SAFETY DATA SHEET

MOLYKOTE(R) 3400A ANTI-FRICTION COATING LF

Version	Revision Date:	SDS Number:	Date of last issue: 02/16/2016
5.0	05/20/2016	680445-00006	Date of first issue: 10/28/2014

SECTION 1. IDENTIFICATION

Product name : MOLYKOTE(R) 3400A ANTI-FRICTION COATING LF

Product code : 000000000003299295

Manufacturer or supplier's details

Company name of supplier : Dow Corning Corporation

Address : South Saginaw Road
Midland Michigan 48686

Telephone : (989) 496-6000

Emergency telephone : 24 Hour Emergency Telephone : (989) 496-5900
CHEMTREC : (800) 424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Lubricants and lubricant additives

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Eye irritation : Category 2A

Respiratory sensitization : Category 1

Skin sensitization : Category 1

Carcinogenicity : Category 1B

Reproductive toxicity : Category 1B

Specific target organ systemic toxicity - single exposure : Category 3

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapor.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H336 May cause drowsiness or dizziness.
H350 May cause cancer.
H360Fd May damage fertility. Suspected of damaging the unborn child.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P285 In case of inadequate ventilation wear respiratory protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Static-accumulating flammable liquid.
Repeated exposure may cause skin dryness or cracking.
Vapors may form explosive mixture with air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Inorganic and organic compounds dispersion

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
n-Butyl acetate	123-86-4	>= 20 - < 30
Butanone	78-93-3	>= 10 - < 20
Ethanol	64-17-5	>= 10 - < 20
Antimony trioxide	1309-64-4	>= 10 - < 20
Molybdenum sulfide	1317-33-5	>= 10 - < 20
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200)	25068-38-6	>= 5 - < 10
Methanol	67-56-1	>= 0.1 - < 1
Cobalt bis(ethylhexanoate)	136-52-7	>= 0.1 - < 1
Cobalt naphthenate	61789-51-3	>= 0.1 - < 1
2,6-cis-Diphenylhexamethyl cyclotetrasiloxane	33204-76-1	< 0.1

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.
Remove contaminated clothing and shoes.
Get medical attention.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Get medical attention.

If swallowed : If swallowed, DO NOT induce vomiting.

Get medical attention.
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed	:	May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause drowsiness or dizziness. May cause cancer. May damage fertility. Suspected of damaging the unborn child. Prolonged or repeated contact may dry skin and cause irritation.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
Notes to physician	:	Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Do not use a solid water stream as it may scatter and spread fire. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to health.
Hazardous combustion products	:	Carbon oxides Metal oxides Sulfur oxides Chlorine compounds
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Remove all sources of ignition. Ventilate the area. Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions	:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mists with a water spray jet. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures	:	Ensure all equipment is electrically grounded before beginning transfer operations. This material can accumulate static charge due to its inherent physical properties and can therefore cause an electrical ignition source to vapors. In order to prevent a fire hazard, as bonding and grounding may be insufficient to remove static electricity, it is necessary to provide an inert gas purge before beginning transfer operations. Restrict flow velocity in order to reduce the accumulation of static electricity.
Local/Total ventilation	:	Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation.
Advice on safe handling	:	Do not get on skin or clothing. Do not breathe vapors or spray mist. Do not swallow. Do not get in eyes. Handle in accordance with good industrial hygiene and safety

practice.
Non-sparking tools should be used.
Keep container tightly closed.
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage : Keep in properly labeled containers.
Store locked up.
Keep tightly closed.
Keep in a cool, well-ventilated place.
Store in accordance with the particular national regulations.
Keep away from heat and sources of ignition.

Materials to avoid : Do not store with the following product types:
Strong oxidizing agents
Organic peroxides
Flammable solids
Pyrophoric liquids
Pyrophoric solids
Self-heating substances and mixtures
Substances and mixtures which in contact with water emit flammable gases
Explosives
Gases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
n-Butyl acetate	123-86-4	TWA	150 ppm	ACGIH
		STEL	200 ppm	ACGIH
		TWA	150 ppm 710 mg/m³	OSHA Z-1
		TWA	150 ppm 710 mg/m³	NIOSH REL
		ST	200 ppm 950 mg/m³	NIOSH REL
Butanone	78-93-3	TWA	200 ppm	ACGIH
		STEL	300 ppm	ACGIH
		TWA	200 ppm 590 mg/m³	OSHA Z-1
		TWA	200 ppm 590 mg/m³	NIOSH REL
		ST	300 ppm 885 mg/m³	NIOSH REL
Ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m³	NIOSH REL

