

# SAFETY DATA SHEET

T77F32

### Section 1. Identification

Product name

: SHER-WOOD® Catalyzed Lacquer

Medium Rubbed Effect

Product code

: T77F32

: Liquid.

Other means of

: Not available.

identification

Product type

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

Paint or paint related material.

**Manufacturer** 

: THE SHERWIN-WILLIAMS COMPANY

101 W. Prospect Avenue Cleveland, OH 44115

National contact

: Sherwin-Williams Canada Inc.

180 Brunel Road

Mississauga, Ontario L4Z 1T5 Canada

**Emergency telephone** 

number of the company

: US / Canada: (216) 566-2917

Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

**Product Information** Mephone Number

: US / Canada: Not Available Mexico: Not Available

Regulatory Information

**Telephone Number** 

: US / Canada: (216) 566-2902

Mexico: Not Available

**Transportation Emergency** 

**Telephone Number** 

: US / Canada: (800) 424-9300

Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

## Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2

SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A

TOXIC TO REPRODUCTION (Unborn child) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 19.1% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 35.5% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 51.

1%

AS label elements

Hazard pictograms









#### Section 2. Hazards identification

Signal word

Hazard statements

: Danger

: Highly flammable liquid and vapor. Causes serious eye damage.

Causes skin irritation.

May cause an allergic skin reaction.

May cause cancer.

Suspected of damaging the unborn child. May be fatal if swallowed and enters airways.

May cause respiratory irritation.
May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. 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. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep 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. Wash contaminated clothing before reuse. If skin irritation or rash 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. Immediately call a POISON CENTER or physician.

Storage Disposal

: Store locked up. Store in a well-ventilated place. Keep cool.

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. Contains Formaldehyde - a potential cancer hazard. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified

DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

# Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

S number/other identifiers

# Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Isobutyl Acetate	19.03	110-19-0
-Butanol	12.4	71-36-3
Lt. Aliphatic Hydrocarbon Solvent	9.31	64742-89-8
n-Butyl Acetate	8.99	123-86-4
Ethanol	6.63	64-17-5
Cellulose Nitrate	5.7	9004-70-0
2-methoxy-1-methylethyl acetate	4.52	108-65-6
Toluene	4.03	108-88-3
2-Propanol	2.79	67-63-0
Rosin Ester	2.58	68038-41-5
Methyl n-Amyl Ketone	2.49	110-43-0
Xylene, mixed isomers	0.83	1330-20-7
Ethylbenzene	0.16	100-41-4
Formaldehyde (max.)	0.01 - 0.1	50-00-0

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 concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

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

#### Section 4. First aid measures

#### Description of necessary first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

hhalation

Get medical attention immediately. Call a poison center or physician. 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. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. 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. Chemical burns must be treated promptly by a physician. 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 damage.

#### Section 4. First aid measures

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness. May cause respiratory irritation.

**Skin contact**: Causes skin irritation. May cause an allergic skin reaction.

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 watering redness

**Inhalation**: Adverse symptoms may include the following:

respiratory tract irritation

coughing

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:

pain or irritation

redness

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion** : Adverse symptoms may include the following:

stomach pains 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

In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**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** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam. media

horritable autimorriables

nsuitable extinguishing : Do not use water jet.

media

## Section 5. Fire-fighting measures

#### Specific hazards arising from the chemical

#### : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

#### Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides

#### 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized 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 nonemergency 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).

#### 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

: Contains a formaldehyde-based resin which, under certain conditions of use, may release formaldehyde. Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas

# Section 7. Handling and storage

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.

