

Code: 446-22-2000

## **Material Safety Data Sheet**

446-22-2000\_Gray BAC 707 #G15001

Akzo Nobel Coatings Inc. encourages and expects you to read and understand this entire MSDS, as there is important information throughout the document. Further, Akzo Nobel Coatings Inc. expects you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

To promote safe handling, each customer or recipient should: 1) Notify its employees, agents, contractors, and others whom it knows or believes will use this material of the information contained in this MSDS and any other information regarding hazards and safety; 2) Furnish this same information to each of its customers for the product; 3) Request its customers to notify their employees, customers, and other users of the product of this information; and 4) Notify its employees, agents, contractors, and others that the precautions identified for this product and any other products with which mixtures may be created are transferable and cumulative to the mixture.

# Section 1. Chemical product and company identification

### **Manufacturer**

Akzo Nobel Coatings, Inc. 1 East Water Street Waukegan, IL 60085 USA +1(847) 625-4200

IN CASE OF EMERGENCY (HEALTH OR SPILLS):

CHEMTREC 1 (800) 424-9300 (Inside the US)

CHEMTREC International +1 (703) 527-3887 (Outside the US, collect calls accepted)

Product code: 446-22-2000

Product name: 446-22-2000 Gray BAC 707 #G15001

**Product use: Coatings or Coatings Component** 

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For the most recent update to this Material Safety Data Sheet, visit our website at http://www.akzonobel.com/aerospace For additional information call (847) 625-4200.

## Section 2. Hazards identification

Emergency overview : WARNING!

FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED OR SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER. POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA.

Potential acute health effects

Inhalation : Toxic by inhalation. Irritating to respiratory system.

**Ingestion**: Toxic if swallowed.

Skin : Harmful in contact with skin. Severely irritating to the skin.Eyes : Severely irritating to eyes. Risk of serious damage to eyes.

Potential chronic health effects

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## Section 2. Hazards identification

**Chronic effects** : Contains material that can cause target organ damage.

Carcinogenicity : Contains material which can cause cancer. Risk of cancer depends on duration and

level of exposure.

**Mutagenicity**: No known significant effects or critical hazards.

**Teratogenicity**: Contains material which may cause birth defects, based on animal data.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Target organs : Contains material which causes damage to the following organs: upper respiratory tract,

skin, central nervous system (CNS), eye, lens or cornea.

Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, peripheral nervous system, gastrointestinal tract,

cardiovascular system, ears, nose/sinuses, testes, throat.

#### Over-exposure signs/symptoms

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

respiratory tract irritation

coughing

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Skin : Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

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

pain or irritation

watering redness

reduced fetal weight increase in fetal deaths skeletal malformations

Medical conditions aggravated by over-

: Pre-existing disorders involving any target organs mentioned in this MSDS as being at

risk may be aggravated by over-exposure to this product.

NOTICE: Reports have associated repeated and prolonged OVEREXPOSURE to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this package may be harmful or fatal.

See toxicological information (Section 11)

# Section 3. Composition/information on ingredients

Name Name	CAS number	% by weight
Titanium dioxide	13463-67-7	25 - 40
butanone	78-93-3	5 - 10
Xylene	1330-20-7	1 - 5
epoxy resin	25085-99-8	1 - 5
solvent naphtha (petroleum), light arom.	64742-95-6	1 - 5
heptan-2-one	110-43-0	1 - 5
1-methoxy-2-propanol	107-98-2	1 - 5
silica, amorphous, fumed	7631-86-9	1 - 5
aluminum hydroxide	21645-51-2	1 - 5

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# Section 3. Composition/information on ingredients

1,2,4-trimethylbenzene	95-63-6		
SILICIUMDIÓXIDE, CRYSTALLINE QUARTS	14808-60-7	1 - 5	
n-butyl acetate	123-86-4	1 - 5	
ethylbenzene	100-41-4	1 - 5	

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 or the environment and hence require reporting in this section.

## Section 4. First aid measures

**Eye contact** 

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

**Skin contact** 

: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion

: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**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.

Notes to physician

: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

# Section 5. Fire-fighting measures

Flammability of the product

: Flammable liquid. 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.

**Extinguishing media** 

Suitable

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

Not suitable

: Do not use water jet.

Special exposure hazards

: 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.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide

carbon dioxide
carbon monoxide
halogenated compounds
metal oxide/oxides

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.

