason**

New SDS

*The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.*

**End of SDS**

# SAFETY DATA SHEET

TruFuel 50:1 Mix



## Section 1. Identification

**GHS product identifier** : TruFuel 50:1 Mix  
**Product code** : 0125600  
**Other means of identification** : Not available.  
**Product type** : Liquid.

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

Identified uses	
Consumer products: Fuel. Industrial applications: Fuel.	
Uses advised against	Reason
Not available.	

**Supplier's details** : Calumet Packaging  
10411 Highway 1  
Shreveport, LA 71115 USA  
318-795-3800

**Emergency telephone number (with hours of operation)** : 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 1  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 1B  
TOXIC TO REPRODUCTION (Fertility) - Category 2  
TOXIC TO REPRODUCTION (Unborn child) - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
AQUATIC HAZARD (ACUTE) - Category 3  
AQUATIC HAZARD (LONG-TERM) - Category 3  
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 11.8%

### GHS label elements

**Hazard pictograms** :   

**Signal word** : Danger

## Section 2. Hazards identification

- Hazard statements** :
- Extremely flammable liquid and vapor.
  - Causes serious eye irritation.
  - Causes skin irritation.
  - May cause cancer.
  - Suspected of damaging fertility or the unborn child.
  - May be fatal if swallowed and enters airways.
  - May cause drowsiness and dizziness.
  - May cause damage to organs through prolonged or repeated exposure.
  - Harmful to aquatic life with long lasting effects.

### Precautionary statements

- General** :
- Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** :
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Wash hands thoroughly after handling.
- Response** :
- Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** :
- Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** :
- Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** :
- Avoid contact with skin and clothing. Wash thoroughly after handling.
- Hazards not otherwise classified** :
- Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

### CAS number/other identifiers

- CAS number** : Not applicable.

Ingredient name	%	CAS number
Naphtha (petroleum), full-range alkylate, butane-contg.	≥50 - <75	68527-27-5
pentane	≥10 - <25	109-66-0
toluene	≥6 - <10	108-88-3
xylene	≥5 - <9.8	1330-20-7
ylbenzene	≥1 - <1.8	100-41-4
naphtha (petroleum), hydrotreated light	≥0.3 - <1	64742-49-0
Distillates (petroleum), sweetened middle	≥0.1 - <0.3	64741-86-2
n-hexane	≥0.1 - <0.3	110-54-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the**



## Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
- Skin contact** : Causes skin irritation. Defatting to the skin.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

## Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Extremely flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide

## Section 6. Accidental release measures

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Naphtha (petroleum), full-range alkylate, butane-contg.	<b>ACGIH TLV (United States).</b>
	TWA: 200 ppm 8 hours.
pentane	<b>ACGIH TLV (United States, 4/2014).</b>
	TWA: 1000 ppm 8 hours.
	<b>OSHA PEL (United States, 2/2013).</b>
	TWA: 1000 ppm 8 hours.
	TWA: 2950 mg/m <sup>3</sup> 8 hours.
	<b>OSHA PEL 1989 (United States, 3/1989).</b>
	TWA: 600 ppm 8 hours.
	TWA: 1800 mg/m <sup>3</sup> 8 hours.
	STEL: 750 ppm 15 minutes.
	STEL: 2250 mg/m <sup>3</sup> 15 minutes.
	<b>NIOSH REL (United States, 10/2013).</b>
	TWA: 120 ppm 10 hours.
	TWA: 350 mg/m <sup>3</sup> 10 hours.
	CEIL: 610 ppm 15 minutes.
	CEIL: 1800 mg/m <sup>3</sup> 15 minutes.
toluene	<b>ACGIH TLV (United States, 4/2014).</b>
	TWA: 20 ppm 8 hours.
	<b>OSHA PEL Z2 (United States, 2/2013).</b>
	TWA: 200 ppm 8 hours.
	CEIL: 300 ppm
	AMP: 500 ppm 10 minutes.
	<b>OSHA PEL 1989 (United States, 3/1989).</b>
	TWA: 100 ppm 8 hours.
	TWA: 375 mg/m <sup>3</sup> 8 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 560 mg/m <sup>3</sup> 15 minutes.
	<b>NIOSH REL (United States, 10/2013).</b>
	TWA: 100 ppm 10 hours.
	TWA: 375 mg/m <sup>3</sup> 10 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 560 mg/m <sup>3</sup> 15 minutes.
xylene	<b>ACGIH TLV (United States, 4/2014).</b>
	TWA: 100 ppm 8 hours.
	TWA: 434 mg/m <sup>3</sup> 8 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 651 mg/m <sup>3</sup> 15 minutes.
	<b>OSHA PEL (United States, 2/2013).</b>
	TWA: 100 ppm 8 hours.
	TWA: 435 mg/m <sup>3</sup> 8 hours.
	<b>OSHA PEL 1989 (United States, 3/1989).</b>
	TWA: 100 ppm 8 hours.
	TWA: 435 mg/m <sup>3</sup> 8 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 655 mg/m <sup>3</sup> 15 minutes.
	<b>ACGIH TLV (United States, 4/2014).</b>
	TWA: 20 ppm 8 hours.
	<b>OSHA PEL (United States, 2/2013).</b>
	TWA: 100 ppm 8 hours.
	TWA: 435 mg/m <sup>3</sup> 8 hours.
	<b>OSHA PEL 1989 (United States, 3/1989).</b>
	TWA: 100 ppm 8 hours.
	TWA: 435 mg/m <sup>3</sup> 8 hours.
	STEL: 125 ppm 15 minutes.
	STEL: 545 mg/m <sup>3</sup> 15 minutes.
	<b>NIOSH REL (United States, 10/2013).</b>

