

Safety Data Sheet



LXA104 ADDITIVO di Adesione per Vetro - Adhesion Additive for Glass

Safety Data Sheet dated 11/3/2020, version 1

1. IDENTIFICATION

Product identifier
 Mixture identification:
 Trade name: ADDITIVO di Adesione per Vetro - Adhesion Additive for Glass
 Other means of identification:
 Trade code: LXA104
 Recommended use of the chemical and restrictions on use
 Recommended use:
 Industrial and professional uses (SU3 - SU22)
 Paint additive
 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party
 Company:
 NUOVA S.I.V.A.M. SpA - Via Monviso, 10 - 20010 BAREGGIO (MI) - Tel. +39 02 90304.1
 Importer:
 Richelieu America Ltd, 7021 Sterling Ponds Blvd, Sterling Heights, MI 48312-5809 U.S. Tel: +1-800-361-6000.
 Emergency phone number for U.S.A.: Chemtrec +1-800-424-9300
 Distributor:
 Richelieu America Ltd, 7021 Sterling Ponds Blvd, Sterling Heights, MI 48312-5809 U.S. Tel: +1-800-361-6000.
 Emergency phone number for U.S.A.: Chemtrec +1-800-424-9300
 Competent person responsible for the safety data sheet:
 msds@sivam.it
 Emergency phone number
 NUOVA S.I.V.A.M. SpA - Tel. +39 02 90304.1 (Monday - Friday 8.00 - 15.00)
 Poison Centre - Ospedale di Niguarda - Milan - Tel. +39 02 66101029 (24 h)

2. HAZARD(S) IDENTIFICATION

Classification of the chemical
 ⚠ Warning, Flam. Liq. 3, Flammable liquid and vapour.
 ⚠ Danger, Eye Dam. 1, Causes serious eye damage.
 ⚠ Warning, STOT SE 3, May cause drowsiness or dizziness.

Label elements
 Hazard pictograms:



Danger
 Hazard statements:
 H226 Flammable liquid and vapour.
 H318 Causes serious eye damage.
 H336 May cause drowsiness or dizziness.
 Precautionary statements:
 P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
 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 dust/fume/gas/mist/vapours/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor/...
 P312 Call a POISON CENTER/doctor/... if you feel unwell.
 P370+P378 In case of fire, use alcohol resistant foam, dry chemical, CO2, water spray. Do not use water jet.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with applicable regulations.
 Special Provisions:
 None
 Hazards not otherwise classified identified during the classification process:

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None
 Ingredient(s) with unknown acute toxicity:
 None.
 Additional classification information
 NFPA rating:



HMIS rating:

| | | |
|---------------------|---|---|
| HEALTH | / | 3 |
| FLAMMABILITY | | 3 |
| PHYSICAL HAZARD | | 1 |
| PERSONAL PROTECTION | | G |

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
 N.A.

Mixtures
 Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

| Qty | Name | Ident. Number | Classification |
|----------------|---|---|---|
| >= 80% - < 90% | n-butyl acetate | Index number: 607-025-00-1 CAS: 123-86-4 EC: 204-658-1 REACH No.: 01-2119485493-29 | ⚠ B.6/3 Flam. Liq. 3 H226 ⚠ A.8/3 STOT SE 3 H336 |
| >= 15% - < 20% | [3-(2,3-epoxypropoxy)propyl] trimethoxysilane | CAS: 2530-83-8 EC: 219-784-2 | ⚠ A.3/1 Eye Dam. 1 H318 |

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.
 OBTAIN IMMEDIATE MEDICAL ATTENTION.
 Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
 Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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Treatment:
None

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:
In case of fire, use alcohol resistant foam, dry chemical, CO₂, water spray. Do not use water jet.

Unsuitable extinguishing media:
None in particular.

Specific hazards arising from the chemical
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

Hazardous combustion products:
None

Explosive properties: N.D. in volume

Oxidizing properties: N.D.

Special protective equipment and precautions for fire-fighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up
Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Do not use on extensive surface areas in premises where there are occupants.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.