Special remarks on fire hazards

: Not available.

Special remarks on explosion hazards

: Not available.

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## Section 6. Accidental release measures

## **Personal precautions**

: 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 (see Section 8).

#### **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 for cleaning up

#### Small spill

: Stop leak if without risk. Move containers from spill area. 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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

### Large spill

: Stop leak if without risk. Move containers from spill area. 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). Use spark-proof tools and explosion-proof equipment. 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

### **Handling**

: Put on appropriate personal protective equipment (see Section 8). 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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### **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. 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.

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## Section 8. Exposure controls/personal protection

Product name Exposure limits

titanium dioxide OSHA PEL (United States, 6/2010).

TWA: 15 mg/m<sup>3</sup> 8 hour(s). Form: Total dust

ACGIH TLV (United States, 3/2012).

TWA: 10 mg/m<sup>3</sup> 8 hour(s).

butanone ACGIH TLV (United States, 3/2012).

STEL: 885 mg/m³ 15 minute(s). STEL: 300 ppm 15 minute(s). TWA: 590 mg/m³ 8 hour(s). TWA: 200 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 885 mg/m³ 15 minute(s). STEL: 300 ppm 15 minute(s). TWA: 590 mg/m³ 10 hour(s). TWA: 200 ppm 10 hour(s).

OSHA PEL (United States, 6/2010).

TWA: 590 mg/m³ 8 hour(s). TWA: 200 ppm 8 hour(s).

xylene ACGIH TLV (United States, 3/2012).

STEL: 651 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 434 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).

OSHA PEL (United States, 6/2010).

TWA: 435 mg/m<sup>3</sup> 8 hour(s). TWA: 100 ppm 8 hour(s).

heptan-2-one ACGIH TLV (United States, 3/2012).

TWA: 233 mg/m<sup>3</sup> 8 hour(s). TWA: 50 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

TWA: 465 mg/m<sup>3</sup> 10 hour(s). TWA: 100 ppm 10 hour(s).

OSHA PEL (United States, 6/2010).

TWA: 465 mg/m<sup>3</sup> 8 hour(s). TWA: 100 ppm 8 hour(s).

1-methoxy-2-propanol ACGIH TLV (United States, 3/2012).

STEL: 553 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 369 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 540 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 360 mg/m³ 10 hour(s). TWA: 100 ppm 10 hour(s).

silicon dioxide NIOSH REL (United States, 6/2009).

TWA: 6 mg/m<sup>3</sup> 10 hour(s).

aluminium hydroxide NIOSH REL (United States, 6/2009).

TWA: 2 mg/m³, (as Al) 10 hour(s).

1,2,4-trimethylbenzene ACGIH TLV (United States, 3/2012).

TWA: 123 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

TWA: 125 mg/m³ 10 hour(s). TWA: 25 ppm 10 hour(s).

crystalline silica respirable OSHA PEL Z3 (United States, 9/2005).

TWA: 250 mppcf 8 hour(s). Form: Respirable TWA: 10 mg/m³ 8 hour(s). Form: Respirable TWA: 30 mg/m³ 8 hour(s). Form: Total dust.

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# Section 8. Exposure controls/personal protection

ACGIH TLV (United States, 3/2012).

TWA: 0.025 mg/m<sup>3</sup> 8 hour(s). Form: Respirable fraction

NIOSH REL (United States, 6/2009).

TWA: 0.05 mg/m3 10 hour(s). Form: respirable dust

n-butyl acetate ACGIH TLV (United States, 3/2012).

STEL: 200 ppm 15 minute(s). TWA: 150 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 950 mg/m³ 15 minute(s). STEL: 200 ppm 15 minute(s). TWA: 710 mg/m³ 10 hour(s). TWA: 150 ppm 10 hour(s).

OSHA PEL (United States, 6/2010).

TWA: 710 mg/m<sup>3</sup> 8 hour(s). TWA: 150 ppm 8 hour(s).

ACGIH TLV (United States, 3/2012).

TWA: 20 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 545 mg/m³ 15 minute(s). STEL: 125 ppm 15 minute(s). TWA: 435 mg/m³ 10 hour(s). TWA: 100 ppm 10 hour(s).

OSHA PEL (United States, 6/2010).

TWA: 435 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).

#### Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** 

ethylbenzene

: 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.

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.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

#### **Personal protection**

Respiratory

: 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.