## Section 8. Exposure controls/personal protection

Naphtha (petroleum), hydrotreated light

Distillates (petroleum), sweetened middle

n-hexane

TWA: 435 mg/m<sup>3</sup> 10 hours.  
 STEL: 125 ppm 15 minutes.  
 STEL: 545 mg/m<sup>3</sup> 15 minutes.

**OSHA PEL (United States).**

TWA: 500 ppm 8 hours.  
 TWA: 1800 mg/m<sup>3</sup> 8 hours.

**ACGIH TLV (United States).**

TWA: 50 ppm 8 hours.

**ACGIH TLV (United States).**

TWA: 200 ppm 8 hours.

**ACGIH TLV (United States, 4/2014).**

**Absorbed through skin.**

TWA: 50 ppm 8 hours.

**OSHA PEL (United States, 2/2013).**

TWA: 500 ppm 8 hours.

TWA: 1800 mg/m<sup>3</sup> 8 hours.

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 50 ppm 8 hours.

TWA: 180 mg/m<sup>3</sup> 8 hours.

**NIOSH REL (United States, 10/2013).**

TWA: 50 ppm 10 hours.

TWA: 180 mg/m<sup>3</sup> 10 hours.

### Appropriate engineering controls

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### Skin protection

##### Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

##### Body protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

##### Other skin protection

- : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a

## Section 8. Exposure controls/personal protection

- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Mobile liquid.]
- Color** : Red.
- Odor** : Characteristic. Hydrocarbon.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : 34.444 to 190.56°C (94 to 375°F)
- Flash point** : Closed cup: -40°C (-40°F) [Tagliabue.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.72
- Solubility** : Insoluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <0.01 cm<sup>2</sup>/s (<1 cSt)

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Incompatible materials** : Reactive or incompatible with the following materials:  
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum), full-range alkylate, butane-contg. pentane toluene	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	364 g/m <sup>3</sup>	4 hours
	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	636 mg/kg	-
xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
ethylbenzene	LC50 Inhalation Gas.	Rat	4000 ppm	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Naphtha (petroleum), hydrotreated light	LC50 Inhalation Vapor	Rat	>5.2 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), sweetened middle	LC50 Inhalation Dusts and mists	Rat	4.6 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
n-hexane	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
	LD50 Oral	Rat	15840 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Eyes - Severe irritant	Rabbit	-	870 Micrograms	-
	Skin - Mild irritant	Pig	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 250 microliters	-
	Skin - Moderate irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
xylene	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
ethylbenzene	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
Naphtha (petroleum), hydrotreated light	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
	Eyes - Mild irritant	Rabbit	-	10 milligrams	-
n-hexane	Eyes - Mild irritant	Rabbit	-	10 milligrams	-

#### Sensitization

Not available.

## Section 11. Toxicological information

Not available.

### Carcinogenicity

Not available.

**Conclusion/Summary** : Animal tumorigen. May cause tumors.

### Classification

Product/ingredient name	OSHA	IARC	NTP
toluene	-	3	-
xylene	-	3	-
ethylbenzene	-	2B	-

### Reproductive toxicity

Not available.

