SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006
OSHA Hazard Communication Standard 29 CFR 1910.1200

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier:

22-11202 ALUMINUM EPOXY TOPCOAT

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

Uses in Coatings: Industrial Use
Uses in Coatings: Professional Use

1.3 Details of the supplier of the safety data sheet

Sterling Lacquer Mfg. Co.
3150 Brannon Avenue
Saint Louis, MO 63139
Telephone: 314-776-4450
Fax: 314-771-1858
Email address: sds@sterlinglacquer.com

1.4 Emergency telephone number

800-424-9300 Or Outstide the USA 011-703-581-3887 (Chemtrec)
Or contact National Poison Center or Registered Medical Provider

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Section 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) 1272/2008

Physical Hazards:
Flammable liquids, Category 3; H225: Highly Flammable liquid and vapor

Health Hazards:

Asp. Tox., Cat 1	H304 – May be fatal if swallowed and enters airways.
Skin Irrit., Cat. 2	H315 – Causes skin irritation.
Eye Irrit., Cat. 2	H319 – Causes serious eye irritation.
STOT SE, Cat. 3	H336 – May cause drowsiness or dizziness.

2.2 Label elements according to Regulation (EC) 1272/2008

Hazard Pictogram:

Signal Word: Danger

Hazard Statements

Hazard Statements

H225 – Highly flammable liquid and vapor
H319 – Causes serious eye irritation.
H332 – Harmful if inhaled.
H336 – May cause drowsiness or dizziness.

Precautionary Statements
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.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release to the environment.
P308 + P313: If exposed or concerned: Get medical advice/attention.
P370+P378: In case of fire: Use dry sand, CO_2, dry chemical or alcohol-resistant foam for extinction.
P403+P235: Store in a well-ventilated place. Keep cool.
P404: Store in a closed container.
P501: Dispose of content/container to an approved waste disposal plant in accordance with local, state and federal laws.

Supplemental Information:

Read all information on labels and contained in this document before use. For Industrial Use Only. Keep out of reach of children.

Additional labelling:

N/A

2.3 Other hazards
Not Available

Section 3: Composition/information on ingredients

Ingredient Name CAS No. EC No. Reg. No.	Classification		Classification	% Concentration
2-(propyloxy)ethanol 2807-30-9 220-548-6 01-2119883539-19	Eye Irrit. 2	H319	R21-36	20-30%
Toluene 108-88-3 203-625-9 01-2119471310-51	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3	H225 H304 H315 H336	R11-48/20-63-65-38	5-15%
Methyl Ethyl Ketone 78-93-3 201-159-0 01-2119457290-43	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336	R: 11-36-66-67	5-15%
Aluminum 7429-90-5 231-072-3	(Powder) Flam. Sol. 1	H228	R: 15-17	5-15%

01-2119529243-45

Additional Information: The text for R-Phrases is given in Section 16.

Section 4: First Aid Measures

4.1 Description of first aid measures

After Inhalation: Move to fresh air. Obtain medical attention if needed.
After Skin Contact: Remove contaminated clothing. Wash affected area with soap and water.
After Eye Contact: Flush with water for 15 minutes. Get immediate medical attention.
After Ingestion: Do not induce vomiting. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
In all cases of doubt, or when symptoms persist, seek medical attention.

4.3 Indication of any immediate medical attention and special treatment needed

Not available.

Section 5: Firefighting measures

5.1 Extinguishing Media

Suitable extinguishing media: Foam, CO2, Dry Chemical.
Unsuitable extinguishing media: Do not use water.

5.2 Special hazards arising from the substance or mixture

Flammable liquid, can release vapors that form flammable mixtures at temperature at or above the Flashpoint. Eliminate and isolate from all sources of Ignition. Combustion will produce CO2, CO, and toxic gasses. Apply water fog nozzles to cool closed container and nearby equipment. Exposure to decomposition products may cause a health hazard.

5.3 Advice for firefighters

Wear self-contained breathing apparatus with a full facepiece operated in pressure-demand when fighting fires. Do not allow run-off from fire fighting to enter drains or water courses.

