## **Safety Data Sheet**

# Prepared in Accordance with HCS 29 C.F.R. 1910.1200



## 1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier 985LXA-SDS Revision Date: 09/14/2023

Product Name: Prime Flex LX10 Supersedes Date: 02/18/2021

Component A

1.2 Relevant identified uses of the

substance or mixture and uses

advised against

See Technical Datasheet. For use by appropriately trained applicators. Advised

against: Spray application, because of the additional hazards.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Prime Resins Inc.

2291 Plunkett Road Conyers, GA 30012

USA

Phone: 800-321-7212 Fax: 770-338-0936 www.primeresins.com

Datasheet Produced by: EHS@primeresins.com

1.4 Emergency telephone number: CHEMTREC +001 703 5273887 (Outside US)

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

Giftinformasjonen: +47 22 59 13 00

## 2. Hazard Identification

#### 2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 4
Carcinogenicity, category 2
Eye Irritation, category 2A
Respiratory Sensitizer, category 1
STOT, repeated exposure, category 2
STOT, single exposure, category 3, RTI
Skin Irritation, category 2
Skin Sensitizer, category 1

#### 2.2 Label elements

#### Symbol(s) of Product



#### Signal Word

Danger

#### Named Chemicals on Label

4,4'-methylenediphenyl diisocyanate, Diphenylmethane-diisocyanate, isomers and homologues

#### **HAZARD STATEMENTS**

Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2A	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

## **PRECAUTION PHRASES**

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P284	Wear respiratory protection.
P285	In case of inadequate ventilation wear respiratory protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

## 2.3 Other hazards

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

#### Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

## 3. Composition/Information On Ingredients

#### 3.2 Mixtures

Hazardous ingredients

Name According to EEC EINEC No. CAS-No. % Classifications

4,4'-methylenediphenyl diisocyanate	202-966-0	101-68-8	50 - <75	H315-317-319-332-3 34-335-351-373	Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1A, STOT RE 2, STOT SE 3 RTI
Diphenylmethane- diisocyanate, isomers and homologues	618-498-9	9016-87-9	50 - <75	H315-317-319-332-3 34-335-351-373	Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1A, STOT RE 2, STOT SE 3 RTI

 CAS-No.
 M-Factors

 101-68-8
 0

 9016-87-9
 0

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

## 4. First-aid Measures

#### 4.1 Description of First Aid Measures

**GENERAL NOTES:** When symptoms persist or in all cases of doubt seek medical advice. Show this safety data sheet to the doctor in attendance.

AFTER INHALATION: Remove person to fresh air. If signs/symptoms continue, get medical attention.

**AFTER SKIN CONTACT:** Use a mild soap if available. Do not use solvent or thinners to clean skin. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. **AFTER EYE CONTACT:** Consult a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

**AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. Obtain medical attention. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.

#### Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. 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.

#### 4.2 Most important symptoms and effects, both acute and delayed

May cause damage to organs through prolonged or repeated exposure. Harmful by inhalation. Irritating to respiratory system. Limited evidence of a carcinogenic effect. Irritating to eyes and skin. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## 5. Fire-fighting Measures

## 5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Do not use a solid water stream as it may scatter and spread fire. Alcohol, Alcohol based solutions, any other media not listed above.

## 5.2 Special hazards arising from the substance or mixture

Carbon monoxide, carbon dioxide, nitrogen oxide, cyanides, isocyanate vapours. Reacts violently with water.

#### 5.3 Advice for firefighters

Use water spray to cool unopened containers. Fire will produce dense black smoke containing hazardous combustion products (see section 10). In the event of fire, wear self-contained breathing apparatus. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

#### 6. Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. For personal protection see section 8.2. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Discharge into the environment must be avoided. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

#### 6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Refer to protective measures listed in sections 7 and 8. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### 6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

## 7. Handling and Storage

#### 7.1 Precautions for safe handling

**INSTRUCTIONS FOR SAFE HANDLING:** People handling polyurethane products must have received special training according to guidelines from the National Occupational Health and Safety Board. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin and eyes. Apply technical measures to comply with the occupational exposure limits (see section 8).