# including any incompatibilities

Conditions for safe storage, : 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. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

#### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Isobutyl Acetate	NIOSH REL (United States, 10/2016).  TWA: 150 ppm 10 hours.  TWA: 700 mg/m³ 10 hours.  OSHA PEL (United States, 5/2018).  TWA: 150 ppm 8 hours.  TWA: 700 mg/m³ 8 hours.  ACGIH TLV (United States, 3/2018).  STEL: 150 ppm 15 minutes.  TWA: 50 ppm 8 hours.
1-Butanol	ACGIH TLV (United States, 3/2018).  TWA: 20 ppm 8 hours.  NIOSH REL (United States, 10/2016).  Absorbed through skin.  CEIL: 50 ppm  CEIL: 150 mg/m³  OSHA PEL (United States, 5/2018).  TWA: 100 ppm 8 hours.  TWA: 300 mg/m³ 8 hours.
Lt. Aliphatic Hydrocarbon Solvent n-Butyl Acetate	None.  NIOSH REL (United States, 10/2016).  TWA: 150 ppm 10 hours.  TWA: 710 mg/m³ 10 hours.  STEL: 200 ppm 15 minutes.  STEL: 950 mg/m³ 15 minutes.  OSHA PEL (United States, 5/2018).  TWA: 150 ppm 8 hours.  TWA: 710 mg/m³ 8 hours.  ACGIH TLV (United States, 3/2018).  STEL: 150 ppm 15 minutes.  TWA: 50 ppm 8 hours.
Ethanol	ACGIH TLV (United States, 3/2018). STEL: 1000 ppm 15 minutes. NIOSH REL (United States, 10/2016).

Cellulose Nitrate 2-methoxy-1-methylethyl acetate

Toluene

2-Propanol

Rosin Ester Methyl n-Amyl Ketone

Xylene, mixed isomers

Ethylbenzene

Formaldehyde (max.)

TWA: 1000 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. OSHA PEL (United States, 5/2018).

TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours.

None.

AIHA WEEL (United States, 7/2018).

TWA: 50 ppm 8 hours.

OSHA PEL Z2 (United States, 2/2013).

TWA: 200 ppm 8 hours.

CEIL: 300 ppm

AMP: 500 ppm 10 minutes.

NIOSH REL (United States, 10/2016).

TWA: 100 ppm 10 hours. TWA: 375 mg/m³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m³ 15 minutes.

ACGIH TLV (United States, 3/2018).

TWA: 20 ppm 8 hours.

ACGIH TLV (United States, 3/2018).

TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes.

NIOSH REL (United States, 10/2016).

TWA: 400 ppm 10 hours. TWA: 980 mg/m³ 10 hours. STEL: 500 ppm 15 minutes. STEL: 1225 mg/m³ 15 minutes. OSHA PEL (United States, 5/2018).

TWA: 400 ppm 8 hours. TWA: 980 mg/m³ 8 hours.

None.

ACGIH TLV (United States, 3/2018).

TWA: 50 ppm 8 hours. TWA: 233 mg/m<sup>3</sup> 8 hours.

NIOSH REL (United States, 10/2016).

TWA: 100 ppm 10 hours. TWA: 465 mg/m³ 10 hours.

OSHA PEL (United States, 5/2018).

TWA: 100 ppm 8 hours. TWA: 465 mg/m³ 8 hours.

ACGIH TLV (United States, 3/2018).

TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes.

OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours.

TWA: 435 mg/m<sup>3</sup> 8 hours.

ACGIH TLV (United States, 3/2018).

TWA: 20 ppm 8 hours.

NIOSH REL (United States, 10/2016).

TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes.

OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours.

TWA: 435 mg/m<sup>3</sup> 8 hours.

OSHA PEL Z2 (United States, 2/2013).

TWA: 0.75 ppm 8 hours. STEL: 2 ppm 15 minutes.

# Section 8. Exposure controls/personal protection | NIOSH REL (United States, 10/2016). TWA: 0.016 ppm 10 hours. CEIL: 0.1 ppm 15 minutes. | OSHA PEL (United States, 5/2018). TWA: 0.75 ppm 8 hours. STEL: 2 ppm 15 minutes. | ACGIH TLV (United States, 3/2018). Skin sensitizer. Inhalation sensitizer. STEL: 0.3 ppm 15 minutes.