Section 6: Accidental release measures

6.1 Personal precautions

Evacuate all personnel immediately and ventilate area. Eliminate every possible source of ignition. Wear respirator. Avoid contact with skin, eyes, and clothing. Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Shut off leaks if without risks. Absorb with vermiculite or other absorbent material. Stop spill at source and prevent spreading. Prevent entry into sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up

Collect spillage in closable, suitable disposal containers. Clean up spill as soon as possible using vermiculite, sand, earth or other absorbent material. Destroy by liquid incineration. Contaminated absorbent may be deposited in a landfill in accordance with local regulations.

6.4 Reference to other sections

For personal protection see section 8. For waste regulation see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentrations higher than the occupational exposure limits. Comply with the health and safety at work laws. Smoking, eating and drinking should be prohibited in the application area. Observe specific local and national regulations for handling and use of paints.

The product should be stored in a dry area. Keep containers tightly closed. Protect from physical damage. Emptied containers retain product residues (vapor, liquid, and/or solid). Store below 49° C.

Wash hands after using. Keep out of reach of children. Do not take internally. For professional industrial use only.

7.2 Conditions for safe storage, including any incompatibilities

Store large quantities in buildings designed to comply with OSHA 1910.106. Keep containers tightly closed. Keep closure tight and container upright to prevent leakage. Do not store near heat, sparks or flame. Do not get in eyes. Keep away from children. Avoid skin contact. Do not take internally. For Industrial use.

Avoid strong oxidizers. Avoid excessive heat.

7.3 Specific end use(s)

Paint or paint related material

Section 8: Exposure Controls/personal protection

8.1 Control parameters

Substance	**CAS No.**	**Workplace Exposure Limit EH40 Workplace Exposure Limits**				**OSHA PEL**		**Cal/OSHA PEL** (as of 4/26/13	**NIOSH REL** (as of 4/26/13)	**ACGIH** 2015 TLV
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)				8-hr TWA (ST) STEL (C) Ceiling	Up to 10-hr TWA (ST) STEL (C) Ceiling	8-hr TWA (ST) STEL (C) Ceiling
		ppm	**mg/m^3**	**ppm**	**mg/m^3**	**ppm**	**mg/m^3**			
2-(propyloxy) ethanol	2807-30-9	N/E								
Toluene	108-88-3	50	191	100	384	200		150 ppm		100
Methyl Ethyl Ketone	78-93-3	200	600	300	899	200	590	200 ppm (ST) 300 ppm	200 ppm (ST) 300 ppm	200 ppm (ST) 300 ppm
Aluminum	7429-90-5		4 (Dust)				15	10 mg/m3	10 mg/m3	

8.2 Exposure controls

Engineering measures: Ventilate area. Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below OEL(s). If unable to maintain aerosol and solvent vapors concentration below the OEL, suitable respiration protection must be worn.

Respiratory Protection: If exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Use half-mask model with cartridge or air-fed. Where practical, install exhaust hoods to improve capture of vapors and fumes and avoid exposition; otherwise wear respiratory protection equipment.

Eye Protection: Wear safety goggles to protect against solvent splashes.

Hand Protection: Rubber or plastic 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 sleeve clothing. Remove and wash contaminated clothing before re-use.

Skin and body protection: To prevent repeated or prolonged skin contact, wear solvent impervious clothing and boots.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Colored liquid
Physical State (20 C)	Liquid
Odour	Solvent Odour
Odour Threshold	Not determined
pH	N/A
Melting point/freezing point	Not determined
Boiling Point/Range (1013 hPa)	78-149° C
Flashpoint	-6° C
Evaporation Rate	Not determined
Flammability (solid, gas)	Not determined
Flammable Limits in air by Volume	Lower: 1.2% Upper: 15.8%
Explosive Limits	Not determined
Vapor Pressure, mmHg	Not determined
Relative vapor density	Not determined
Relative density	No data available
Water solubility	Negligible
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Coating VOC content (g/l)	544
Specific Gravity	1.1-1.2

9.2 Other information

N/A

Section 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.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Avoid excessive heat.

10.5 Incompatible materials

Avoid alkali metal hydroxides, such as sodium hydroxide. Avoid strong oxidizers.