**PROTECTION AND HYGIENE MEASURES:** Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. In the case of sensitisation to any of the ingredients, it is inadvisable to work with the product. Handle in accordance with good industrial hygiene and safety practice. Keep working clothes separately. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

#### 7.2 Conditions for safe storage, including any incompatibilities

**CONDITIONS TO AVOID:** Avoid temperatures above 30 °C, direct sunlight and contact with sources of heat. Do not freeze. **STORAGE CONDITIONS:** Keep out of the reach of children. Keep at temperatures between 10 and 30 °C. Store in original container. Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep away from food, drink and animal feeding stuffs.

#### 7.3 Specific end use(s)

Component of multicomponent coatings. The mixing and application to be in accordance with the technical data sheets.

## 8. Exposure Controls/Personal Protection

#### 8.1 Control parameters

## Ingredients with Occupational Exposure Limits (US)

NameCAS-No.ACGIH TWAACGIH STELACGIH Ceiling4,4'-methylenediphenyl diisocyanate101-68-80.005 PPM

Diphenylmethane-diisocyanate, isomers 9016-87-9 and homologues

Name CAS-No. OSHA PEL OSHA STEL

4,4'-methylenediphenyl diisocyanate 101-68-8 0.02 PPM-CEILIN

Diphenylmethane-diisocyanate, isomers

9016-87-9

and homologues

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

#### 8.2 Exposure controls

#### **Personal Protection**

**RESPIRATORY PROTECTION:** No personal respiratory protective equipment normally required. In case of insufficient ventilation wear suitable respiratory equipment. Combination filter: A2-P2.

EYE PROTECTION: Safety glasses with side-shields conforming to EN 166.

HAND PROTECTION: Isocyanates can harden gloves and increase the risk of their splitting. Protective gloves complying with EN 374: Viton®, Neoprene, Nitrile rubber, Butyl rubber. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Long sleeved clothing. Remove and wash contaminated clothing before re-use.

**OTHER PROTECTIVE EQUIPMENT:** Ensure that eyewash stations and safety showers are close to the workstation location. **ENGINEERING CONTROLS:** At temperatures below 30°C, provide a good standard of general ventilation. At temperatures over 30°C - and always if sprayed - exhaust ventilation is required. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

## 9. Physical and Chemical Properties

9.1	Information on basic physical and chemical properties	
	A	

Appearance: Brown liquid

Physical State Liquid
Odor Mild

Odor threshold Not determined

pH Not determined

Melting point / freezing point (°C)

Not determined

Boiling point/range (°C) N.D. - N.D.

Flash Point, (°F / °C) Not determined

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive Not determined

limits - %(V)

Vapour Pressure Not determined

Vapour density Not determined

Relative density Not determined

Solubility in / Miscibility with water Not determined

Partition coefficient: n-octanol/water Not determined

Auto-ignition temperature (°C) Not determined

Decomposition temperature (°C)

Not determined

Viscosity 200 cP

Explosive properties Not determined

Oxidising properties

Not determined

#### 9.2 Other information

VOC Content g/l: Not determined

Specific Gravity (g/cm3) 1.230

## 10. Stability and Reactivity

## 10.1 Reactivity

No reactivity hazards known under recommended storage and use conditions.

#### 10.2 Chemical stability

Stable under recommended storage conditions. Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

#### 10.3 Possibility of hazardous reactions

Polymerises at about 200°C with evolution of CO2. Amines and alcohols cause exothermic reactions. Preparation reacts slowly with water resulting in evolution of CO2.

#### 10.4 Conditions to avoid

Avoid temperatures above 30 °C, direct sunlight and contact with sources of heat. Do not freeze.

#### 10.5 Incompatible materials

Keep away from oxidising agents, strongly acid or alkaline materials, as well as of amines, alcohols and water.

#### 10.6 Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke. Preparation reacts slowly with water resulting in evolution of CO2. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

## 11. Toxicological Information

#### Information on toxicological effects 11.1

**Acute Toxicity:** 

Oral LD50: No information available. Inhalation LC50: No information available.

No information available. Irritation:

No information available. Corrosivity:

Sensitization: No information available.

No information available. Repeated dose toxicity:

Carcinogenicity: No information available.

Mutagenicity: No information available.

No information available. Toxicity for reproduction:

No information available. STOT-single exposure: No information available.

