

Safety Data Sheet

1. Identification

1.1. Product identifier

Code: Z353/USA
 Product name: 98% Zinc
 Chemical name and synonym: Protective zinc

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

Intended use: Metallic Coatings (MCP) 1.25 MAX MIR.

| Identified Uses | Industrial | Professional | Consumer |
|------------------|------------|--------------|----------|
| Industrial Use | ✓ | - | - |
| Professional Use | - | ✓ | - |

1.3. Details of the supplier of the safety data sheet

Name: AMBRO-SOL S.R.L.
 Full address: Via per Pavone del Mella n.21
 District and Country: 25020 Cigole (BS)
 Italia

Tel. +39 030 9959674

Fax +39 030 959265

e-mail address of the competent person
 responsible for the Safety Data Sheet

quality@ambro-sol.com

1.4. Emergency telephone number

For urgent inquiries refer to

American Association of Poison Control Centers: +1 (800) 222-1222

2. Hazards identification

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement

Hazard pictograms:

Aerosol, category 1

Extremely flammable aerosol.

Pressurised gas

Contains gas under pressure; may burst if heated.

Aspiration hazard, category 1

May be fatal if swallowed and enters airways.

Skin irritation, category 2

Causes skin irritation.

Specific target organ toxicity - single exposure, category 3

May cause drowsiness or dizziness.



Signal words:

Danger

Hazard statements:

- H222** Extremely flammable aerosol.
- H280** Contains gas under pressure; may burst if heated.
- H304** May be fatal if swallowed and enters airways.
- H315** Causes skin irritation.
- H336** May cause drowsiness or dizziness.

Precautionary statements:

Prevention:

- P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211** Do not spray on an open flame or other ignition source.
- P251** Do not pierce or burn, even after use.
- P261** Avoid breathing dust / fume / gas / mist / vapours / spray.
- P280** Wear protective gloves.
- P271** Use only outdoors or in a well-ventilated area.
- P264** Wash hands thoroughly after handling.

Response:

- P312** Call a POISON CENTER / doctor / . . . / if you feel unwell.
- P332+P313** If skin irritation occurs: Get medical advice / attention.
- P304+P340** IF INHALED: remove person to fresh air and keep comfortable for breathing.
- P302+P352** IF ON SKIN: wash with plenty of water / . . .
- P362+P364** Take off contaminated clothing and wash it before reuse.

Storage:

- P410+P412** Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
- P410+P403** Protect from sunlight. Store in a well-ventilated place.
- P403+P233** Store in a well-ventilated place. Keep container tightly closed.
- P405** Store locked up.

Disposal:

- P501** Dispose of contents / container in compliance with current regulations.

2.2. Other hazards

Environmental classification as for Reg. (EU) 1272/2008 (CLP):

The product is classified as hazardous for environment pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).

Classification and Hazard Statement

- Hazardous to the aquatic environment, acute toxicity, category 1 Very toxic to aquatic life.
- Hazardous to the aquatic environment, chronic toxicity, category 1 Very toxic to aquatic life with long lasting effects.

Hazard pictograms:



Signal words: Warning

Hazard statements:

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:
P273 Avoid release to the environment.

Response:
P391 Collect spillage.

Storage:

--

Disposal:
P501 Dispose of contents / container in compliance with current regulations.

Additional hazards

Information not available

3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

| Identification | Conc. % | Classification: |
|-------------------------------------|---------|---|
| Dimethyl carbonate | | |
| CAS 616-38-6 | 22.374 | Flammable liquid, category 2 H225 |
| EC 210-478-4 | | |
| INDEX 607-013-00-6 | | |
| PROPANE | | |
| CAS 74-98-6 | 20.32 | Flammable gas, category 1 H220, Liquefied gas H280 |
| EC 200-827-9 | | |
| INDEX 601-003-00-5 | | |
| Hydrocarbons, C6, isoalkanes | | |
| CAS 64742-49-0 | 11.85 | Flammable liquid, category 2 H225, Aspiration hazard, category 1 H304, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H336, Hazardous to the aquatic environment, chronic toxicity, category 2 H411 |
| EC 265-151-9 | | |