Conditions for safe storage, including any incompatibilities
Always keep in a well ventilated place.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Avoid accumulating electrostatic charge.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.
Safety electric system.
Storage temperature:
Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
n-butyl acetate - CAS: 123-86-4
ACGIH - TWA(8h): 50 ppm - STEL: 150 ppm - Notes: Eye and URT irr

DNEL Exposure Limit Values
n-butyl acetate - CAS: 123-86-4
Worker Industry: 960 mg/m³ - Worker Professional: 960 mg/m³ - Consumer: 859.7 mg/m³ - Exposure: Human
Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 960 mg/m³ - Worker Professional: 960 mg/m³ - Consumer: 859.7 mg/m³ - Exposure: Human
Inhalation - Frequency: Short Term, local effects
Worker Industry: 480 mg/m³ - Worker Professional: 480 mg/m³ - Consumer: 102.34 mg/m³ - Exposure: Human
Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 480 mg/m³ - Worker Professional: 480 mg/m³ - Consumer: 102.34 mg/m³ - Exposure: Human
Inhalation - Frequency: Long Term, local effects
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane - CAS: 2530-83-8
Worker Industry: 21 mg/kg - Consumer: 12.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term,
systemic effects

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Worker Industry: 147 mg/m³ - Consumer: 43.5 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 12.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

n-butyl acetate - CAS: 123-86-4

Target: Fresh Water - Value: 0.18 mg/l

Target: Marine water - Value: 0.018 mg/l

Target: Intermittent emission - Value: 0.36 mg/l

Target: Freshwater sediments - Value: 0.98 mg/kg

Target: Marine water sediments - Value: 0.098 mg/kg

Target: Microorganisms in sewage treatments - Value: 35.6 mg/l

Target: Soil (agricultural) - Value: 0.09 mg/kg

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane - CAS: 2530-83-8

Target: Fresh Water - Value: 1 mg/l

Target: Marine water - Value: 0.1 mg/l

Target: Intermittent emission - Value: 1 mg/l

Target: Freshwater sediments - Value: 0.79 mg/kg

Target: Marine water sediments - Value: 0.079 mg/kg

Target: Microorganisms in sewage treatments - Value: 10 mg/l

Target: Food chain - Value: 111 mg/kg

Target: Soil (agricultural) - Value: 0.13 mg/kg

Appropriate engineering controls:

None

Individual protection measures

Eye protection:

Eye glasses with side protection. (EN166)

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. (EN374)

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|-------------------------------------|
| Appearance and colour: | colourless fluid |
| Odour: | typical |
| Odour threshold: | N.D. |
| pH: | N.A. |
| Melting point / freezing point: | N.D. °C |
| Initial boiling point and boiling range: | > 110 °C |
| Solid/gas flammability: | N.A. |
| Upper/lower flammability or explosive limits: | 7.5% - 1.2 % Vol. (n-butyl acetate) |
| Vapour density: | > 1 |
| Flash point: | > 23 °C |
| Evaporation rate: | N.D. |
| Vapour pressure: | N.D. (20 °C) |
| Relative density: | 0.900 - 0.920 |
| Solubility in water: | partial |
| Solubility in oil: | partial |
| Partition coefficient (n-octanol/water): | N.D. |
| Auto-ignition temperature: | > 300 °C |
| Decomposition temperature: | N.D. °C |
| Viscosity: | N.D. |
| Miscibility: | N.D. |
| Fat Solubility: | N.D. |
| Conductivity: | N.D. |
| Substance Groups relevant properties | N.A. |

10. STABILITY AND REACTIVITY

Reactivity

It may generate dangerous reactions (See subsections below)

Chemical stability

It may generate dangerous reactions (See subsections below)

Possibility of hazardous reactions

It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth), and nitrides.

It may catch fire on contact with oxidising mineral acids, powerful oxidising agents, and powerful reducing agents.

Conditions to avoid

Avoid accumulating electrostatic charge.