10.6 Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO)

Section 11: Toxicological effects

11.1 Information on toxicological effects

Acute Toxicity

Substance Name	**CAS**	**Test Data**
2-(propyloxy)ethanol	2807-30-9	Oral LD-50: (Rat): 3,089 mg/kg
Toluene	108-88-3	Oral LD50 (Rat): 636 mg/kg Dermal LD50 (Rabbit): 14100 mg/kg
Methyl Ethyl Ketone	78-93-3	Oral LD50 (Rat): 2737 mg/kg Dermal LD50 (Rabbit): 6480 mg/kg
Aluminum	7429-90-5	No Data Available

Skin Corrosion/Irritation: Not Available

Serious Eye Damage/Irritation: Not Available

Respiratory/Skin Sensitization: Not Available

Germ Cell Mutagenicity: Not Available

Carcinogenicity: No Information available for the mixture itself.

Specified Substances:

Substance	**IARC**
Toluene	Group 3: Not classifiable as to its carcinogenicity to humans
2-(propyloxy)ethanol	Group 3: Not classifiable as to its carcinogenicity to humans

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Reproduction Toxicity: Not Available

Aspiration Hazard: Not Available

Routes of Exposure:

Inhalation of vapor or spray mist.
Eye or Skin contact with the product, vapor or spray mist.

Effects of overexposure

Inhalation: Irritating to the respiratory tract (nose, throat, lungs).
Eyes: Irritating to eyes.
Skin: Irritating to skin.

Section 12: Ecological information

12.1 Toxicity

Components

Substance	**CAS No.**	**Test Data**
2-(propyloxy) ethanol	2807-30-9	LC-50 (Fathead Minnow, 96 h): > 5,000 mg/l LC-50 (Water Flea, 48 h): > 5,000 mg/l
Toluene	108-88-3	LC50: 18 - 36 mg/l, Exposure time: 96 h Species: Pimephales promelas (fathead minnow) : EC50 - 24 h : 72,8 mg/l - Daphnia magna (Water flea)
Methyl Ethyl Ketone	78-93-3	Acute: Algae EC50 Green Algae (Scenedesmus subspicatus) 75.5 mg/l, 72 hours Crustacea EC50 Water flea (Daphnia magna) > 90.1 mg/l, 48 hours Fish LC50 Fathead minnow (Pimephales promelas) 131 mg/l, 96 hours
Aluminum	7429-90-5	No Data Available

12.2 Persistence and degradability

There is no data available for the preparation itself.

12.3 Bioaccumulation

There is no data available for the preparation itself.

12.4 Mobility in soil

There is no data available for the preparation itself.

12.5 Results of PBT and vPvB assessment

Not Applicable

12.6 Other adverse effects

There is no data available for the preparation itself. The product should not be allowed to enter drains or water courses.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Waste from Residues/Unused Products: There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the US and EC member countries through corresponding laws and regulation. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

Removal contaminated Packaging: Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like house hold waste or recycled.

Recommended EU Waste key for the unused product: 080111 waste paint and varnish containing organic solvents or other dangerous substances. If unsure, waste codes should be assigned by the user based on the application for which the product was used. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Section 14: Transportation information

	ADR/RID	**IMDG**	**IATA/ICAO**
14.1 UN Number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transportation hazard class	3	3	3
14.4 Packing group	II	II	II
14.5 Environmental hazards	NO	NO	NO
14.6 Special precautions for user	Tunnelcode: D/E	F-E, S-E	Packing Instruction 364 Cargo aircraft only
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC	Not applicable	Not applicable	Not applicable
14.8 Technical names	Not applicable	Not applicable	Not applicable

Section 15: Regulatory information

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

Directive 1999/13/EC: VOC Content excluding water 544 G/L

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: None

Annex XIV - List of substances subject to authorization, Substances of very high concern: None

The information given in this material safety data sheet does not release the user from its duty of risk assessment and control in the work place defined in other health and safety law. Adhere to the national sanitary and occupational safety regulations when using this product.

Toxic Substances Control Act: All the components of this product comply with applicable requirements of the US EPA TSCA inventory.

15.2 Chemical safety assessment

This product contains substance for which Chemical Safety Assessments are still required.