		TWA	1,000 ppm 1,900 mg/m³	OSHA Z-1
		STEL	1,000 ppm	ACGIH
Antimony trioxide	1309-64-4	TWA	0.5 mg/m³ (antimony)	OSHA Z-1
		TWA	0.5 mg/m³ (antimony)	NIOSH REL
Molybdenum sulfide	1317-33-5	TWA (total dust)	15 mg/m³ (Molybdenum)	OSHA Z-1
		TWA (Inhalable fraction)	10 mg/m³ (Molybdenum)	ACGIH
		TWA (Respirable fraction)	3 mg/m³ (Molybdenum)	ACGIH
Methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m³	NIOSH REL
		ST	250 ppm 325 mg/m³	NIOSH REL
		TWA	200 ppm 260 mg/m³	OSHA Z-1
2,6-cis-Diphenylhexamethyl cyclotetrasiloxane	33204-76-1	TWA (Vapor)	0.4 ppb	DCC OEL
	Further information: Skin			
		TWA (aerosol)	0.7 mcg/m3	DCC OEL
	Further information: Skin			

Hazardous components without workplace control parameters

Ingredients	CAS-No.
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200)	25068-38-6
Cobalt bis(ethylhexanoate)	136-52-7
Cobalt naphthenate	61789-51-3

Biological occupational exposure limits

Ingredients	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Butanone	78-93-3	methyl ethyl ketone	Urine	End of shift (As soon as possible after exposure ceases)	2 mg/l	ACGIH BEI
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible	15 mg/l	ACGIH BEI

				after exposure ceases)		

Engineering measures : Minimize workplace exposure concentrations.
Use only in an area equipped with explosion proof exhaust ventilation.
Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Material : Chemical-resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Take note that the product is flammable, which may impact the selection of hand protection. Wash hands before breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:
Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment:
Flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.
These precautions are for room temperature handling. Use at

elevated temperature or aerosol/spray applications may require added precautions.
For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Corning customer service group.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	Charcoal
Odor	:	solvent
Odor Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	> 35 °C
Flash point	:	10 °C Method: closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	1.2
Solubility(ies)		
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available

Viscosity
Viscosity, kinematic : < 20.5 mm²/s

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Highly flammable liquid and vapor.
Vapors may form explosive mixture with air.
Can react with strong oxidizing agents.

Conditions to avoid : Handling operations that can promote accumulation of static charges.
Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 48.2 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Ingredients:

n-Butyl acetate:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 21.1 mg/l Exposure time: 4 h Test atmosphere: vapor Method: OECD Test Guideline 403
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg Method: OECD Test Guideline 402

Butanone:

Acute oral toxicity	:	LD50 (Rat): 3,460 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 7500 ppm Exposure time: 4 h Test atmosphere: vapor
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg Method: OECD Test Guideline 402

Ethanol:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 124.7 mg/l Exposure time: 4 h Test atmosphere: vapor

Antimony trioxide:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 5.2 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg

Molybdenum sulfide:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	:	LC50 (Rat): > 2.82 mg/l Exposure time: 4 h Test atmosphere: dust/mist

Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 420 Assessment: The substance or mixture has no acute oral toxicity Remarks: Based on data from similar materials
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity Remarks: Based on data from similar materials

Methanol:

Acute oral toxicity	:	Acute toxicity estimate (Humans): 300 mg/kg Method: Expert judgment
Acute inhalation toxicity	:	Acute toxicity estimate: 3 mg/l Exposure time: 4 h Test atmosphere: vapor Method: Expert judgment Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI
Acute dermal toxicity	:	Acute toxicity estimate (Humans): 300 mg/kg Method: Expert judgment

Cobalt bis(ethylhexanoate):

Acute oral toxicity	:	LD50 (Rat): 594 mg/kg Remarks: Based on data from similar materials

Cobalt naphthenate:

Acute oral toxicity	:	LD50 (Rat, female): 3,129 mg/kg Method: OECD Test Guideline 425

2,6-cis-Diphenylhexamethyl cyclotetrasiloxane:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Assessment: The substance or mixture has no acute oral toxicity Remarks: Based on test data

Skin corrosion/irritation

Not classified based on available information.