**Hands** 

: 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.

**Eyes** 

: 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 or dusts.

Skin

: 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.

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# Section 8. Exposure controls/personal protection

**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.

# Section 9. Physical and chemical properties

Physical state : Liquid.

Flash point : Closed cup: -3.9°C (25°F)

Auto-ignition temperature: Not available.upper flammability limit: Not determined.Lower flammability limit: Not determined.

Appearance : Gray.
Odor : Solvent.
Odor threshold : Not available.

Specific gravity : 1.444

pH : Not available.

Boiling/condensation point : 80°C (176°F)

Melting/freezing point : Not available.

Vapor pressure : Not available.

Vapor density : Heavier than air

**Density** : 12.05 lbs/gal 1.444 g/cm<sup>3</sup>

Not determined. **Evaporation rate** Coefficient of water/oil distribution : Not determined. **Weight Volatiles** 27.08% (w/w) **Volume Volatiles** 45.7 %(v/v)72.92 **Weight Solids** %(w/w) **Volume Solids** 54.30 %(v/v) VOC, minus water and exempt solvents : 3.25 lbs/gal (390 g/l)

# Section 10. Stability and reactivity

Stability

**Hazardous polymerization** 

**Conditions to avoid** 

: The product is stable.

: Under normal conditions of storage and use, hazardous polymerization will not occur.

: 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.

Materials to avoid : Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition products

products

Conditions of reactivity

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

: Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.

Flammable in the presence of the following materials or conditions: oxidizing materials.

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# Section 11. Toxicological information