Section 16: Other information

Full text of R-phrases

R11: Highly flammable

R15: Contact with water liberates extremely flammable gases
R17: Spontaneously flammable in air
R21: Harmful in contact with skin
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
R36: Irritating to eyes
R38: Irritating to skin
R63: Possible risk of harm to the unborn child
R65: Harmful: may cause lung damage if swallowed
R66: Repeated exposure may cause skin dryness or cracking
R67: Vapours may cause drowsiness and dizziness

Revision Date: 3/1/16

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006
OSHA Hazard Communication Standard 29 CFR 1910.1200

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier:

22-7589 EPOXY CATALYST

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

Uses in Coatings: Industrial Use
Uses in Coatings: Professional Use

1.3 Details of the supplier of the safety data sheet

Sterling Lacquer Mfg. Co.
3150 Brannon Avenue
Saint Louis, MO 63139
Telephone: 314-776-4450
Fax: 314-771-1858
Email address: sds@sterlinglacquer.com

1.4 Emergency telephone number

800-424-9300 Or Outstide the USA 011-703-581-3887 (Chemtrec)
Or contact National Poison Center or Registered Medical Provider

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Section 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) 1272/2008

Physical Hazards:
Flammable liquids, Category 2; H225: Highly flammable liquid and vapor

Health Hazards:

Asp. Tox., Cat 1	H304 – May be fatal if swallowed and enters airways.
Skin Irrit., Cat. 2	H315 – Causes skin irritation.
Eye Irrit., Cat. 2	H319 – Causes serious eye irritation.
STOT SE, Cat. 3	H336 – May cause drowsiness or dizziness.

Classification according to Dangerous Preparation Directive – 1999/45/EC
Harmful

2.2 Label elements according to Regulation (EC) 1272/2008

Hazard Pictogram:

Signal Word: Danger

Hazard Statements

H225 – Highly flammable liquid and vapour.
H304 – May be fatal if swallowed and enters airways.
H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H335 – May cause respiratory irritation.
H336 – May cause drowsiness or dizziness.

Precautionary Statements

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.
P243: Take precautionary measures against static discharge.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P262: Do not get in eyes, on skin, or on clothing.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P273: Avoid release to the environment.
P301+312: If SWALLLOWED: Call a Poison Center or doctor/physician. If you feel unwell.
P308 + P313 – If exposed or concerned: Get medical advice/attention.
P370+P378: In case of fire: Use dry sand, CO2, dry chemical or alcohol-resistant foam for extinction.
P403+P235: Store in a well-ventilated place. Keep cool.
P404 – Store in a closed container.
P501: Dispose of content/container to an approved waste disposal plant in accordance with local, state and federal laws.

Supplemental Information:

Read all information on labels and contained in this document before use. For Industrial Use Only. Keep out of reach of children.

Additional labelling:

N/A

2.3 Other hazards
Not Available

Section 3: Composition/information on ingredients

Ingredient Name CAS No. EC No. Reg. No.	Classification HAZARD CLASS & CATEGORY CODE	(Regulation 1272-2008) HAZARD STATEMENT CODE	Classification (Directive 67-548-EEC)	% Concentration
Toluene 108-88-3 203-625-9 01-2119471310-51	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3	H225 H304 H315 H336	R11-48/20-63-65-38	5-15%
Polyaminoamide				25-35%

68410-23-1				
2-(propyloxy)ethanol 2807-30-9 220-548-6 01-2119883539-19	Eye Irrit. 2	H319	R21-36	35-45%
Normal Butyl Alcohol 71-36-3 200-751-6 01-2119484630-38	Flam. Liq. 3 Acute Tox. 4 STOT SE 3 Skin Irrit. 2	H226 H302 H335 H315	R: 10-22-37/38-41-67	5-15%

Additional Information: The text for R-Phrases is given in Section 16.

Section 4: First Aid Measures

4.1 Description of first aid measures

After Inhalation: Move to fresh air. Obtain medical attention if needed.
After Skin Contact: Remove contaminated clothing. Wash affected area with soap and water.
After Eye Contact: Flush with water for 15 minutes. Get immediate medical attention.
After Ingestion: Do not induce vomiting. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
In all cases of doubt, or when symptoms persist, seek medical attention.

4.3 Indication of any immediate medical attention and special treatment needed

Not available.

Section 5: Firefighting measures

5.1 Extinguishing Media

Suitable extinguishing media: Foam, CO2, Dry Chemical, Foam.
Unsuitable extinguishing media: Do not use water.

5.2 Special hazards arising from the substance or mixture

Flammable liquid, can release vapors that form flammable mixtures at temperature at or above the Flashpoint. Eliminate and isolate from all sources of Ignition. Combustion will produce CO2, CO, and toxic gasses. Apply water fog nozzles to cool closed container and nearby equipment. Exposure to decomposition products may cause a health hazard.