Ingredients:

n-Butyl acetate:

Assessment: Repeated exposure may cause skin dryness or cracking.

Butanone:

Assessment: Repeated exposure may cause skin dryness or cracking.

Ethanol:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Antimony trioxide:

Species: Rabbit
Result: No skin irritation

Molybdenum sulfide:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Result: Skin irritation

Methanol:

Species: Rabbit
Result: No skin irritation

Cobalt naphthenate:

Method: OECD Test Guideline 431
Result: No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Ingredients:

n-Butyl acetate:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Butanone:

Species: Rabbit
Result: Irritation to eyes, reversing within 21 days
Method: OECD Test Guideline 405

Ethanol:

Species: Rabbit
Result: Irritation to eyes, reversing within 21 days
Method: OECD Test Guideline 405

Antimony trioxide:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Molybdenum sulfide:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Result: Irritation to eyes, reversing within 21 days

Methanol:

Species: Rabbit
Result: No eye irritation

Cobalt bis(ethylhexanoate):

Species: Rabbit
Result: Irritation to eyes, reversing within 21 days
Method: OECD Test Guideline 405

Cobalt naphthenate:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Ingredients:

n-Butyl acetate:

Test Type: Buehler Test
Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

Butanone:

Test Type: Buehler Test
Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

Ethanol:

Test Type: Local lymph node assay (LLNA)
Routes of exposure: Skin contact
Species: Mouse
Result: negative

Antimony trioxide:

Test Type: Maximization Test
Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

Molybdenum sulfide:

Test Type: Maximization Test
Routes of exposure: Skin contact
Species: Guinea pig
Result: negative

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Test Type: Local lymph node assay (LLNA)
Routes of exposure: Skin contact
Species: Mouse
Method: OECD Test Guideline 429
Result: positive
Remarks: Based on data from similar materials

Assessment: Probability or evidence of skin sensitization in humans

Methanol:

Test Type: Maximization Test
Routes of exposure: Skin contact

Species: Guinea pig
Result: negative

Cobalt bis(ethylhexanoate):

Test Type: Local lymph node assay (LLNA)
Routes of exposure: Skin contact
Species: Mouse
Result: positive

Assessment: Probability or evidence of high skin sensitization rate in humans

Routes of exposure: Inhalation
Species: Humans
Result: positive

Assessment: May cause sensitization by inhalation.

Cobalt naphthenate:

Test Type: Local lymph node assay (LLNA)
Routes of exposure: Skin contact
Species: Mouse
Result: positive

Assessment: Probability or evidence of skin sensitization in humans

Routes of exposure: inhalation (dust/mist/fume)
Species: Humans
Result: positive
Remarks: Based on data from similar materials

Assessment: May cause sensitization by inhalation.

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

n-Butyl acetate:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
	:	Test Type: Chromosome aberration test in vitro Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Ingestion Method: OECD Test Guideline 474 Result: negative

Butanone:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative
	:	Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative
	:	Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473 Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Method: OECD Test Guideline 474 Result: negative

Ethanol:

Genotoxicity in vitro	:	Test Type: In vitro mammalian cell gene mutation test Result: negative
Genotoxicity in vivo	:	Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Mouse Application Route: Ingestion Result: negative

Antimony trioxide:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Ingestion Method: OECD Test Guideline 474 Result: negative

Molybdenum sulfide:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative

		Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Mouse Application Route: Ingestion Result: negative Remarks: Based on data from similar materials

Methanol:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative
	:	Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Result: negative

Cobalt bis(ethylhexanoate):

Genotoxicity in vitro	:	Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative
Genotoxicity in vivo	:	Test Type: Chromosome aberration test in vitro Species: Rat Application Route: Ingestion Result: positive Remarks: Based on data from similar materials
Germ cell mutagenicity - Assessment	:	Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

Cobalt naphthenate:

Genotoxicity in vitro	:	Test Type: in vitro micronucleus test Result: positive Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse Application Route: Intraperitoneal injection Result: positive Remarks: Based on data from similar materials
Germ cell mutagenicity - Assessment	:	Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

2,6-cis-Diphenylhexamethyl cyclotetrasiloxane:

Genotoxicity in vitro	:	Result: negative Remarks: Based on test data

Carcinogenicity

May cause cancer.