INDEX 649-328-00-1

XYLENE (MIXTURE OF ISOMERS)

CAS 1330-20-7 10.65 Flammable liquid, category 3 H226, Acute toxicity, category 4 H312, Acute toxicity, category 4 H332, Skin irritation, category 2 H315

EC 215-535-7

INDEX 601-022-00-9

BUTANE

CAS 106-97-8 8.71 Flammable gas, category 1 H220, Liquefied gas H280

EC 203-448-7

INDEX 601-004-00-0

Zinc powder (stabilised)

CAS 7440-66-6 5.75 Hazardous to the aquatic environment, acute toxicity, category 1 H400 M=10, Hazardous to the aquatic environment, chronic toxicity, category 1 H410 M=10

EC 231-175-3

INDEX 030-001-01-9

TALC

CAS 69012-64-2 4.84 Acute toxicity, category 4 H332, Specific target organ toxicity - single exposure, category 3 H335

EC 273-761-1

INDEX 606-005-00-X

Aluminium powder (stabilised)

CAS 7429-90-5 2.66 Flammable solid, category 1 H228, Substance or mixture which in contact with water emits flammable gas, category 2 H261

EC 231-072-3

INDEX 013-002-00-1

ETHYL ACETATE

CAS 141-78-6 1.71 Flammable liquid, category 2 H225, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H336

EC 205-500-4

INDEX 607-022-00-5

**NAPHTHA (PETROL.)
HYDROTREATED HEAVY**

CAS 64742-48-9 1.45 Flammable liquid, category 3 H226, Aspiration hazard, category 1 H304, Specific target organ toxicity - single exposure, category 3 H336

EC 919-857-5

INDEX 649-327-00-6

The full wording of hazard (H) phrases is given in section 16 of the sheet.

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 29.03 %

4. First-aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

5. Fire-fighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

7.2. Conditions for safe storage, including any incompatibilities

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

7.3. Specific end use(s)

Information not available

8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

| | | |
|-----|--------------|---|
| USA | NIOSH-REL | NIOSH publication No. 2005-149, 3th printing, 2007. |
| USA | OSHA-PEL | Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000. |
| USA | CAL/OSHA-PEL | California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs). |
| EU | OEL EU | Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2018 |

PROPANE

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | |
|-----------|---------|--------|------|------------|-----|
| | | mg/m3 | ppm | mg/m3 | ppm |
| TLV-ACGIH | - | | 1000 | | |
| OSHA | USA | 1800 | 1000 | | |
| CAL/OSHA | USA | 1800 | 1000 | | |
| NIOSH | USA | 1800 | 1000 | | |

Hydrocarbons, C6, isoalkanes

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | |
|------|---------|--------|-----|------------|-----|
| | | mg/m3 | ppm | mg/m3 | ppm |
| OEL | EU | 0 | 0 | 72 | 0 |

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | |
|-----------|---------|--------|-----|------------|-----|------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV-ACGIH | - | 434 | 100 | 651 | 150 | |
| OEL | EU | 221 | 50 | 442 | 100 | SKIN |

AMBRO-SOL S.R.L.

Revision nr. 1

Dated 5/3/2019

Z353/USA – 98% Zinc

Printed on 5/3/2019

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| | | | | | |
|----------|-----|-----|-----|---------|----------|
| OSHA | USA | 435 | 100 | | |
| CAL/OSHA | USA | 435 | 100 | 655 (C) | 3000 (C) |

| BUTANE | | | | | |
|------------------------------|---------|--------|------|------------|-----|
| Threshold Limit Value | | | | | |
| Type | Country | TWA/8h | | STEL/15min | |
| | | mg/m3 | ppm | mg/m3 | ppm |
| TLV-ACGIH | - | | 1000 | | |
| CAL/OSHA | USA | 1.9 | 800 | | |
| NIOSH | USA | 1900 | 800 | | |

| TALC | | | | | |
|------------------------------|---------|--------|-----|------------|-----|
| Threshold Limit Value | | | | | |
| Type | Country | TWA/8h | | STEL/15min | |
| | | mg/m3 | ppm | mg/m3 | ppm |
| TLV-ACGIH | - | 2 | | | |