5.3 Advice for firefighters

Wear self-contained breathing apparatus with a full facepiece operated in pressure-demand when fighting fires. Do not allow run-off from fire fighting to enter drains or water courses.

Section 6: Accidental release measures

6.1 Personal precautions

Evacuate all personnel immediately and ventilate area. Eliminate every possible source of ignition. Wear respirator. Avoid contact with skin, eyes, and clothing. Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Shut off leaks if without risks. Absorb with vermiculite or other absorbent material. Stop spill at source and prevent spreading. Prevent entry into sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up

Collect spillage in closable, suitable disposal containers. Clean up spill as soon as possible using vermiculite, sand, earth or other absorbent material. Destroy by liquid incineration. Contaminated absorbent may be deposited in a landfill in accordance with local regulations.

6.4 Reference to other sections

For personal protection see section 8. For waste regulation see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentrations higher than the occupational exposure limits. Comply with the health and safety at work laws. Smoking, eating and drinking should be prohibited in the application area. Observe specific local and national regulations for handling and use of paints.

The product should be stored in a dry area. Keep containers tightly closed. Protect from physical damage. Emptied containers retain product residues (vapor, liquid, and/or solid). Store below 49° C.

Wash hands after using. Keep out of reach of children. Do not take internally. For professional industrial use only.

7.2 Conditions for safe storage, including any incompatibilities

Store large quantities in buildings designed to comply with OSHA 1910.106. Keep containers tightly closed. Keep closure tight and container upright to prevent leakage. Do not store near heat, sparks or flame. Do not get in eyes. Keep away from children. Avoid skin contact. Do not take internally. For Industrial use.

Avoid strong oxidizers. Avoid excessive heat.

7.3 Specific end use(s)

Paint or paint related material

Section 8: Exposure Controls/personal protection

8.1 Control parameters

Substance	**CAS No.**	**Workplace Exposure Limit EH40 Workplace Exposure Limits**				**OSHA PEL**		**Cal/OSHA PEL** (as of 4/26/13 8-hr TWA (ST) STEL (C) Ceiling	**NIOSH REL** (as of 4/26/13) Up to 10-hr TWA (ST) STEL (C) Ceiling	**ACGIH** 2015 TLV 8-hr TWA (ST) STEL (C) Ceiling
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)						
		ppm	**mg/m^3**	**ppm**	**mg/m^3**	**ppm**	**mg/m^3**			
Toluene	108-88-3	50	191	100	384	200		150 ppm		100
Polyaminoamide	68410-23-1	N/E								
Normal Butyl Alcohol	71-36-3			50	154	100	300	(C) 50 ppm	(C) 50 ppm	20 ppm
2-(propyloxy) ethanol	2807-30-9	N/E								

8.2 Exposure controls

Engineering measures: Ventilate area. Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below OEL(s). If unable to maintain aerosol and solvent vapors concentration below the OEL, suitable respiration protection must be worn.

Respiratory Protection: If exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Use half-mask model with cartridge or air-fed. Where practical, install exhaust hoods to improve capture of vapors and fumes and avoid exposition; otherwise wear respiratory protection equipment.

Eye Protection: Wear safety goggles to protect against solvent splashes.

Hand Protection: Rubber or plastic 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 sleeve clothing. Remove and wash contaminated clothing before re-use.

Skin and body protection: To prevent repeated or prolonged skin contact, wear solvent impervious clothing and boots.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Colored liquid
Physical State (20 C)	Liquid
Odour	Solvent Odour
Odour Threshold	Not determined
pH	N/A
Melting point/freezing point	Not determined
Boiling Point/Range (1013 hPa)	83-1497° C
Flashpoint	7° C
Evaporation Rate	Not determined
Flammability (solid, gas)	Not determined
Flammable Limits in air by Volume	Lower: 1.2% Upper: 15.8%
Explosive Limits	Not determined
Vapor Pressure, mmHg	Not determined
Relative vapor density	Not determined
Relative density	No data available
Water solubility	Negligible
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Coating VOC content (g/l)	655
Specific Gravity	0.9-1.0

9.2 Other information
N/A

Section 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.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Avoid excessive heat.

10.5 Incompatible materials

Avoid alkali metal hydroxides, such as sodium hydroxide. Avoid strong oxidizers.