TWA: 0.1 ppm 8 hours.

#### Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Isobutyl acetate	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 150 ppm 8 hours. 8 hrs OEL: 713 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2018).  TWA: 150 ppm 8 hours. CA Ontario Provincial (Canada, 1/2018).  TWA: 150 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014).  TWAEV: 150 ppm 8 hours.  TWAEV: 713 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 188 ppm 15 minutes. TWA: 150 ppm 8 hours.
Normal butyl alcohol	CA Alberta Provincial (Canada, 6/2018).  8 hrs OEL: 60 mg/m³ 8 hours.  8 hrs OEL: 20 ppm 8 hours.  CA British Columbia Provincial (Canada, 7/2018).  TWA: 15 ppm 8 hours.  C: 30 ppm  CA Ontario Provincial (Canada, 1/2018).  TWA: 20 ppm 8 hours.  CA Quebec Provincial (Canada, 1/2014).  Absorbed through skin.  STEV: 50 ppm 15 minutes.  STEV: 152 mg/m³ 15 minutes.  CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 30 ppm 15 minutes.  TWA: 20 ppm 8 hours.
Normal butyl acetate	CA Alberta Provincial (Canada, 6/2018).  15 min OEL: 200 ppm 15 minutes.  15 min OEL: 950 mg/m³ 15 minutes.  8 hrs OEL: 150 ppm 8 hours.  8 hrs OEL: 713 mg/m³ 8 hours.  CA British Columbia Provincial (Canada, 7/2018).  TWA: 20 ppm 8 hours.  CA Ontario Provincial (Canada, 1/2018).  TWA: 150 ppm 8 hours.  STEL: 200 ppm 15 minutes.  CA Quebec Provincial (Canada, 1/2014).  TWAEV: 150 ppm 8 hours.  TWAEV: 713 mg/m³ 8 hours.  STEV: 200 ppm 15 minutes.

Ethyl alcohol

Toluene

Isopropyl alcohol

Methyl n-amyl ketone

STEV: 950 mg/m3 15 minutes.

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours.

CA Alberta Provincial (Canada, 6/2018).

8 hrs OEL: 1000 ppm 8 hours. 8 hrs OEL: 1880 mg/m³ 8 hours.

CA British Columbia Provincial (Canada, 7/2018).

STEL: 1000 ppm 15 minutes.

CA Ontario Provincial (Canada, 1/2018).

STEL: 1000 ppm 15 minutes.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 1000 ppm 8 hours. TWAEV: 1880 mg/m³ 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours.

CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.

8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m³ 8 hours.

CA British Columbia Provincial (Canada, 7/2018).

TWA: 20 ppm 8 hours.

CA Ontario Provincial (Canada, 1/2018).

TWA: 20 ppm 8 hours.

CA Quebec Provincial (Canada, 1/2014).

Absorbed through skin.

TWAEV: 50 ppm 8 hours. TWAEV: 188 mg/m³ 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.

STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.

CA Alberta Provincial (Canada, 6/2018).

15 min OEL: 984 mg/m³ 15 minutes.

8 hrs OEL: 200 ppm 8 hours. 15 min OEL: 400 ppm 15 minutes.

8 hrs OEL: 492 mg/m³ 8 hours.

CA British Columbia Provincial (Canada, 7/2018).

TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes.

CA Ontario Provincial (Canada, 1/2018).

TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 400 ppm 8 hours. TWAEV: 983 mg/m³ 8 hours. STEV: 500 ppm 15 minutes. STEV: 1230 mg/m³ 15 minutes.

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours.

CA Alberta Provincial (Canada, 6/2018).

8 hrs OEL: 233 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours.

CA British Columbia Provincial (Canada, 7/2018).

TWA: 50 ppm 8 hours.

CA Ontario Provincial (Canada, 1/2018).