**Conclusion/Summary** : Reproductive toxicant - female Suspected of damaging the unborn child if inhaled.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Naphtha (petroleum), full-range alkylate, butane-contg. pentane toluene	Category 3 Category 3 Category 3	Not applicable. Not applicable. Not applicable.	Narcotic effects Narcotic effects Respiratory tract irritation and Narcotic effects
xylene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
ethylbenzene Naphtha (petroleum), hydrotreated light n-hexane	Category 3 Category 3 Category 3	Not applicable. Not applicable. Not applicable.	Narcotic effects Narcotic effects Respiratory tract irritation and Narcotic effects

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
toluene ethylbenzene Distillates (petroleum), sweetened middle n-hexane	Category 2 Category 2 Category 2 Category 2	Not determined Not determined Not determined Not determined	kidneys and liver ears blood system, liver and thymus peripheral nervous system

### Aspiration hazard

Name	Result
Naphtha (petroleum), full-range alkylate, butane-contg. pentane toluene xylene ethylbenzene Naphtha (petroleum), hydrotreated light Distillates (petroleum), sweetened middle n-hexane	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

**Information on the likely** : Not available.



## Section 11. Toxicological information

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
- Skin contact** : Causes skin irritation. Defatting to the skin.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness
- Inhalation** : Adverse symptoms may include the following:
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
  - irritation
  - redness
  - dryness
  - cracking
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
  - nausea or vomiting
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : Suspected of damaging the unborn child.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : Suspected of damaging fertility.

## Section 11. Toxicological information

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	5728.6 mg/kg
Dermal	11934.8 mg/kg
Inhalation (gases)	44920.8 ppm

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
xylene	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
ethylbenzene	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
Naphtha (petroleum), hydrotreated light	Acute EC50 6530 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 2930 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Distillates (petroleum), sweetened middle	Acute EC50 1 to 10 mg/l	Algae	72 hours
	Acute EC50 1 to 10 mg/l	Daphnia	48 hours
	Acute LC50 1 to 10 mg/l	Fish	96 hours
n-hexane	Chronic EC50 2 to 100 mg/l	Algae	72 hours
	Acute LC50 2500 µg/l Fresh water	Crustaceans	48 hours
		Fish - Pimephales promelas	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene	301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	70 to 80 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
toluene	-	-	Readily
xylene	-	-	Readily
ethylbenzene	-	-	Readily
Naphtha (petroleum), hydrotreated light	-	-	Inherent
Distillates (petroleum),	-	-	Not readily

## Section 12. Ecological information

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Naphtha (petroleum), full-range alkylate, butane-contg.	-	10 to 2500	high
pentane	3.45	171	low
toluene	2.73	90	low
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
Naphtha (petroleum), hydrotreated light	2.2 to 5.2	10 to 2500	high
Distillates (petroleum), sweetened middle	≥4	-	high
n-hexane	4	501.187	high

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations





**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification : D001 [Flammable]

### United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Xylene	1330-20-7	Listed	U239
Toluene; Benzene, methyl-	108-88-3	Listed	U220

## Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1203	UN1203	UN1203	UN1203
Proper shipping name	Gasoline	Gasoline	GASOLINE	Gasoline
Transport hazard class(es)	3 	3 	3 	3 

## Section 14. Transport information

Packing group	II	I	II	II
<b>Environmental hazards</b>	No.	No.	No.	No.
<b>Additional information</b>	<p><b>Limited quantity</b> Yes.</p> <p><b>Packaging instruction</b> <b>Passenger aircraft</b> Quantity limitation: 5 L</p> <p><b>Cargo aircraft</b> Quantity limitation: 60 L</p> <p><b>Special provisions</b> 144, 177, B1, B33, IB2, T8</p> <p><b>Remarks</b> May be classed as a Consumer Commodity, ORM-D for Small Packages, see 49CFR 173.150</p>	-	<p><b>Emergency schedules (EmS)</b> F-E, S-E</p> <p><b>Special provisions</b> 243</p>	<p><b>Passenger and Cargo Aircraft</b> Quantity limitation: 5 L Packaging instructions: 353</p> <p><b>Cargo Aircraft Only</b> Quantity limitation: 60 L Packaging instructions: 364</p> <p><b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 1 L Packaging instructions: Y341</p> <p><b>Special provisions</b> A100</p>

**Special precautions for user** : **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

- U.S. Federal regulations** : TSCA 8(a) PAIR: pentane  
TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
All components are listed or exempted.  
Clean Water Act (CWA) 307: ethylbenzene; toluene  
Clean Water Act (CWA) 311: xylene; ethylbenzene; toluene  
Clean Air Act (CAA) 112 regulated flammable substances: isopentane; pentane
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Listed
- SARA 302/304**
- Composition/information on ingredients**