| Aluminium powder (stabilised) | | | | | |
|--------------------------------------|---------|--------|-----|------------|-------|
| Threshold Limit Value | | | | | |
| Type | Country | TWA/8h | | STEL/15min | |
| | | mg/m3 | ppm | mg/m3 | ppm |
| TLV-ACGIH | - | 1 | 0.9 | | |
| OSHA | USA | 5 | | | |
| NIOSH | USA | 10 | | | INHAL |
| NIOSH | USA | 5 | | | RESP |

| ETHYL ACETATE | | | | | |
|------------------------------|---------|--------|-----|------------|-----|
| Threshold Limit Value | | | | | |
| Type | Country | TWA/8h | | STEL/15min | |
| | | mg/m3 | ppm | mg/m3 | ppm |
| TLV-ACGIH | - | 1441 | 400 | | |
| OEL | EU | 734 | 200 | 1468 | 400 |
| OSHA | USA | 1400 | 400 | | |
| CAL/OSHA | USA | 1.4 | 400 | | |
| NIOSH | USA | 1400 | 400 | | |

| QUARTZ | | | | | |
|------------------------------|---------|--------|-----|------------|-------|
| Threshold Limit Value | | | | | |
| Type | Country | TWA/8h | | STEL/15min | |
| | | mg/m3 | ppm | mg/m3 | ppm |
| TLV-ACGIH | - | 0.025 | | | |
| OSHA | USA | 30 | | | INHAL |
| OSHA | USA | 10 | | | RESP |
| CAL/OSHA | USA | 0.3 | | | INHAL |
| CAL/OSHA | USA | 0.1 | | | RESP |
| NIOSH | USA | 0.05 | | | |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

TLV of solvent mixture: 480 mg/m³

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations.

HAND PROTECTION

None required.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a NIOSH certified combined filter should be worn (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134).

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|----------------------------------|---------------------------|
| Appearance | aerosol |
| Colour | dark grey |
| Odour | characteristic of solvent |
| Odour threshold | Not available |
| pH | Not available |
| Melting point / freezing point | Not available |
| Initial boiling point | Not available |
| Boiling range | Not available |
| Flash point | < 0 °C |
| Evaporation Rate | Not available |
| Flammability of solids and gases | flammable gas |
| Lower inflammability limit | Not available |
| Upper inflammability limit | Not available |
| Lower explosive limit | Not available |
| Upper explosive limit | Not available |
| Vapour pressure | Not available |
| Vapour density | Not available |
| Relative density | 20°C 0,75 ÷ 0,79 g/ml |
| Solubility | insoluble in water |

| | |
|--|----------------|
| Partition coefficient: n-octanol/water | Not available |
| Auto-ignition temperature | Not available |
| Decomposition temperature | Not available |
| Viscosity | Not available |
| Explosive properties | not applicable |
| Oxidising properties | not applicable |

9.2. Other information

| | |
|------------------------------|------------------------|
| Total solids (250°C / 482°F) | 22,94 % |
| VOC : | 77,50 % - 1.21 MAX MIR |

10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

Dimethyl carbonate

May form explosive mixtures with: air.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

Zinc powder (stabilised)

Risk of explosion on contact with: ammonium nitrate, ammonium sulphide, barium peroxide, lead nitride, chlorates, chromium trioxide, sodium hydroxide, oxidising agents, performic acid, acids, tetrachloromethane, water. May react dangerously with: alkaline hydroxides, bromine pentafluoride, calcium chloride, fluorine, hexachloroethane, nitrobenzene, potassium dioxide, carbon disulphide, silver. Reacts with: strong acids, strong alkalis. May develop: hydrogen.

Aluminium powder (stabilised)

Develops hydrogen on contact with: water.

Develops hydrogen on contact with: acids, alkalis, halogens, oxidising agents.

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals, hydrides, oleum. May react violently with: fluorine, strong oxidising agents, chlorosulphuric acid, potassium tert-butoxide. Forms explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating.