TWA: 25 ppm 8 hours. TWA: 115 mg/m³ 8 hours.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 50 ppm 8 hours. TWAEV: 233 mg/m³ 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013)

STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.

CA Alberta Provincial (Canada, 6/2018).

8 hrs OEL: 100 ppm 8 hours.

15 min OEL: 651 mg/m³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 434 mg/m³ 8 hours.

CA British Columbia Provincial (Canada, 7/2018).

TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 100 ppm 8 hours. TWAEV: 434 mg/m³ 8 hours. STEV: 150 ppm 15 minutes. STEV: 651 mg/m³ 15 minutes.

CA Ontario Provincial (Canada, 1/2018).

STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.

CA Alberta Provincial (Canada, 6/2018).

8 hrs OEL: 100 ppm 8 hours. 8 hrs OEL: 434 mg/m³ 8 hours. 15 min OEL: 543 mg/m³ 15 minutes. 15 min OEL: 125 ppm 15 minutes.

CA British Columbia Provincial (Canada, 7/2018).

TWA: 20 ppm 8 hours.

CA Ontario Provincial (Canada, 1/2018).

TWA: 20 ppm 8 hours.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 100 ppm 8 hours. TWAEV: 434 mg/m³ 8 hours. STEV: 125 ppm 15 minutes. STEV: 543 mg/m³ 15 minutes.

CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.

CA Alberta Provincial (Canada, 6/2018).

15 min OEL: 300 ppm 15 minutes. 8 hrs OEL: 200 ppm 8 hours. 8 hrs OEL: 590 mg/m³ 8 hours. 15 min OEL: 885 mg/m³ 15 minutes.

CA British Columbia Provincial (Canada, 7/2018).

TWA: 50 ppm 8 hours.

Xylene

Ethylbenzene

Methyl ethyl ketone

STEL: 100 ppm 15 minutes.

CA Ontario Provincial (Canada, 1/2018).

TWA: 200 ppm 8 hours. STEL: 300 ppm 15 minutes.

CA Quebec Provincial (Canada, 1/2014).

TWAEV: 50 ppm 8 hours. TWAEV: 150 mg/m³ 8 hours. STEV: 100 ppm 15 minutes. STEV: 300 mg/m³ 15 minutes.

CA Saskatchewan Provincial (Canada,

7/2013).

STEL: 300 ppm 15 minutes. TWA: 200 ppm 8 hours.

#### Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
Isobutyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 150 ppm 8 hours.
1-Butanol	NOM-010-STPS-2014 (Mexico, 4/2016).
	Absorbed through skin.
	TWA: 20 ppm 8 hours.
n-Butyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 150 ppm 8 hours.
	STEL: 200 ppm 15 minutes.
ethanol	NOM-010-STPS-2014 (Mexico, 4/2016).
	STEL: 1000 ppm 15 minutes.
Toluene	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 20 ppm 8 hours.
2-Propanol	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 200 ppm 8 hours.
	STEL: 400 ppm 15 minutes.
Methyl n-Amyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 50 ppm 8 hours.
Ethylbenzene	NOM-010-STPS-2014 (Mexico, 4/2016).
	TWA: 20 ppm 8 hours.
Formaldehyde (max.)	NOM-010-STPS-2014 (Mexico, 4/2016). Skin
	sensitizer.
	CEIL: 0.3 ppm

# 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. Contaminated work clothing should not be allowed out of the workplace. 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 and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

#### 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 antistatic 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 specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

#### **Appearance**

hysical state : Liquid.

Color Not available. Odor : Not available. Odor threshold : Not available. pH Not available. Melting point/freezing point : Not available.

Boiling point/boiling range Flash point

: Closed cup: 3°C (37.4°F) [Pensky-Martens Closed Cup]

**Evaporation rate** 

: 2 (butyl acetate = 1)

Flammability (solid, gas) Lower and upper explosive (flammable) limits

: Not available. : Lower: 0.9% Upper: 19%

: 77°C (170.6°F)

: 5.9 kPa (44 mm Hg) [at 20°C]

Vapor pressure Vapor density

: 1.5 [Air = 1]

Relative density

Solubility

: 0.91

Partition coefficient: n-

: Not available.

octanol/water

: Not available.