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Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products

Reacts with water or humidity, generating methanol

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the product:

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a) acute toxicity

Not classified

No data available for the product

b) skin corrosion/irritation

Not classified

No data available for the product

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

d) respiratory or skin sensitisation

Not classified

No data available for the product

e) germ cell mutagenicity

Not classified

No data available for the product

f) carcinogenicity

Not classified

No data available for the product

g) reproductive toxicity

Not classified

No data available for the product

h) STOT-single exposure

The product is classified: STOT SE 3 H336

i) STOT-repeated exposure

Not classified

No data available for the product

j) aspiration hazard

Not classified

No data available for the product

Adverse health effects

The substance if ingested can be harmful or lethal, as it hydrolyzes with organic fluids in the gastrointestinal tract producing methanol, which is toxic. Other possible toxic effects from ingestion are: eye damage and blindness, metabolic acidosis, dizziness and sleepiness, fetal toxicity, damage to the liver, kidneys and heart muscle. In case of poisoning by ingestion observe the latency period which even a few days.

The substance is to be used for industrial applications only.

Do not use for DIY or for sale.

Toxicological information of the main substances found in the product:

n-butyl acetate - CAS: 123-86-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 10760 mg/kg - Source: OECD 423

Test: LC50 - Route: Inhalation - Species: Rat > 23.4 mg/l - Duration: 4h - Source: OECD 403

Test: LD50 - Route: Skin - Species: Rabbit > 14000 mg/kg - Source: OECD 402

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane - CAS: 2530-83-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 8025 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 4250 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 5.3 mg/l - Duration: 4h

n-butyl acetate - CAS: 123-86-4

The vapours can cause headache and nausea. As a liquid it can irritate the eyes and cause conjunctivitis, it can irritate the skin and cause dermatitis and, if swallowed, causes inebriation, hallucinations and sedation.

Symptoms of illness at 500 ppm. Serious toxic effects at 2.000 ppm for 60 min.

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane - CAS: 2530-83-8

The substance, if swallowed can be harmful or lethal, since hydrolyses on the gastric-intestinal tract and produce methanol which is toxic. In case of poisoning, through ingestion, seek medical advice immediately and observe the latency period that can have also a duration of some days.

The substance must be used for professional use only.

Personal use or retail sale is forbidden.

Substance(s) listed on the NTP report on Carcinogens:

None.

Substance(s) listed on the IARC Monographs:

None.

Substance(s) listed as OSHA Carcinogen(s):

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None.

Substance(s) listed as NIOSH Carcinogen(s):

None.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

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Not classified for environmental hazards

No data available for the product

n-butyl acetate - CAS: 123-86-4

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 18 mg/l - Duration h: 96 - Notes: OECD 203

Endpoint: EC50 - Species: Daphnia = 44 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 674 mg/l - Duration h: 72

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane - CAS: 2530-83-8

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 324 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 119 mg/l - Notes: 7 d

Endpoint: LC50 - Species: Fish = 55 mg/l - Duration h: 96

Persistence and degradability

n-butyl acetate - CAS: 123-86-4

Biodegradability: Readily biodegradable

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane - CAS: 2530-83-8

Biodegradability: Non-readily biodegradable

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

None

13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION



UN number

ADR-UN Number: 1263

DOT number: UN1263

IATA-UN Number: 1263

IMDG-UN Number: 1263

UN proper shipping name

ADR-Shipping Name: PAINT RELATED MATERIAL

DOT-Shipping Name: Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base or Paint related material including paint thinning, drying, removing, or reducing compound

IATA-Shipping Name: PAINT RELATED MATERIAL

IMDG-Shipping Name: PAINT RELATED MATERIAL

Transport hazard class(es)

ADR-Class: 3

DOT Hazard Class: 3

ADR - Hazard identification number: 30

IATA-Class: 3

IATA-Label: 3

IMDG-Class: 3

Packing group

ADR-Packing Group: III

DOT Packing group: III

IATA-Packing group: III

IMDG-Packing group: III

Environmental hazards

ADR-Environmental Pollutant: No

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| | |
|--|--|
| IMDG-Marine pollutant: | No |
| Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code) | N.A. |
| Special precautions | |
| DOT Special provisions: | 367, B1, B52, B131, IB3, T2, TP1, TP29 |
| ADR-Subsidiary hazards: | - |
| ADR-S.P.: | 163 367 650 |
| ADR-Transport category (Tunnel restriction code): | 3 (D/E) |
| IATA-Passenger Aircraft: | 355 |
| IATA-Subsidiary hazards: | - |
| IATA-Cargo Aircraft: | 366 |
| IATA-S.P.: | A3 A72 A192 |
| IATA-ERG: | 3L |
| IMDG-EmS: | F-E , S-E |
| IMDG-Subsidiary hazards: | - |
| IMDG-Stowage and handling: | Category A |
| IMDG-Segregation: | - |