Zinc powder (stabilised)

Avoid exposure to: heat,moisture.

ETHYL ACETATE

Avoid exposure to: light,sources of heat,naked flames.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

Dimethyl carbonate

Avoid contact with: oxidising agents,strong reducing agents.

Zinc powder (stabilised)

Incompatible with: water,acids,strong alkalis.

ETHYL ACETATE

Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: plastic materials.

10.6. Hazardous decomposition products

Information not available

11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

Zinc powder (stabilised)

LD50 (Oral) > 2000 mg/kg bw rat

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral) 3523 mg/kg Rat

LD50 (Dermal) 4350 mg/kg Rabbit

LC50 (Inhalation) 26 mg/l/4h Rat

PROPANE

LC50 (Inhalation) 800000 ppm 15 min

NAPHTHA (PETROL.) HYDROTREATED HEAVY

LD50 (Oral) > 5000 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rabbit

Hydrocarbons, C6, isoalkanes

LD50 (Oral) 3790 mg/kg bw rat

LD50 (Dermal) 3500 mg/kg bw rabbit

LC50 (Inhalation) 34.73 mg/l/4h air (rat)

Dimethyl carbonate

LD50 (Oral) 5000 mg/kg/bw rat

LD50 (Dermal) 2000 mg/kg/ bw rabbit

LC50 (Inhalation) 5.36 mg/l/4h rat

Hydrocarbon resin

LD50 (Oral) > 50000 mg/kg

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Carcinogenicity Assessment:

1330-20-7XYLENE (MIXTURE OF ISOMERS)

ACGIH:: A4

IARC:3

69012-64-2TALC

ACGIH:: A1

7429-90-5Aluminium powder (stabilised)

ACGIH:: A4

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Toxic for aspiration

12. Ecological information

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

Zinc powder (stabilised)

| | |
|---|-------------------|
| LC50 - for Fish | 112 µg/l/96h |
| EC50 - for Crustacea | 155 µg/l/48h |
| Chronic NOEC for Fish | 720 µg/l 84 days |
| Chronic NOEC for Crustacea | 300 µg/l 3 months |
| Chronic NOEC for Algae / Aquatic Plants | 20 µg/l 4 days |

NAPHTHA (PETROL.) HYDROTREATED HEAVY

| | |
|-----------------------------------|---|
| LC50 - for Fish | 8.2 mg/l/96h Pimephales promelas |
| EC50 - for Crustacea | 4.5 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | 3.1 mg/l/72h Pseudokirchnerella subcapitata |

Hydrocarbons, C6, isoalkanes

| | |
|---|----------------|
| LC50 - for Fish | 8.41 mg/l/96h |
| EC50 - for Crustacea | 4.7 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | 15.65 mg/l/72h |
| Chronic NOEC for Algae / Aquatic Plants | 6.47 mg/l |

Dimethyl carbonate

| | |
|---|----------------------|
| LC50 - for Fish | 1134 mg/l/96h 4 days |
| EC50 - for Crustacea | > 80 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | > 70 mg/l/72h |
| Chronic NOEC for Fish | 100 mg/l 4 days |
| Chronic NOEC for Crustacea | 25 mg/l 21 days |
| Chronic NOEC for Algae / Aquatic Plants | > 50 mg/l 72 h |

12.2. Persistence and degradability

PROPANE

Global Warming Potential (GWP): 3. Ozone Depletion Potential (ODP): 0.

Aluminium powder (stabilised)

| | |
|--|--------|
| Solubility in water | 0 mg/l |
| Degradability: information not available | |

Zinc powder (stabilised)

| | |
|--|----------------|
| Solubility in water | 0.1 - 100 mg/l |
| Degradability: information not available | |

XYLENE (MIXTURE OF ISOMERS)