Auto-ignition temperature

: Not available.

**Decomposition temperature**: Not available.

Kinematic (40°C (104°F)): <0.205 cm<sup>2</sup>/s (<20.5 cSt)

'"scosity blecular weight

Not applicable.

Aerosol product

Heat of combustion : 23.768 kJ/g

# Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

hemical 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. Do not allow vapor to accumulate in low or confined areas.

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
Isobutyl Acetate	LD50 Dermal	Rabbit	>17400 mg/kg	-
	LD50 Oral	Rat	13400 mg/kg	-
1-Butanol	LC50 Inhalation Vapor	Rat	24000 mg/m <sup>3</sup>	4 hours
4	LD50 Dermal	Rabbit	3400 mg/kg	-
1	LD50 Oral	Rat	790 mg/kg	-
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-
Cellulose Nitrate	LD50 Oral	Rat	>5 g/kg	-
2-methoxy-1-methylethyl	LD50 Dermal	Rabbit	>5 g/kg	-
acetate				
	LD50 Oral	Rat	8532 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
2-Propanol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Methyl n-Amyl Ketone	LD50 Oral	Rat	1600 mg/kg	-
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	<b>-</b>
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Formaldehyde (max.)	LC50 Inhalation Gas.	Rat	250 ppm	4 hours
	LD50 Dermal	Rabbit	270 mg/kg	-
	LD50 Oral	Rat	100 mg/kg	-
L				

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Isobutyl Acetate	Eyes - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
1-Butanol	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-

ш.							
		Eyes - Severe irritant	Rabbit	-	0.005 Mililiters	-	Ī
		Skin - Moderate irritant	Rabbit	_	24 hours 20	_	l
	]				milligrams		l
C	-Butyl Acetate	Eyes - Moderate irritant	Rabbit		100		l
	1-Dutyl Acetate	Lyes - Moderate Initant	Nappil	-		-	l
					milligrams		l
		Skin - Moderate irritant	Rabbit	-	24 hours 500	-	ı
					milligrams		ı
	Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500	_	ı
					milligrams		
		Eyes - Moderate irritant	Rabbit	_	0.066666667		ı
		Lycs - Woderate Witant	INADDIL	_	I	_	l
					minutes 100		ı
					milligrams		ı
		Eyes - Moderate irritant	Rabbit	-	100	-	
					microliters		
		Eyes - Severe irritant	Rabbit	-	500	_	
		,			milligrams		
		Skin - Mild irritant	Rabbit	_	400	_	
		OKIII - WIIIG II IKASIL	Nabbit	[-		-	
		Old Market Co.	D 11.7		milligrams		
		Skin - Moderate irritant	Rabbit	-	24 hours 20	-	
					milligrams		
	Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-	
					100		
					milligrams		
		Eyes - Mild irritant	Rabbit	_	870	_	
		Lycs Willa lintain	Nabbit			_	
		F	D. J. I. W.		Micrograms		
		Eyes - Severe irritant	Rabbit	-	24 hours 2	-	
					milligrams		
	:	Skin - Mild irritant	Pig	-	24 hours 250	-	
					microliters		
	Į.	Skin - Mild irritant	Rabbit	-	435	_	
	)				milligrams		
		Skin - Moderate irritant	Rabbit		24 hours 20		
		Skiii - Moderate irritant	ιναυυπ	-		-	
			5 110		milligrams		
		Skin - Moderate irritant	Rabbit	-	500	-	ı
					milligrams		
	2-Propanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-	
					milligrams		ı
		Eyes - Moderate irritant	Rabbit	_	10 milligrams	_	
		Eyes - Severe irritant	Rabbit	_	100	_	Ü
			. tobbit		milligrams		
		Skin - Mild irritant	Rabbit				
		Skiii - Mila II Italii	Nappli	-	500	-	
		L			milligrams		
	Methyl n-Amyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14	-	
					milligrams		
	Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 milligrams	_	
			Rabbit	_	24 hours 5	_	
		-yes corons in main	, tabbit		milligrams		
		Skin - Mild irritant	Det				
		Skin - Mila irriani	Rat	-	8 hours 60	-	
					microliters		
		Skin - Moderate irritant	Rabbit	-	24 hours 500	-	
					milligrams		
		Skin - Moderate irritant	Rabbit	_	100 Percent	_	
	Ethylbenzene		Rabbit	_	500	_	
		_,55 55.616	abbit				
		Clain Mild in-itt	Dobbit		milligrams		
		Skin - Mild irritant	Rabbit	-	24 hours 15	-	
					milligrams		
	Formaldehyde (max.)	Eyes - Mild irritant	Human	-	6 minutes 1	-	
J					parts per		
					million		
		Eyes - Severe irritant	Rabbit	_	24 hours 750	_	
		_,55 557676 IIIItalit	. abbit				
		Even Covers instruct	Dahhit		Micrograms		
		Eyes - Severe irritant	Rabbit	-	750	-	
					Micrograms		