# Acute toxicity Product/ingre

LDSD   Dermal   Rabbit   12600 uL/kg   LDSD   Oral   Rat   800 mg/kg   LDSD   Oral   Rat   1670 mg/kg   LDSD   Oral   Rat   2459 mg/kg   Rat   1700 mg/kg   Rabbit   4300 mg/kg   6480 mg/kg   Rabbit   6480 mg/kg   Rat   2737 mg/kg   LDSD   Oral   Rat   361 mg/kg   TDLD   Intraperitoneal   Rat   361 mg/kg   TDLD   Intratracheal   Rat   360 mg/kg   TDLD   Intrat	Product/ingredient name	Result	Species	Dose
LDS0 Intraperitoneal   Rat   800 mg/kg   LDS0 Oral   Rat   1607 mg/kg   LDS0 Oral   Rat   1607 mg/kg   LDS0 Intraperitoneal   Rat   2459 mg/kg   LDS0 Intraperitoneal   Rat   4300 mg/kg   LDS0 Intraperitoneal   Rat   4300 mg/kg   LDS0 Untraperitoneal   Rat   4300 mg/kg   LDS0 Untraperitoneal   Rat   4300 mg/kg   LDS0 Dermal   Rabbit   4300 mg/kg   LDS0 Dermal   Rabbit   4300 mg/kg   LDS0 Dermal   Rabbit   4300 mg/kg   LDS0 Intraperitoneal   Rat   2737 mg/kg   Rat   LDS0 Intraperitoneal   Rat   2737 mg/kg   LDS0 Intraperitoneal   Rat   2737 mg/kg   Rat   LDS0 Intraperitoneal   Rat   2737 mg/kg   Rat   2737 mg/kg   Rat   Rat   2737 mg/kg   Rat   Rat   Rat   2737 mg/kg   Rat   Ra	heptan-2-one	LD50 Dermal	Rabbit	12600 uL/kg
LDSO Intraperitioneal		LD50 Intraperitoneal	Rat	800 mg/kg
Aylene			Rat	
LD50 Oral		LD50 Oral	Rat	1600 mg/kg
LD50 Oral	xylene	LD50 Intraperitoneal	Rat	2459 mg/kg
LD50 Subcutaneous	•	LD50 Oral	Rat	4300 mg/kg
Dutanone   LD50 Dermal   Rabbit   6480 mg/kg   LD50 Dermal   Rat   6470 mg/kg   LD50 Oral   Rat   6470 mg/kg   LD50 Oral   Rat   2737 mg/kg   TDL0 Intraperitoneal   Rat   2737 mg/kg   TDL0 Intraperitoneal   Rat   361 mg/kg   TDL0 Intraperitoneal   Rat   361 mg/kg   TDL0 Intraperitoneal   Rat   5 mg/kg   TDL0 Intratracheal   Rat   5 mg/kg   TDL0 Intratracheal   Rat   1.6 mg/kg   TDL0 Intratracheal   Rat   1.25 mg/kg   TDL0 Oral   Rat   60 g/kg   Rat   60 g/kg   Rat   70 g/kg   Rat		LD50 Subcutaneous	Rat	1700 mg/kg
Distance   LD50 Dermal   Rabbit   6480 mg/kg   LD50 Oral   Rat   2737 mg/kg   LD50 Oral   Rat   2737 mg/kg   TDL0 Intraperitoneal   Rat   2737 mg/kg   TDL0 Intraperitoneal   Rat   2737 mg/kg   TDL0 Intratracheal   Rat   >100 ug/kg   TDL0 Intratracheal   Rat   >100 ug/kg   TDL0 Intratracheal   Rat   1.6 mg/kg   TDL0 Intratracheal   Rat   1.6 mg/kg   TDL0 Intratracheal   Rat   1.6 mg/kg   TDL0 Oral   Rat   60 g/kg   Rat   1.0 mg/kg   Rat   2.00 mg/kg   LDL0 Intratracheal   Rat   1.00 mg/kg   TDL0 Dermal   Rat   1.00 mg/kg   TDL0 Intratracheal   Rat   1.00		TDLo Dermal	Rabbit	
LD50 Oral	butanone	LD50 Dermal	Rabbit	
titanium dioxide    Description   TDLo Intraperitoneal   Rat   \$361 mg/kg   TDLo Intratracheal   Rat   \$5 mg/kg   TDLo Intratracheal   Rat   \$5 mg/kg   TDLo Intratracheal   Rat   \$1.55 mg/kg   TDLO Intratracheal   Rat   \$1.25 mg/kg   TDLO Intratracheal   Rat   \$1.25 mg/kg   TDLO Oral   Rat   \$60 g/kg   TDLO Intratracheal   Rat   \$250 mg/kg   TDLO Intratracheal   Rat   \$150 mg/kg   TDLO Intratracheal   Rat   \$15 mg/kg   TDLO		LD50 Intraperitoneal	Rat	607 mg/kg
titanium dioxide		LD50 Oral	Rat	2737 mg/kg
TDLo Intratracheal		TDLo Intraperitoneal	Rat	
TDLo Intratracheal	titanium dioxide	LD Intratracheal	Rat	>100 ug/kg
TDLo Intratracheal		TDLo Intratracheal	Rat	5 mg/kg
TDLo Oral		TDLo Intratracheal	Rat	1.6 mg/kg
Solvent naphtha (petroleum), light arom.   LD50 Oral   Rat   250 mg/kg   LDL0 Intratracheal   Rat   250 mg/kg   LDL0 Intratracheal   Rat   250 mg/kg   LDL0 Intratracheal   Rat   200 mg/kg   LDL0 Intratracheal   Rat   200 mg/kg   TDL0 Intratracheal   Rat   150 mg/kg   TDL0 Intratracheal   Rat   150 mg/kg   TDL0 Intratracheal   Rat   150 mg/kg   TDL0 Intratracheal   Rat   30 mg/kg   TDL0 Intratracheal   Rat   30 mg/kg   TDL0 Intratracheal   Rat   25 mg/kg   TDL0 Intratracheal   Rat   15.69 mg/kg   TDL0 Intratracheal   Rat   1.5 mg/kg   TDL0 Intratracheal   Rat   1.5 mg/kg   TDL0 Intratracheal   Rat   1.5 mg/kg   TDL0 Intratracheal   Rat   1.50 mg/kg   LD50 Dermal   Rabbit   7.5000 mg/kg   LD50 Dermal   Rabbit   7.5000 mg/kg   TDL0 Dermal   Rat   1.00 mg/kg   TDL0 Dermal   Rat   1.00 mg/kg   TDL0 Intraperitoneal   Rat   1.00 mg/kg		TDLo Intratracheal	Rat	1.25 mg/kg