No information available. Aspiration hazard:

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	<u>Chemical Name</u>	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
101-68-8	4,4'-methylenediphenyl diisocyanate	15000 mg/kg oral	>9400 mg/kg	43 ppm vapor 4 hrs	0.000	0.000
9016-87-9	Diphenylmethane-diisocyanate, isomers and homologues	>10000 mg/kg	>9400 mg/kg	049 mg/l (4 h, Aerosol. rat)		

## Additional Information:

In the case of sensitisation to any of the ingredients, it is inadvisable to work with the product. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. Isocyanates may cause acute irritation and/or sensitisation of the respiratory system leading to tightness of the chest, wheeziness and an asthmatic condition.

## 12. Ecological Information

STOT-repeated exposure:

#### 12.1 Toxicity:

EC50 48hr (Daphnia): No information No information IC50 72hr (Algae): No information LC50 96hr (fish):

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

**12.4 Mobility in soil:** No information

12.5 Results of PBT and vPvB The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

assessment:

**12.6 Other adverse effects:** No information

CAS-No.	<u>Chemical Name</u>	EC50 48hr	IC50 72hr	LC50 96hr
101-68-8	4,4'-methylenediphenyl diisocyanate	>1000 mg/l	No information	>1000 mg/l
9016-87-9	Diphenylmethane-diisocyanate, isomers and homologues	No information	1640 mg/l	>1000 mg/l

## 13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Dispose of waste material at an approved hazardous waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems. Contaminated packaging to be disposed of as product. Empty containers should be taken to an approved waste handling site for recycling or disposal. The product should not be allowed to enter drains, water courses or the soil.

## 14. Transport Information

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations.
	Technical name	Not applicable
14.3	Transport hazard class(es)	Not applicable
	Subsidiary shipping hazard	Not applicable
14.4	Packing group	Not applicable
14.5	Environmental hazards	Not applicable
14.6	Special precautions for user	Not applicable
	EmS-No.:	Not applicable
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

## 15. Regulatory Information

## U.S. Federal Regulations: As follows -

## **CERCLA - Sara Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

<sup>15.1</sup> Safety, health and environmental regulations/legislation for the substance or mixture:

#### Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the U.S. Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.	<u>%</u>
4,4'-methylenediphenyl diisocyanate	101-68-8	50
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	50

#### **Toxic Substances Control Act:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

#### U.S. Clean Air Act:

EPA Coating Category:

EPA VOC Content Limit (g/l):

Product VOC Content (g/l)

Thinning Recommendations:

Application Recommendations:

Not applicable

Not applicable

## U.S. State Regulations: As follows -

#### New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

#### Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

#### California Proposition 65:

No Proposition 65 Chemicals exist in this product.

## International Regulations: As follows -

#### \* Canadian DSL:

All chemical ingredients included on inventory or exempt.

<sup>\*</sup> As per the federal EPA definition for coating categories in 40 CFR 59.401.

<sup>\*\*</sup> Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

#### 15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## 16. Other Information

#### Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

#### Reasons for revision

Substance and/or Product Properties Changed in Section(s):

01 - Identification

02 - Hazard Identification

03 - Composition/Information On Ingredients

05 - Fire-fighting Measures

08 - Exposure Controls/Personal Protection

09 - Physical and Chemical Properties

11 - Toxicological Information

14 - Transportation Information

15 - Regulatory Information

Revision Statement(s) Changed

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

#### Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation EC European Commission

EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration

IC50 Half maximal inhibitory concentration

PBT Persistent bioaccumulative toxic chemical

vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container RTI Respiratory Tract Irritation

NE Narcotic Effects

IMO International Maritime Organization

Note P: The classification as a carcinogen or mutagen need not apply; the substance

contains less than 0,1 % w/w benzene

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in

powder form containing 1 % or more of titanium dioxide which is in the form of

or incorporated in particles with aerodynamic diameter  $\leq$  10  $\mu m$ .

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.

## **Safety Data Sheet**

# Prepared in Accordance with HCS 29 C.F.R. 1910.1200



## 1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier RM-PFLX10 B Revision Date: 09/12/2023

Product Name: Prime Flex 985 LX10 Component Supersedes Date: 02/18/2021

В

**1.2 Relevant identified uses of the**Polyol MixtureFor use by appropriately trained applicators. Advised against: Spray

**substance or mixture and uses** application, because of the additional hazards. advised against

1.3 Details of the supplier of the safety data sheet

Supplier: Prime Resins Inc.