## Section 15. Regulatory information

**SARA 304 RQ** : Not applicable.

**ARA 311/312**

**Classification** : Fire hazard  
 Immediate (acute) health hazard  
 Delayed (chronic) health hazard

**Composition/information on ingredients**

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Naphtha (petroleum), full-range alkylate, butane-contg.	≥50 - <75	Yes.	No.	No.	Yes.	No.
pentane	≥10 - <25	Yes.	No.	No.	Yes.	No.
toluene	≥6 - <10	Yes.	No.	No.	Yes.	Yes.
xylene	≥5 - <9.8	Yes.	No.	No.	Yes.	Yes.
ethylbenzene	≥1 - <1.8	Yes.	No.	No.	Yes.	Yes.
Naphtha (petroleum), hydrotreated light	≥0.3 - <1	Yes.	No.	No.	Yes.	Yes.
Distillates (petroleum), sweetened middle	≥0.1 - <0.3	Yes.	No.	No.	Yes.	Yes.
n-hexane	≥0.1 - <0.3	Yes.	No.	No.	Yes.	Yes.

**SARA 313**

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	toluene	108-88-3	≥6 - <10
	xylene	1330-20-7	≥5 - <9.8
	ethylbenzene	100-41-4	≥1 - <1.8
<b>Supplier notification</b>	toluene	108-88-3	≥6 - <10
	xylene	1330-20-7	≥5 - <9.8
	ethylbenzene	100-41-4	≥1 - <1.8

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**State regulations**

- Massachusetts** : The following components are listed: XYLENE; ETHYL BENZENE; TOLUENE; ISOPENTANE; PENTANE
- New York** : The following components are listed: Xylene (mixed); Ethylbenzene; Toluene
- New Jersey** : The following components are listed: XYLENES; BENZENE, DIMETHYL-; ETHYL BENZENE; BENZENE, ETHYL-; TOLUENE; BENZENE, METHYL-; ISOPENTANE; BUTANE, 2-METHYL-; PENTANE
- Pennsylvania** : The following components are listed: BENZENE, DIMETHYL-; BENZENE, ETHYL-; BENZENE, METHYL-; BUTANE, 2-METHYL-; PENTANE

**California Prop. 65**

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
toluene	No.	Yes.	No.	7000 µg/day (ingestion)
ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.

**International lists**

**National inventory**

## Section 15. Regulatory information

Canada	: All components are listed or exempted.
China	: Not determined.
Europe	: All components are listed or exempted.
Japan	: Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
Flam. Liq. 1, H224	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2A, H319	Calculation method
Carc. 1B, H350	Calculation method
Repr. 2, H361 (Fertility)	Calculation method
Repr. 2, H361 (Unborn child)	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
Asp. Tox. 1, H304	Calculation method
Aquatic Acute 3, H402	Calculation method
Aquatic Chronic 3, H412	Calculation method

### History

**Date of issue/Date of revision** : 04/02/2015

**Version** : 0.02

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

☑ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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## 1. Product and Company Identification

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Product Name : TSP  
Product Code : 620N  
Recommended Use: Cleaner

### Company Identification:

SAVOGRAN  
259 LENOX STREET  
PO BOX 130  
NORWOOD, MA 02062-0130  
Information Phone: 781-762-5400  
Emergency Phone: 800-424-9300  
Website Address: [www.savogran.com](http://www.savogran.com)

Synonyms: 10621,10622,10623,11625

## 2. Hazards Identification

---

### Classification:

Skin irritation: Category 2/Serious eye irritation: Category 2A



### Label Hazard Statement and Precautionary Statements:

WARNING; Harmful if swallowed. Eye and skin irritant. May cause burns. Do not breathe dust or mist. Wash skin thoroughly after handling. Wear protective gloves and eye protection.

### Potential Health Effects:

#### Eye:

Eye contact can cause severe irritation, redness, tearing, blurred vision and may cause transient injury to cornea.

#### Skin:

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying, and cracking of skin, and skin burns.

#### Ingestion:

May cause irritation, burns to mouth and esophagus, Aspiration of the swallowed or vomited product can cause severe pulmonary complications.

#### Inhalation:

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Inhalation of dust can cause nasal and respiratory irritation.