Ingredients:

Antimony trioxide:

Species: Rat
Application Route: inhalation (dust/mist/fume)
Exposure time: 12 Months
Result: positive
Remarks: The substance is inextricably bound in the product and therefore does not contribute to a dust inhalation hazard.

Carcinogenicity - Assessment	:	Limited evidence of carcinogenicity in inhalation studies with animals.

Molybdenum sulfide:

Species: Rat
Application Route: Ingestion
Exposure time: 232 days
Result: negative

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Species: Rat
Application Route: Ingestion
Exposure time: 24 month(s)
Method: OECD Test Guideline 453
Result: negative
Remarks: Based on data from similar materials

Methanol:

Species: Mouse
Application Route: inhalation (vapor)
Exposure time: 18 Months
Method: OECD Test Guideline 453
Result: negative

Cobalt bis(ethylhexanoate):

Species: Rat
Application Route: Inhalation
Exposure time: 105 weeks
Result: positive
Remarks: Based on data from similar materials

Carcinogenicity - Assess-	:	Sufficient evidence of carcinogenicity in animal experiments

ment

Cobalt naphthenate:

Species: Rat
Application Route: inhalation (dust/mist/fume)
Exposure time: 105 weeks
Result: positive
Remarks: Based on data from similar materials

Species: Mouse
Application Route: inhalation (dust/mist/fume)
Exposure time: 105 weeks
Result: positive
Remarks: Based on data from similar materials

Carcinogenicity - Assessment : Sufficient evidence of carcinogenicity in animal experiments

IARC Group 2B: Possibly carcinogenic to humans

Antimony trioxide	1309-64-4
Cobalt bis(ethylhexanoate)	136-52-7
Cobalt naphthenate	61789-51-3

OSHA No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

May damage fertility. Suspected of damaging the unborn child.

Ingredients:

n-Butyl acetate:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: inhalation (vapor)
Method: OECD Test Guideline 416
Result: negative

Butanone:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

		Remarks: Based on data from similar materials
Effects on fetal development	:	Test Type: Embryo-fetal development Species: Rat Application Route: Inhalation Method: OECD Test Guideline 414 Result: negative

Ethanol:

Effects on fertility	:	Test Type: Two-generation reproduction toxicity study Species: Mouse Application Route: Ingestion Method: OECD Test Guideline 416 Result: negative

Antimony trioxide:

Effects on fetal development	:	Test Type: Embryo-fetal development Species: Rat Application Route: inhalation (dust/mist/fume) Method: OECD Test Guideline 414 Result: negative

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Effects on fertility	:	Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Ingestion Method: OECD Test Guideline 416 Result: negative Remarks: Based on data from similar materials
Effects on fetal development	:	Test Type: Embryo-fetal development Species: Rat Application Route: Ingestion Method: OECD Test Guideline 414 Result: negative Remarks: Based on data from similar materials

Methanol:

Effects on fertility	:	Test Type: Fertility/early embryonic development Species: Mouse Application Route: Ingestion Result: negative
Effects on fetal development	:	Test Type: Embryo-fetal development Species: Mouse Application Route: Ingestion Method: OECD Test Guideline 414 Result: positive Remarks: The effects were seen only at maternally toxic doses.

Cobalt bis(ethylhexanoate):

Effects on fertility	:	Species: Rat Application Route: Ingestion Result: positive Remarks: Based on data from similar materials Species: Mouse Application Route: Ingestion Result: positive Remarks: Based on data from similar materials
Effects on fetal development	:	Test Type: Embryo-fetal development Species: Rabbit Application Route: Ingestion Result: positive Remarks: Based on data from similar materials
Reproductive toxicity - Assessment	:	Clear evidence of adverse effects on sexual function and fertility, based on animal experiments., Some evidence of adverse effects on development, based on animal experiments.

Cobalt naphthenate:

Effects on fertility	:	Test Type: Fertility/early embryonic development Species: Rat Application Route: Ingestion Result: positive Remarks: Based on data from similar materials Test Type: Fertility/early embryonic development Species: Mouse Application Route: Ingestion Result: positive Remarks: Based on data from similar materials
Effects on fetal development	:	Test Type: Embryo-fetal development Species: Rat Application Route: Ingestion Result: negative Remarks: Based on data from similar materials
Reproductive toxicity - Assessment	:	Clear evidence of adverse effects on sexual function and fertility, based on animal experiments.