15. REGULATORY INFORMATION

- USA - Federal regulations
- TSCA - Toxic Substances Control Act
 - TSCA inventory: all the components are listed on the TSCA inventory.
 - TSCA listed substances:
 - n-butyl acetate is listed in TSCA Section 8b
 - [3-(2,3-epoxypropoxy)propyl]trimethoxysilane is listed in TSCA Section 8b, Section 8d HSDR.
 - SARA - Superfund Amendments and Reauthorization Act
 - Section 302 – Extremely Hazardous Substances: no substances listed.
 - Section 304 – Hazardous substances: n-butyl acetate.
 - Section 313 – Toxic chemical list: no substances listed.
 - CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
 - Substance(s) listed under CERCLA: n-butyl acetate - Reportable quantity: 5000 pounds.
 - Reportable quantity for mixture: 6250 pounds.
 - CAA - Clean Air Act
 - CAA listed substances:
 - n-butyl acetate is listed in CAA Section 111.
 - CWA - Clean Water Act
 - CWA listed substances:
 - n-butyl acetate is listed in CWA Section 304, Section 311.
- USA - State specific regulations
- California Proposition 65
 - Substance(s) listed under California Proposition 65:
 - None.
 - Massachusetts Right to know
 - Substance(s) listed under Massachusetts Right to know:
 - n-butyl acetate.
 - New Jersey Right to know
 - Substance(s) listed under New Jersey Right to know:
 - n-butyl acetate.
 - Pennsylvania Right to know
 - Substance(s) listed under Pennsylvania Right to know:
 - n-butyl acetate.

Volatile Organic compounds - VOCs = 80.02 %
 Volatile Organic compounds - VOCs = 736.18 g/l
 Volatile CMR substances = 0.00 %
 Organic Carbon - C = 0.50

16. OTHER INFORMATION

- Full text of phrases referred to in Section 3:
- H226 Flammable liquid and vapour.
 - H336 May cause drowsiness or dizziness.
 - H318 Causes serious eye damage.

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Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.
 This Safety Data Sheet cancels and replaces any preceding release.

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| | |
|-----------|--|
| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road. |
| ATE: | Acute Toxicity Estimate |
| ATEmix: | Acute toxicity Estimate (Mixtures) |
| CAS: | Chemical Abstracts Service (division of the American Chemical Society). |
| CLP: | Classification, Labeling, Packaging. |
| DNEL: | Derived No Effect Level. |
| EINECS: | European Inventory of Existing Commercial Chemical Substances. |
| GHS: | Globally Harmonized System of Classification and Labeling of Chemicals. |
| HMIS: | Hazardous Materials Identification System |
| IARC: | International Agency for Research on Cancer |
| IATA: | International Air Transport Association. |
| IATA-DGR: | Dangerous Goods Regulation by the "International Air Transport Association" (IATA). |
| ICAO: | International Civil Aviation Organization. |
| ICAO-TI: | Technical Instructions by the "International Civil Aviation Organization" (ICAO). |
| IMDG: | International Maritime Code for Dangerous Goods. |
| INCI: | International Nomenclature of Cosmetic Ingredients. |
| KSt: | Explosion coefficient. |
| LC50: | Lethal concentration, for 50 percent of test population. |
| LD50: | Lethal dose, for 50 percent of test population. |
| NFPA: | National Fire Protection Association |
| NIOSH: | National Institute for Occupational Safety and Health |
| NTP: | National Toxicology Program |
| OSHA: | Occupational Safety and Health Administration. |
| PNEC: | Predicted No Effect Concentration. |
| RID: | Regulation Concerning the International Transport of Dangerous Goods by Rail. |
| STEL: | Short Term Exposure limit. |
| STOT: | Specific Target Organ Toxicity. |
| TLV: | Threshold Limiting Value. |
| TWA: | Time-weighted average |