Chronic Overexposure Information:

NO DATA

Teratology and Reproduction Information:

NO DATA

Aggravation of Pre-Existing Conditions:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

OSHA Hazard Communication Standard:

This product is defined as hazardous by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### 3. Composition/Information on Ingredients

Component	CAS#	% by Wt.
TRISODIUM PHOSPHATE DODECAHYDRATE EXPOSURE GUIDELINES NOT LISTED	10101-89-0	75% - 80%
SODIUM SESQUICARBONATE EXPOSURE GUIDELINES NOT LISTED	533-96-0	20% - 25%

### 4. First Aid Measures

Eyes:

Flood with plenty of water with eye lids held open for at least 15 minutes and get medical attention promptly.

Skin:

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion:

Do NOT induce vomiting. If conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention.

Note to Physicians:

Treat symptomatically. No specific antidote available.

### 5. Fire Fighting Measures

Flammable Properties:

None

Hazardous Combustion Products:



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Oxides of sodium and oxides of phosphorus.

**Extinguishing Media:**

Not combustible. Use extinguishing method suitable for surrounding fire.

**Firefighting Procedures:**

Solutions in water are moderately to strong alkaline. Wear full protective clothing.

---

## 6. Accidental Release Measures

**Small Spill:**

Wipe or scrape up any material. Wash area thoroughly with detergent and water; ventilate adequately with good fresh air movement at floor level.

**Large Spill:**

Wipe or scrape up any material. Wash area thoroughly with detergent and water; ventilate adequately with good fresh air movement at floor level.

**Environmental Precautions:**

Do not release into sewers or waterways.

**Methods/Materials for Containment and Cleaning Up:**

Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

---

## 7. Handling and Storage

**Handling:**

Avoid direct or prolonged contact with skin and eyes. Avoid breathing dusts. Do not ingest.

**Storage:**

Store in an area that is cool and dry. Moisture can cause caking.

---

## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:** See Section 3

**Engineering Controls:**

When a potential for excessive exposure exists, use local ventilation at the point of generation.

**Personal Protective Equipment:**

**Respiratory Protection:**

Wear NIOSH/MSHA approved dust respirator, if dust is formed.

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Skin Protection:  
Use dust proof gloves.

Eye Protection:  
Use dust proof goggles if dust is irritating eyes.

## 9. Physical and Chemical Properties

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Boiling Point: NA  
Melting Point: NO DATA  
Freezing Point: NO DATA  
Vapor Pressure: NA  
Vapor Density: NA  
Solubility in Water: MODERATE  
Evaporation Rate: NA  
Flash Point: NA Method: NO DATA  
Lower explosive limit: NO DATA  
Upper explosive limit: NO DATA  
Autoignition Temperature: NO DATA  
Specific Gravity: 1.035  
pH (1% in H<sub>2</sub>O): 11-12  
Color: None  
Appearance: White crystalline solid

## 10. Stability and Reactivity

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Chemical Stability (Conditions to Avoid): Stable

Incompatibility:  
Solutions in water are highly alkaline and may produce hydrogen gas when in contact with aluminum. Will react with acids to form carbon dioxide.

Hazardous Decomposition Products:  
Oxides of sodium and oxides of phosphorus.

Hazardous Polymerization: Will not occur.

## 11. Toxicological Information

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Acute:  
This product has not been tested as a whole.

Subchronic:  
This product has not been tested as a whole.

Chronic/Carcinogenicity:  
Not listed by ACGIH, IARC, NIOSH, NTP or OSHA

Routes of Exposure:

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Inhalation, Ingestion

## 12. Ecological Information

Environmental Fate: While the alkalinity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems.

## 13. Disposal Considerations

Waste Disposal Method:

Small quantities may be deposited in general trash and residue flushed down drain with water. Large spills must be disposed of in accordance with local state and federal regulations.

## 14. Transport Information

Land Transport (DOT):

Not Regulated

## 15. Regulatory Information

U.S. Federal Regulations:

TSCA: CAS#10101-89-0 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)). CAS#7601-54-9 is listed on the TSCA inventory.

OSHA: The intentional regulated ingredients of this product are listed.

CERCLA: SARA Hazard Category: None

Section 313: Not Listed

Reportable Quantity: Product Component (Trisodium Phosphate Dodecahydrate-5000lb)

State Regulations: NO DATA

Volatile Organic Compounds: None

## 16. Other Information:

NFPA Ratings: 2,0,0

Manufacturer Disclaimer: Judgement of potential hazards of this product is based on information available about individual components listed under section 3 - Ingredients. Direct testing of mixture has not been done. Information given herein is believed to be accurate and is given in good faith. However, no warranty either expressed or implied is made. It is strongly suggested that users confirm in advance of need that the information is current and applicable to their situations.