2,6-cis-Diphenylhexamethyl cyclotetrasiloxane:

Effects on fertility	:	Application Route: Ingestion Symptoms: Effects on fertility. Remarks: Based on test data
Reproductive toxicity - As-	:	Clear evidence of adverse effects on sexual function and

sessment fertility, based on animal experiments.

STOT-single exposure

May cause drowsiness or dizziness.

Ingredients:

n-Butyl acetate:

Assessment: May cause drowsiness or dizziness.

Butanone:

Assessment: May cause drowsiness or dizziness.

Methanol:

Target Organs: Eyes, Central nervous system
Assessment: Causes damage to organs.

STOT-repeated exposure

Not classified based on available information.

Ingredients:

Antimony trioxide:

Routes of exposure: inhalation (dust/mist/fume)
Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d or less.

Cobalt bis(ethylhexanoate):

Routes of exposure: Ingestion
Target Organs: Thyroid, Heart, Blood
Assessment: Shown to produce significant health effects in animals at concentrations of 10 mg/kg bw or less.

Routes of exposure: inhalation (dust/mist/fume)
Target Organs: Respiratory system
Assessment: Shown to produce significant health effects in animals at concentrations of 0.02 mg/l/6h/d or less.

Cobalt naphthenate:

Routes of exposure: Ingestion
Target Organs: Thyroid, Heart, Blood
Assessment: Shown to produce significant health effects in animals at concentrations of 10 mg/kg bw or less.

Routes of exposure: inhalation (dust/mist/fume)
Target Organs: Respiratory system
Assessment: Shown to produce significant health effects in animals at concentrations of 0.02 mg/l/6h/d or less.

2,6-cis-Diphenylhexamethyl cyclotetrasiloxane:

Routes of exposure: Ingestion
Target Organs: Adrenal gland, Pituitary gland, Bone, Liver, spleen
Assessment: Shown to produce significant health effects in animals at concentrations of 10 mg/kg bw or less.

Repeated dose toxicity

Ingredients:

n-Butyl acetate:

Species: Rat
NOAEL: 2.4 mg/l
Application Route: inhalation (vapor)
Exposure time: 90 Days

Butanone:

Species: Rat
NOAEL: 5014 ppm
Application Route: inhalation (vapor)
Exposure time: 90 Days
Method: OECD Test Guideline 413

Ethanol:

Species: Rat
NOAEL: 2,400 mg/kg
Application Route: Ingestion
Exposure time: 2 y

Antimony trioxide:

Species: Rat
NOAEL: 1,686 mg/kg
Application Route: Ingestion
Exposure time: 90 Days
Method: OECD Test Guideline 408

Species: Rat
NOAEL: >= 0.51 mg/m³
Application Route: inhalation (dust/mist/fume)
Exposure time: 1 y

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Species: Rat
NOAEL: 50 mg/kg
LOAEL: 250 mg/kg
Application Route: Ingestion
Exposure time: 14 Weeks
Method: OECD Test Guideline 408
Remarks: Based on data from similar materials

Methanol:

Species: Rat
NOAEL: 1.06 mg/l
Application Route: inhalation (vapor)
Exposure time: 90 Days

Cobalt bis(ethylhexanoate):

Species: Rat
LOAEL: 5 mg/kg
Application Route: Ingestion
Exposure time: 8 Weeks
Remarks: Based on data from similar materials

Species: Rat
LOAEL: < 0.01 mg/l
Application Route: inhalation (dust/mist/fume)
Exposure time: 13 Weeks
Remarks: Based on data from similar materials

Cobalt naphthenate:

Species: Rat
LOAEL: > 10 - 100 mg/kg
Application Route: Ingestion
Exposure time: 8 Weeks
Remarks: Based on data from similar materials

Species: Rat
LOAEL: < 0.01 mg/l
Application Route: inhalation (dust/mist/fume)
Exposure time: 13 Weeks
Remarks: Based on data from similar materials

2,6-cis-Diphenylhexamethyl cyclotetrasiloxane:

Species: Rat
Application Route: Ingestion
Target Organs: Adrenal gland, Pituitary gland, Bone, Liver, spleen
Remarks: Based on test data