10.6 Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO)

Section 11: Toxicological effects

11.1 Information on toxicological effects

Acute Toxicity

Substance Name	CAS	Test Data
Toluene	108-88-3	Oral LD50 (Rat): 636 mg/kg Dermal LD50 (Rabbit): 14100 mg/kg
Polyaminoamide	68410-23-1	No Data Available
2-(propyloxy)ethanol	2807-30-9	Oral LD-50: (Rat): 3,089 mg/kg
Normal Butyl Alcohol	71-36-3	Oral LD50 (Rabbit): 3484 mg/kg Oral LD50 (Rat): 790 mg/kg

Skin Corrosion/Irritation: Not Available

Serious Eye Damage/Irritation: Not Available

Respiratory/Skin Sensitization: Not Available

Germ Cell Mutagenicity: Not Available

Carcinogenicity: No Information available for the mixture itself.

Specified Substances:

Substance	IARC
Toluene	Group 3: Not classifiable as to its carcinogenicity to humans
2-(propyloxy)ethanol	Group 3: Not classifiable as to its carcinogenicity to humans

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Reproduction Toxicity: Not Available

Aspiration Hazard: Not Available

Routes of Exposure:

Inhalation of vapor or spray mist.
Eye or Skin contact with the product, vapor or spray mist.

Effects of overexposure

Inhalation: Irritating to the respiratory tract (nose, throat, lungs).
Eyes: Irritating to eyes.
Skin: Irritating to skin.

Section 12: Ecological information

12.1 Toxicity

Components

Substance	CAS No.	Test Data
Toluene	108-88-3	LC50: 18 - 36 mg/l, Exposure time: 96 h Species: Pimephales promelas (fathead minnow) : EC50 - 24 h : 72,8 mg/l - Daphnia magna (Water flea)
Polyaminoamide	68410-23-1	No Data Available
2-(propyloxy) ethanol	2807-30-9	LC-50 (Fathead Minnow, 96 h): > 5,000 mg/l LC-50 (Water Flea, 48 h): > 5,000 mg/l
Normal Butyl Alcohol	71-36-3	LC-50 (Fathead Minnow, 96 h): 1,376 mg/l LC-50 (Water Flea, 48 h): 1,328 mg/l

12.2 Persistence and degradability

There is no data available for the preparation itself.

12.3 Bioaccumulation

There is no data available for the preparation itself.

12.4 Mobility in soil

There is no data available for the preparation itself.

12.5 Results of PBT and vPvB assessment

Not Applicable

12.6 Other adverse effects

There is no data available for the preparation itself. The product should not be allowed to enter drains or water courses.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Waste from Residues/Unused Products: There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the US and EC member countries through corresponding laws and regulation. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.
Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

Removal contaminated Packaging: Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like house hold waste or recycled.

Recommended EU Waste key for the unused product: 080111 waste paint and varnish containing organic solvents or other dangerous substances. If unsure, waste codes should be assigned by the user based on the application for which the product was used. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Section 14: Transportation information

	ADR/RID	IMDG	IATA/ICAO
14.1 UN Number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transportation hazard class	3	3	3
14.4 Packing group	II	II	II
14.5 Environmental hazards	NO	NO	NO
14.6 Special precautions for user	Tunnelcode: D/E	F-E, S-E	Packing Instruction 364 Cargo aircraft only
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC	Not applicable	Not applicable	Not applicable
14.8 Technical names	Not applicable	Not applicable	Not applicable

Section 15: Regulatory information

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

Directive 1999/13/EC: VOC Content excluding water 655 G/L

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: None

Annex XIV - List of substances subject to authorization, Substances of very high concern: None

The information given in this material safety data sheet does not release the user from its duty of risk assessment and control in the work place defined in other health and safety law. Adhere to the national sanitary and occupational safety regulations when using this product.

Toxic Substances Control Act: All the components of this product comply with applicable requirements of the US EPA TSCA inventory.

15.2 Chemical safety assessment

This product contains substance for which Chemical Safety Assessments are still required.

Section 16: Other information

Full text of R-phrases

R10: Flammable

R11: Highly flammable

R21: Harmful in contact with skin

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation

R22: Harmful if swallowed

R36: Irritating to eyes

R37: Irritating to respiratory system

R38: Irritating to skin

R41: Risk of serious damage to eyes

R63: Possible risk of harm to the unborn child

R65: Harmful: may cause lung damage if swallowed

R67: Vapours may cause drowsiness and dizziness

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