	-	-		
Skin - Mild irritant	Human	-	72 hours 150 Micrograms	-
			Intermittent	
Skin - Severe irritant	Human	-	0.01 Percent	-
Skin - Mild irritant	Rabbit	-	540	-
			milligrams	
Skin - Moderate irritant	Rabbit	-	24 hours 50	-
			milligrams	
Skin - Severe irritant	Rabbit	_	24 hours 2	-
			milligrams	

#### **Sensitization**

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Classification

Product/ingredient name	OSHA	IARC	NTP
Ethanol	-	1	-
Cellulose Nitrate	-	2A	-
Toluene	-	3	-
2-Propanol	_	3	-
Xylene, mixed isomers	-	3	-
Ethylbenzene	-	2B	-
Formaldehyde (max.)	+	1	Known to be a human carcinogen.

## Reproductive toxicity

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Isobutyl Acetate 1-Butanol	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation and Narcotic effects
Lt. Aliphatic Hydrocarbon Solvent	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
n-Butyl Acetate	Category 3	Not applicable.	Narcotic effects
Ethanol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
2-methoxy-1-methylethyl acetate	Category 3	Not applicable.	Narcotic effects
Toluene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
2-Propanol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Methyl n-Amyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Xylene, mixed isomers	Category 3	Not applicable.	Respiratory tract irritation

Ethylbenzene	Category 3	Not applicable.	Respiratory tract
Formaldehyde (max.)	Category 3	Not applicable.	Narcotic effects Respiratory tract
			irritation and Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
1-Butanol	Category 2	Not determined	Not determined
Lt. Aliphatic Hydrocarbon Solvent	Category 2	Not determined	Not determined
Ethanol	Category 2	Not determined	Not determined
Toluene	Category 2	Not determined	Not determined
2-Propanol	Category 2	Not determined	Not determined
Methyl n-Amyl Ketone	Category 2	Not determined	Not determined
Xylene, mixed isomers	Category 2	Not determined	Not determined
Ethylbenzene	Category 2	Not determined	Not determined
Formaldehyde (max.)	Category 2	Not determined	Not determined

#### **Aspiration hazard**

Name	Result
Lt. Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely

: Not available.

outes of exposure

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness. May cause respiratory irritation.

**Skin contact**: Causes skin irritation. May cause an allergic skin reaction.

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 watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

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:

pain or irritation

redness

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

> stomach pains 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

: Not available.

effects

Potential delayed effects

Potential delayed effects

: Not available.

: Not available.