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:

n-Butyl acetate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 18 mg/l

		Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 44 mg/l Exposure time: 48 h
Toxicity to algae	:	ErC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l Exposure time: 72 h
		NOEC (Desmodesmus subspicatus (green algae)): 200 mg/l Exposure time: 72 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 23 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
Toxicity to bacteria	:	IC50 (Protozoa): 356 mg/l Exposure time: 40 h

Butanone:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 2,993 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 308 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	EC50 (Selenastrum capricornutum (green algae)): 2,029 mg/l Exposure time: 96 h Method: OECD Test Guideline 201

Ethanol:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h
Toxicity to algae	:	EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 9.6 mg/l Exposure time: 9 d
Toxicity to bacteria	:	EC50 (Photobacterium phosphoreum): 32.1 mg/l Exposure time: 0.25 h

Antimony trioxide:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 14.4 mg/l

Exposure time: 96 h
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 12.1 mg/l Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 36.6 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials NOEC (Pseudokirchneriella subcapitata (green algae)): 2.11 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials
Toxicity to fish (Chronic toxicity)	:	NOEC (Pimephales promelas (fathead minnow)): 4.5 mg/l Exposure time: 28 d Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 1.74 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 Remarks: Based on data from similar materials

Molybdenum sulfide:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 644.2 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 130.9 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Based on data from similar materials
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 289.2 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials
Toxicity to fish (Chronic toxicity)	:	NOEC (Oncorhynchus mykiss (rainbow trout)): > 17 mg/l Exposure time: 12 Months Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Ceriodaphnia dubia (water flea)): 156.5 mg/l Exposure time: 21 d Remarks: Based on data from similar materials

Toxicity to bacteria	:	NOEC: > 950 mg/l Exposure time: 17 d Remarks: Based on data from similar materials

Methanol:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 22,000 mg/l Exposure time: 96 h Method: OPPTS 850.5400
Toxicity to fish (Chronic toxicity)	:	NOEC (Oryzias latipes (Orange-red killifish)): 15,800 mg/l Exposure time: 200 h
Toxicity to bacteria	:	EC50: 20,000 mg/l Exposure time: 15 h

Cobalt bis(ethylhexanoate):

Toxicity to fish	:	LC50 (Oncorhynchus tshawytscha (chinook salmon)): 2.062 mg/l Exposure time: 14 d Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia dubia (water flea)): 3.563 mg/l Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to algae	:	EC50 (Champia parvula (marine algae)): 0.141 mg/l Exposure time: 72 h Remarks: Based on data from similar materials EC10 (Lemna minor (common duckweed)): 0.029 mg/l Exposure time: 7 d Remarks: Based on data from similar materials
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC (Danio rerio (zebra fish)): 2.003 mg/l Exposure time: 16 d Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC10 (Daphnia magna (Water flea)): 0.026 mg/l Exposure time: 28 d Remarks: Based on data from similar materials

M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to bacteria	:	EC50: 120 mg/l Exposure time: 30 min Method: OECD Test Guideline 209 Remarks: Based on data from similar materials

Cobalt naphthenate:

Toxicity to fish	:	LC50 (Oncorhynchus tshawytscha (chinook salmon)): 1.77 mg/l Exposure time: 14 d Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia dubia (water flea)): 3.06 mg/l Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to algae	:	EC50 (Champia parvula (marine algae)): 0.121 mg/l Exposure time: 72 h Remarks: Based on data from similar materials EC10 (Lemna minor (common duckweed)): 0.025 mg/l Exposure time: 7 d Remarks: Based on data from similar materials
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC (Danio rerio (zebra fish)): 1.72 mg/l Exposure time: 16 d Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC10 (Daphnia magna (Water flea)): 0.02 mg/l Exposure time: 28 d Remarks: Based on data from similar materials
M-Factor (Chronic aquatic toxicity)	:	1

2,6-cis-Diphenylhexamethyl cyclotetrasiloxane:

Ecotoxicology Assessment

Chronic aquatic toxicity	:	May cause long lasting harmful effects to aquatic life.