2291 Plunkett Road Conyers, GA 30012

USA

Phone: 800-321-7212 Fax: 770-338-0936 www.primeresins.com

Datasheet Produced by: EHS@primeresins.com

1.4 Emergency telephone number: CHEMTREC +001 703 5273887 (Outside US)

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

Giftinformasjonen: +47 22 59 13 00

## 2. Hazard Identification

## 2.1 Classification of the substance or mixture

Flammable Liquid, category 2

#### 2.2 Label elements

#### Symbol(s) of Product



#### Signal Word

Danger

#### Named Chemicals on Label

None

#### **HAZARD STATEMENTS**

Flammable Liquid, category 2
PRECAUTION PHRASES

H225

Highly flammable liquid and vapour.

P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P235 Keep cool.

P403+233 Store in a well-ventilated place. Keep container tightly

closed.

#### 2.3 Other hazards

No Information

#### Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

## 3. Composition/Information On Ingredients

#### 3.2 Mixtures

#### Hazardous ingredients

Name According to EEC tris(2-chloroisopropyl) phosphate	EINEC No.	<u>CAS-No.</u> 13674-84-5	<u>%</u> 2.5 - <10	<u>Classifications</u> H302	Acute Tox. 4 Oral
Cyclopentane		287-92-3	2.5 - <10	H225-412	Aquatic Chronic 3, Flam. Liq. 2
2,2-Dimethylbutane		75-83-2	1.0 - <2.5	H225-304-315-336-4 11	Aquatic Chronic 2, Asp. Tox. 1, Flam. Liq. 2, Skin Irrit. 2, STOT SE 3 NE

CAS-No.M-Factors13674-84-50287-92-3075-83-20

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

#### 4. First-aid Measures

## 4.1 Description of First Aid Measures

**GENERAL NOTES:** When symptoms persist or in all cases of doubt seek medical advice.

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.

**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

**AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

#### Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. 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.

#### 4.2 Most important symptoms and effects, both acute and delayed

No Information

#### 4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## 5. Fire-fighting Measures

#### 5.1 Extinguishing Media:

Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

#### 5.2 Special hazards arising from the substance or mixture

No Information

#### 5.3 Advice for firefighters

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 6. Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

## 6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

## 6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

#### 6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

## 7. Handling and Storage

## 7.1 Precautions for safe handling

**INSTRUCTIONS FOR SAFE HANDLING:** Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Keep away from sources

of ignition - No smoking.

**PROTECTION AND HYGIENE MEASURES:** Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

#### 7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Direct sources of heat.

**STORAGE CONDITIONS:** Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

#### 7.3 Specific end use(s)

No specific advice for end use available.

## 8. Exposure Controls/Personal Protection

## 8.1 Control parameters

## Ingredients with Occupational Exposure Limits

(US)

<u>Name</u>	CAS-No.	ACGIH TWA	ACGIH STEL	ACGIH Ceiling
tris(2-chloroisopropyl) phosphate	13674-84-5			
Cyclopentane	287-92-3	600 PPM		
2,2-Dimethylbutane	75-83-2	500 PPM	1000 PPM	
<u>Name</u>	CAS-No.	OSHA PEL	OSHA STEL	
Name tris(2-chloroisopropyl) phosphate	<u>CAS-No.</u> 13674-84-5	OSHA PEL	OSHA STEL	
		OSHA PEL  1720 MGM3, 600 PPM	OSHA STEL	

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

#### 8.2 Exposure controls

#### **Personal Protection**

**RESPIRATORY PROTECTION:** No personal respiratory protective equipment normally required. In case of insufficient ventilation wear suitable respiratory equipment, Combination filter A2-P2.

**EYE PROTECTION:** Tightly fitting safety goggles.

**HAND PROTECTION:** Impervious gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

**ENGINEERING CONTROLS:** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

## 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Not determined

Physical State Liquid

Odor Slightly sweet
Odor threshold Not determined
pH Not determined

Not determined

Melting point / freezing point (°C)

Not determined

Boiling point/range (°C) 49 - N.D.

Flash Point, (°F / °C)

Evaporation rate

Not determined

Not determined

Flammability (solid, gas)

Not determined

Upper/lower flammability or explosive

limits - %(V)

Vapour Pressure Not determined
Vapour density Not determined

Relative density 1.06

Solubility in / Miscibility with water Not determined

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Not determined

Decomposition temperature (°C)

Not determined

Viscosity 500 cps

Explosive properties Not determined

Oxidising properties

Not determined

9.2 Other information

VOC Content g/l: Not determined

Specific Gravity (g/cm3) 1.064

## 10. Stability and Reactivity

#### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

#### 10.2 Chemical stability

Stable under recommended storage conditions. Risk of ignition.