crystalline silica respirable         LDLo Intratracheal LDLo Intratracheal LDLO Intratracheal LDLO Intratracheal LDLO Intratracheal LDLO Intratracheal Rat 200 mg/kg TDLO Intratracheal Rat 150 mg/kg TDLO Intratracheal Rat 150 mg/kg TDLO Intratracheal Rat 100 mg/kg TDLO Intratracheal Rat 50 mg/kg TDLO Intratracheal Rat 25 mg/kg TDLO Intratracheal Rat 25 mg/kg TDLO Intratracheal Rat 25 mg/kg TDLO Intratracheal Rat 15.69 mg/kg TDLO Intratracheal Rat 1.5 mg/kg TDLO Intratracheal Rat 1.5 mg/kg TDLO Intratracheal Rat 1.5 mg/kg TDLO Intratracheal Rat 1250 ug/kg TDLO Oral Rat 120 g/kg Ethylbenzene LD50 Dermal Rabbit 75000 mg/kg LD50 Oral Rat 1002 mg/kg LD50 Oral Rat 1002 mg/kg TDLO Intraperitoneal Rat 1002 mg/kg TDLO Intraperitoneal Rat 1002 mg/kg LD50 Oral Rat 1002 mg/kg LD50 Oral Rat 1002 mg/kg LD50 Oral Rat 10768 mg/kg LD50 Intraperitoneal Rat 1 mg/kg LD50 Oral Rat 1 mg/kg LD50 Intraperitoneal Rat 1 mg/kg LD50 Oral Rat 1 mg/kg LD50 Intraperitoneal Rat 150 mg/kg LD50 Intraperitoneal Rat 3720 mg/kg LD50 Intraperitoneal Rat 3730 mg/kg LD50 Intraperitoneal Rat 3		TDLo Oral	Rat	60 g/kg
LDLo Intratracheal	Solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	
LDLo Intratracheal	crystalline silica respirable	LDLo Intratracheal	Rat	250 mg/kg
TDLo Intratracheal		LDLo Intratracheal	Rat	200 mg/kg
TDLo Intratracheal		LDLo Intravenous	Rat	90 mg/kg
TDLo Intratracheal		TDLo Intratracheal	Rat	150 mg/kg
TDLo Intratracheal		TDLo Intratracheal	Rat	100 mg/kg
TDLo Intratracheal		TDLo Intratracheal		
TDLo Intratracheal		TDLo Intratracheal	Rat	30 mg/kg
TDLo Intratracheal		TDLo Intratracheal		
TDLo Intratracheal		TDLo Intratracheal	Rat	15.69 mg/kg
TDLo Intratracheal		TDLo Intratracheal	Rat	
TDLo Intratracheal				
TDLo Intratracheal   Rat   1250 ug/kg   TDLo Oral   Rat   120 g/kg   TDLo Oral   Rat   120 g/kg   Ethylbenzene   LD50 Dermal   Rabbit   >5000 mg/kg   LD50 Dermal   Rabbit   17800 uL/kg   LD50 Dermal   Rat   3500 mg/kg   TDLo Dermal   Rat   3500 mg/kg   TDLo Dermal   Rat   0.08 mL/kg   TDLo Intraperitoneal   Rat   1062 mg/kg   TDLo Intraperitoneal   Rat   1062 mg/kg   TDLO Intraperitoneal   Rat   1752 mg/kg   TDLO Intraperitoneal   Rat   1752 mg/kg   TDLO Intraperitoneal   Rat   1752 mg/kg   LD50 Oral   Rat   10768 mg/kg   LD50 Oral   Rat   10768 mg/kg   LC50 Inhalation Vapor   Rat   390 ppm   Silicon dioxide   LDLo Oral   Rat   150 mg/kg   TDLO Intratracheal   Rat   150 mg/kg   Att   150 mg/kg   TDLO Oral   Rat   3720 mg/kg   LD50 Intraperitoneal   Rat   3720 mg/kg   LD50 Intraperitoneal   Rat   4200 mg/kg   LD50 Untraperitoneal   Rat   4200 mg/kg   LD50 Subcutaneous   Rat   6600 mg/kg   LD50 Subcutaneous   Rat   7800 mg/kg   LD50 Subcutaneous   Rat   7800 mg/kg   LD50 Subcutaneous   Rat   3739 mg/kg   LD50 Oral   LD50 Oral   Rat   3739 mg/kg   LD50 Oral   LD50 Oral   R				
ethylbenzene				
ethylbenzene         LD50 Dermal LD50 Dermal Rabbit LD50 mg/kg LD50 Dermal Rat LD50 UL/kg LD50 Oral Rat S500 mg/kg TDLo Dermal Rat D.08 mL/kg TDLo Intraperitoneal Rat D.08 mL/kg TDLo Intraperitoneal Rat D.08 mL/kg TDLO Intraperitoneal Rat D.09 mg/kg Rat D.00 Intraperitoneal Rat D.00 mg/kg LD50 Dermal Rat D.00 mg/kg LD50 Dermal Rat D.00 mg/kg LD50 Oral Rat D.00 mg/kg LD50 Oral Rat D.00 mg/kg LD50 Dermal Rat D.00 mg/kg Rat D.00 Intraperitoneal Rat D.00 mg/kg Rat D.00 Intraperitoneal Rat D.00 mg/kg D.00 Dermal Rat D.00 Dermal D.00 Dermal Rat D.00 Dermal Rat D.00 Dermal D.00 Dermal D.00				