Long term exposure

Potential immediate

effects

: Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure. Once

sensitized, a severe allergic reaction may occur when subsequently exposed to very low

: May cause cancer. Risk of cancer depends on duration and level of exposure. Carcinogenicity

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** : No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

#### Acute toxicity estimates

Route	ATE value
Oral	3349.5 mg/kg
Dermal	17695.6 mg/kg
Inhalation (vapors)	216.1 mg/l

# Section 12. Ecological information

**Toxicity** 

Product/ingredient name	Result	Species	Exposure
1-Butanol	Acute EC50 1983000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1730000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
. Aliphatic Hydrocarbon	Acute LC50 >100000 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
Solvent	pp	I i i i i i i i i i i i i i i i i i i	
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
Butyr / toolate	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Ethanol	Acute EC50 17.921 mg/l Marine water		96 hours
Ethanor		Algae - Ulva pertusa	
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia	48 hours
		franciscana - Larvae	
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki -	12 weeks
		Larvae	
Cellulose Nitrate	Acute EC50 579000 μg/l Fresh water	Algae - Pseudokirchneriella	96 hours
		subcapitata	
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella	72 hours
		subcapitata	1 - 1.0013
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus	48 hours
	Acute 2000 11000 µg/111esh water	pseudolimnaeus - Adult	40 110015
	Acuto ECEO 5 56 mg/l Freeh water	l'	40 h =
	Acute EC50 5.56 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
	A	Neonate	
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	
0 D I	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
2-Propanol	Acute EC50 10100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
×	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
ethyl n-Amyl Ketone	Acute LC50 131000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Xylene, mixed isomers	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella	72 hours
Estylbonzene	redic 2000 4000 pg/11 resit water	subcapitata	72 Hours
	Aguto ECEO 2600 ug/l Eroch water		06 5000
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella	96 hours
		subcapitata	
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Formaldehyde (max.)	Acute EC50 3.48 mg/l Fresh water	Algae - Desmodesmus	72 hours
, , ,	3	subspicatus	
	Acute EC50 0.788 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 12.98 mg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours
	. 1345 2555 12.05 mg/r 165h Water	dubia - Neonate	10 mours
	Acute EC50 5800 µg/l Fresh water	Daphnia - Daphnia pulex -	48 hours
	nodie 2000 0000 pg// riesii watei	Neonate	-0 110urs
	Aguto I CEO 4 44 pers Freels water		00 h
	Acute LC50 1.41 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.005 mg/l Marine water	Algae - Isochrysis galbana -	96 hours
		Exponential growth phase	
	Chronic NOEC 953.9 ppm Fresh water	Fish - Oncorhynchus	43 days
		tshawytscha - Egg	

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability.
1-Butanol	-	-	Readily
~-Butyl Acetate	-	-	Readily
hanol	-	-	Readily
Toluene	-	-	Readily
2-Propanol	-	-	Readily
Methyl n-Amyl Ketone	-	-	Readily
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily

#### Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential	
Lt. Aliphatic Hydrocarbon Solvent	-	10 to 2500	high	
Toluene Xylene, mixed isomers	-	90 8.1 to 25.9	low	

#### Mobility in soil

Soil/water partition coefficient (Koc)

: 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.

# Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3	3
Packing group	П	II	П	Н	П
Environmental hazards	No.	No.	No.	No.	No.

# Section 14. Transport information

Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.	-	-	Emergency schedules F-E, S-E
		18-2.19 (Class 3).			
	ERG No.	ERG No.	ERG No.		
	128	128	128		

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

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

Proper shipping name

: Not available. : Not available.

Ship type Pollution category

Not available.

# Section 15. Regulatory information

#### international regulations

International lists

: Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined. Korea inventory (KECI): Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

Taiwan Chemical Substances Inventory (TCSI): Not determined.

Thailand inventory: Not determined. Turkey inventory: Not determined. Vietnam inventory: Not determined.

## Section 16. Other information

#### Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Faution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

# **Section 16. Other information**

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPEČIFÍC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1	Calculation method Calculation method

#### History

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revision

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Version : 1

**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 = 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

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buver/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.