Persistence and degradability

Ingredients:

n-Butyl acetate:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 96 %

Exposure time: 28 d
Method: OECD Test Guideline 301D

Butanone:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Ethanol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 84 %
Exposure time: 20 d

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200):

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 5 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Methanol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 95 %
Exposure time: 20 d

2,6-cis-Diphenylhexamethyl cyclotetrasiloxane:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

Ingredients:

n-Butyl acetate:

Partition coefficient: n-octanol/water : log Pow: 2.3

Butanone:

Partition coefficient: n-octanol/water : log Pow: 0.3

Ethanol:

Partition coefficient: n-octanol/water : log Pow: -0.35

Methanol:

Bioaccumulation : Species: Leuciscus idus (Golden orfe)

Bioconcentration factor (BCF): < 10

Partition coefficient: n-octanol/water : log Pow: -0.77

2,6-cis-Diphenylhexamethyl cyclotetrasiloxane:

Bioaccumulation : Bioconcentration factor (BCF): > 500
Remarks: Based on data from similar materials

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Resource Conservation and Recovery Act (RCRA) : When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste.

Waste Code : D001: Ignitability
D004
D035
D008

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.
If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 1993
Proper shipping name : FLAMMABLE LIQUID, N.O.S.
(Butanone, Ethanol)
Class : 3
Packing group : II
Labels : 3

IATA-DGR

UN/ID No. : UN 1993

Proper shipping name	:	Flammable liquid, n.o.s. (Butanone, Ethanol)
Class	:	3
Packing group	:	II
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	364
Packing instruction (passenger aircraft)	:	353

IMDG-Code

UN number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (Butanone, Ethanol)
Class	:	3
Packing group	:	II
Labels	:	3
EmS Code	:	F-E, S-E
Marine pollutant	:	no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUIDS, N.O.S. (Butanone, Ethanol)
Class	:	3
Packing group	:	II
Labels	:	FLAMMABLE LIQUID
ERG Code	:	128
Marine pollutant	:	no

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Antimony trioxide	1309-64-4	1000	8333
Arsenic oxide	1327-53-3	1	10000
n-Butyl acetate	123-86-4	5000	17241

SARA 304 Extremely Hazardous Substances Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Arsenic oxide	**1327-53-3**	**1**	**10000**
Formaldehyde	**50-00-0**	**100**	*****

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards	:	Fire Hazard Acute Health Hazard Chronic Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Antimony trioxide	1309-64-4	12 %

US State Regulations

Pennsylvania Right To Know

n-Butyl acetate	123-86-4
Butanone	78-93-3
Ethanol	64-17-5
Antimony trioxide	1309-64-4
Molybdenum sulfide	1317-33-5
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight > 700 - 1200)	25068-38-6
Ethyl acetate	141-78-6
Methanol	67-56-1
Phosphoric acid	7664-38-2
Toluene	108-88-3
Formaldehyde	50-00-0
Arsenic oxide	1327-53-3

California Prop. 65 WARNING! This product contains a chemical known in the State of California to cause cancer.

Antimony trioxide	1309-64-4
Formaldehyde	50-00-0
Lead oxide	1317-36-8
Arsenic oxide	1327-53-3

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

Methanol	67-56-1
Toluene	108-88-3
Arsenic oxide	1327-53-3

California List of Hazardous Substances

n-Butyl acetate	123-86-4
Butanone	78-93-3
Ethanol	64-17-5
Antimony trioxide	1309-64-4
Molybdenum sulfide	1317-33-5

California Permissible Exposure Limits for Chemical Contaminants

n-Butyl acetate	123-86-4
Butanone	78-93-3
Ethanol	64-17-5
Antimony trioxide	1309-64-4
Molybdenum sulfide	1317-33-5

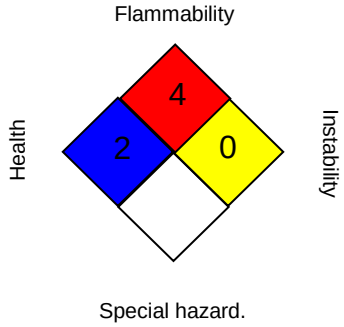
The ingredients of this product are reported in the following inventories:

NZIoC	All ingredients listed or exempt.
REACH	All ingredients (pre-)registered or exempt.
TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
AICS	Consult your local Dow Corning office.
IECSC	All ingredients listed or exempt.
ENCS/ISHL	Consult your local Dow Corning office.
KECI	One or more ingredients are not listed or exempt.
DSL	All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).
TCSI	All ingredients listed or exempt.

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	4
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
DCC OEL	:	Dow Corning Guide
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
DCC OEL / TWA	:	Time weighted average

NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA	:	8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/
Revision Date	:	05/20/2016

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provid-

ed relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8