#### 10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

#### 10.4 Conditions to avoid

Direct sources of heat.

## 10.5 Incompatible materials

Strong oxidizing agents.

## 10.6 Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

## 11. Toxicological Information

#### 11.1 Information on toxicological effects

**Acute Toxicity:** 

Oral LD50: No information available.

Inhalation LC50: No information available.

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction:

STOT-single exposure:

No information available.

No information available.

No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u> <u>Chemical Name</u> <u>Oral LD50</u> <u>Dermal LD50</u> <u>Vapor LC50</u> <u>Gas LC50</u> <u>Dust/Mist LC50</u>

13674-84-5 tris(2-chloroisopropyl) phosphate 1240 0.000 0.000

#### Additional Information:

No Information

## 12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information
No information
No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

**12.4 Mobility in soil:** No information

12.5 Results of PBT and vPvB The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

assessment:

#### 12.6 Other adverse effects: No information

CAS-No.	Chemical Name	EC50 48hr	<u>IC50 72hr</u>	LC50 96hr
13674-84-5	tris(2-chloroisopropyl) phosphate	No information	No information	
287-92-3	Cyclopentane	No information	No information	No information
75-83-2	2,2-Dimethylbutane	No information	No information	No information

## 13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport Information

**14.1 UN number** UN1866

14.2 UN proper shipping name Resin solution, flammable

Technical name Not applicable

14.3 Transport hazard class(es) 3

Subsidiary shipping hazard Not applicable

14.4 Packing group

14.5 Environmental hazards
Not applicable
Not applicable
Not applicable
EmS-No.:
Not applicable

14.7 Transport in bulk according to Annex II of

MARPOL 73/78 and the IBC code

Not applicable

## 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

## U.S. Federal Regulations: As follows -

#### **CERCLA - Sara Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids)

#### Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the U.S. Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR part 372:

<u>Chemical Name</u> <u>CAS-No.</u> %

No SARA 313 substances exist in this product above de minimis concentrations.

#### **Toxic Substances Control Act:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

#### U.S. Clean Air Act:

EPA Coating Category:

EPA VOC Content Limit (g/l):

Product VOC Content (g/l)

Thinning Recommendations:

Application Recommendations:

Not applicable

Not applicable

## U.S. State Regulations: As follows -

## New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS-No.
Sucrose, propoxylated	
Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1)	9082-00-2
glycerol propoxylate	25791-96-2

#### Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u>	<u>CAS-No.</u>
Sucrose, propoxylated	
Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1)	9082-00-2
glycerol propoxylate	25791-96-2

## California Proposition 65:

No Proposition 65 Chemicals exist in this product.

## International Regulations: As follows -

#### \* Canadian DSL:

All chemical ingredients included on inventory or exempt.

<sup>\*</sup> As per the federal EPA definition for coating categories in 40 CFR 59.401.

<sup>\*\*</sup> Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

#### 15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## 16. Other Information

#### Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225
H302
H304
H304
H315
Causes skin irritation.
H336
May cause drowsiness or dizziness.
H411
Toxic to aquatic life with long lasting effects.
H412
Harmful to aquatic life with long lasting effects.

#### Reasons for revision

Substance and/or Product Properties Changed in Section(s):

- 01 Identification
- 02 Hazard Identification
- 03 Composition/Information On Ingredients
- 05 Fire-fighting Measures
- 08 Exposure Controls/Personal Protection
- 09 Physical and Chemical Properties
- 11 Toxicological Information
- 14 Transportation Information
- 15 Regulatory Information

Substance CAS Number Changed

Substance Chemical Name Changed Substance Hazard Threshold % Changed

Composition Information Changed

Substance Regulatory CAS Number Changed

Substance Hazardous Flag Changed

Revision Statement(s) Changed

#### List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

## Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission
EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration

IC50 Half maximal inhibitory concentration

PBT Persistent bioaccumulative toxic chemical

vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container RTI Respiratory Tract Irritation

NE Narcotic Effects

IMO International Maritime Organization

Note P: The classification as a carcinogen or mutagen need not apply; the substance

contains less than 0,1 % w/w benzene

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in

powder form containing 1 % or more of titanium dioxide which is in the form of

or incorporated in particles with aerodynamic diameter  $\leq$  10  $\mu$ m.

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.