LD50 Dermal   Rabbit   17800 uL/kg   LD50 Oral   Rat   3500 mg/kg   TDLo Dermal   Rat   0.08 mL/kg   TDLo Intraperitoneal   Rat   1062 mg/kg   TDLo Intraperitoneal   Rat   1062 mg/kg   1,2,4-trimethylbenzene   LD50 Oral   Rat   5 g/kg   LD50 Intraperitoneal   Rat   1752 mg/kg   Rabbit   17600 mg/kg   LD50 Dermal   Rat   10768 mg/kg   LD50 Oral   Rat   10768 mg/kg   LC50 Inhalation Vapor   Rat   390 ppm   Silicon dioxide   LDLo Oral   Rat   1 mg/kg   Rabbit   15 mg/kg   Rat   1 mg/kg   LD50 Intraperitoneal   Rat   3720 mg/kg   LD50 Intravenous   Rat   3720 mg/kg   LD50 Oral   Rat   6600 mg/kg   LD50 Subcutaneous   Rat   7800 mg/kg   LD50 Subcutaneous   Rat   7800 mg/kg   LD50 Subcutaneous   Rat   3739 mg/kg   LD50 Oral   Rat   3739 mg/kg   L				
LD50 Oral   Rat   3500 mg/kg   TDLo Dermal   Rat   0.08 mL/kg   TDLo Intraperitoneal   Rat   1062 mg/kg   TDLo Intraperitoneal   Rat   1062 mg/kg   TDLo Intraperitoneal   Rat   1752 mg/kg   LDLo Intraperitoneal   Rat   1752 mg/kg   LD50 Dermal   Rabbit   >17600 mg/kg   LD50 Oral   Rat   10768 mg/kg   LC50 Inhalation Vapor   Rat   390 ppm   Silicon dioxide   LDLo Oral   Rat   5 g/kg   TDLo Intratracheal   Rat   1 mg/kg   aluminium hydroxide   LDLo Intraperitoneal   Rat   1 mg/kg   TDLo Oral   Rat   150 mg/kg   TDLo Oral   Rat   15 mg/kg   TDLo Oral   Rat   15 mg/kg   TDLo Oral   Rat   15 mg/kg   LD50 Intraperitoneal   Rat   3720 mg/kg   LD50 Intravenous   Rat   24200 mg/kg   LD50 Oral   Rat   6600 mg/kg   LD50 Oral   Rat   6600 mg/kg   LD50 Subcutaneous   Rat   7800 mg/kg   LD50 Subcutaneous   Rat   7800 mg/kg   LD50 Oral	ethylbenzene			0 0
TDLo Dermal Rat 0.08 mL/kg TDLo Intraperitoneal Rat 1062 mg/kg 1,2,4-trimethylbenzene LD50 Oral Rat 5 g/kg LDLo Intraperitoneal Rat 1752 mg/kg n-butyl acetate LD50 Dermal Rabbit >17600 mg/kg LD50 Oral Rat 10768 mg/kg LC50 Inhalation Vapor Rat 390 ppm silicon dioxide LDLo Oral Rat 1 mg/kg aluminium hydroxide LDLo Intratracheal Rat 1 mg/kg aluminium hydroxide LDLo Intraperitoneal Rat 15 mg/kg 1-methoxy-2-propanol LD50 Dermal Rabbit 13 g/kg LD50 Intraperitoneal Rat 3720 mg/kg LD50 Intravenous Rat 3720 mg/kg LD50 Oral Rat 6600 mg/kg LD50 Subcutaneous Rat 7800 mg/kg				
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n-butyl acetate  LD50 Dermal LD50 Oral Rat 10768 mg/kg LC50 Inhalation Vapor Rat 390 ppm  silicon dioxide LDLo Oral Rat TDLo Intratracheal Rat 1 mg/kg aluminium hydroxide LDLo Intraperitoneal Rat 150 mg/kg TDLo Oral Rat 155 mg/kg TDLo Oral Rat 150 mg/kg Rat 150 mg/kg TDLo Oral Rat 150 mg/kg Rat 3720 mg/kg LD50 Intravenous Rat Rat 6600 mg/kg LD50 Subcutaneous Rat 7800 mg/kg LD50 mg/kg LD50 Oral Rat 7800 mg/kg Rat 7800 mg/kg Rat Rat 7800 mg/kg Rat Rat 7800 mg/kg Rat Rat 7800 mg/kg Rat	1,2,4-trimethylbenzene			
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1-methoxy-2-propanol         LD50 Dermal         Rabbit         13 g/kg           LD50 Intraperitoneal         Rat         3720 mg/kg           LD50 Intravenous         Rat         >4200 mg/kg           LD50 Oral         Rat         6600 mg/kg           LD50 Subcutaneous         Rat         7800 mg/kg           LDLo Oral         Rat         3739 mg/kg	aluminium nydroxide	•		
LD50 Intraperitoneal       Rat       3720 mg/kg         LD50 Intravenous       Rat       >4200 mg/kg         LD50 Oral       Rat       6600 mg/kg         LD50 Subcutaneous       Rat       7800 mg/kg         LDLo Oral       Rat       3739 mg/kg	4 mathaus O mananal			
LD50 Intravenous       Rat       >4200 mg/kg         LD50 Oral       Rat       6600 mg/kg         LD50 Subcutaneous       Rat       7800 mg/kg         LDLo Oral       Rat       3739 mg/kg	т-тетноху-2-ргорапог			
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LDLo Oral Rat 3739 mg/kg				
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Not available. Not available. Product code : 446-22-2000 Page: 9/11

# Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
heptan-2-one	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
•	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
butanone	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
Solvent naphtha (petroleum), light arom.	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
silicon dioxide	Eyes - Mild irritant	Rabbit	-	24 hours 25 milligrams	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

## **Carcinogenicity**

Not available.

## **Classification**

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
titanium dioxide	A4	2B	-	+	-	-
butanone	-	_	_	None.	-	-
xylene	A4	-	-	None.	-	-
heptan-2-one	-	-	-	None.	-	-
silicon dioxide	-	3	-	_	-	-
1,2,4-trimethylbenzene	-	-	-	None.	-	-
crystalline silica respirable	A2	1	-	+	Proven.	-
n-butyl acetate	A4	-	-	None.	-	-
ethylbenzene	A3	2B	-	None.	-	-

Mutagenicity

Not available.

**Teratogenicity** 

**Conclusion/Summary** 

: Not available.

**Reproductive toxicity** 

Not available.

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## Section 12. Ecological information

**Environmental effects**: No known significant effects or critical hazards.

Aquatic ecotoxicity : Not available. Biodegradability : Not available.

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

Ecotoxicological data for one or more components are known and will be made available on request.

## Section 13. Disposal considerations

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

# Section 14. Transport information

Consult your shipping specialist or supplier for appropriate assignment of the DOT information.

# Section 15. Other Regulatory Information and Pictograms

**United States** 

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

United States inventory (TSCA 8b)

: All components are listed or exempted.

**SARA 313** 

**Product name CAS** number Concentration : butanone 78-93-3 5 - 10Form R - Reporting requirements xylene 1330-20-7 1 - 5 1,2,4-trimethylbenzene 95-63-6 1 - 5 ethylbenzene 100-41-4 1 - 5

California Prop. 65

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

Canada

WHMIS (Canada)

: Class B-2: Flammable liquid

Class D-1B: Material causing immediate and serious toxic effects (Toxic).

Class D-2A: Material causing other toxic effects (Very toxic).

Class D-2B: Material causing other toxic effects (Toxic).



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# Section 15. Other Regulatory Information and Pictograms

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada inventory

International lists

: All components are listed or exempted.

International regulations

: Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted.

**Japan inventory**: At least one component is not listed. **Korea inventory**: All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): At least one component is not listed.

Philippines inventory (PICCS): At least one component is not listed.

## **Section 16. Other information**



#### **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.