Solubility in water 100 - 1000 mg/l

Degradability: information not available

TALC

Solubility in water < 0.1 mg/l

BUTANE

Solubility in water 0.1 - 100 mg/l

Rapidly degradable

PROPANE

Solubility in water 0.1 - 100 mg/l

Rapidly degradable

ETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

NAPHTHA (PETROL.) HYDROTREATED HEAVY

Rapidly degradable

Hydrocarbons, C6, isoalkanes

Rapidly degradable

Dimethyl carbonate

Rapidly degradable

Hydrocarbon resin

Degradability: information not available

12.3. Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water 3.12

BCF 25.9

BUTANE

Partition coefficient: n-octanol/water 1.09

PROPANE

Partition coefficient: n-octanol/water 1.09

ETHYL ACETATE

Partition coefficient: n-octanol/water 0.68
BCF 30

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water 2.73

NAPHTHA (PETROL.) HYDROTREATED HEAVY

Partition coefficient: soil/water 1.78

Hydrocarbons, C6, isoalkanes

Partition coefficient: soil/water 1.78

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA).

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not puncture or incinerate containers, even empty. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

14. Transport information

14.1. UN number

ADR / RID, IMDG, 1950
IATA:

14.2. UN proper shipping name

ADR / RID: AEROSOLS
IMDG: AEROSOLS (Hydrocarbons, C6, isoalkanes)
IATA: AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1



IMDG: Class: 2 Label: 2.1



IATA: Class: 2 Label: 2.1



14.4. Packing group

ADR / RID, IMDG, IATA: -

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

14.6. Special precautions for user

ADR / RID: HIN - Kemler: --

Limited Quantities: 1 L

Tunnel restriction code: (D)

Special Provision: -

IMDG: EMS: F-D, S-U

Limited Quantities: 1 L

IATA: Cargo:

Maximum quantity: 150 Kg

Packaging instructions: 203

Pass.:

Maximum quantity: 75 Kg

Packaging instructions: 203

Special Instructions:

A145, A167, A802

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

15. Regulatory information

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

U.S. Federal Regulations

TSCA:

All components are listed on TSCA Inventory.

Clean Air Act Section 112(b):

1330-20-7

XYLENE (MIXTURE OF ISOMERS)

Clean Air Act Section 602 Class I Substances:

No component(s) listed.

Clean Air Act Section 602 Class II Substances:

No component(s) listed.

Clean Water Act –
Priority Pollutants:

7440-66-6

Zinc powder (stabilised) (Zinc
compounds)Clean Water Act –
Toxic Pollutants:

7440-66-6

Zinc powder (stabilised) (Zinc
compounds)DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

No component(s) listed.

EPA List of Lists:

313 Category Code:

1330-20-7

XYLENE (MIXTURE OF ISOMERS)

7440-66-6

Zinc powder (stabilised) (Zinc
compounds)

7429-90-5

Aluminium powder (stabilised)
(Aluminum compounds, Aluminun
dust)

EPCRA 302 EHS TPQ:

No component(s) listed.

EPCRA 304 EHS RQ:

No component(s) listed.

CERCLA RQ:

1330-20-7

XYLENE (MIXTURE OF ISOMERS)

7440-66-6

Zinc powder (stabilised) (Zinc
compounds)

141-78-6

ETHYL ACETATE

EPCRA 313 TRI:

AMBRO-SOL S.R.L.

Revision nr. 1

Dated 5/3/2019

Z353/USA – 98% Zinc

Printed on 5/3/2019

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1330-20-7 XYLENE (MIXTURE OF ISOMERS)
7440-66-6 Zinc powder (stabilised) (Zinc compounds)
7429-90-5 Aluminium powder (stabilised)
(Aluminum compounds, Aluminum dust)

RCRA Code:

1330-20-7 XYLENE (MIXTURE OF ISOMERS)
141-78-6 ETHYL ACETATE

CAA 112 (r) RMP TQ:

74-98-6 PROPANE (Alkanes, Alkanes
(aliphatic hydrocarbon alkanes, C1-C4))
106-97-8 BUTANE (Alkanes)

State Regulations**Massachusetts:**

616-38-6 Dimethyl carbonate
74-98-6 PROPANE (Alkanes, Alkanes
(aliphatic hydrocarbon alkanes, C1-C4))
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
106-97-8 BUTANE (Alkanes)
7440-66-6 Zinc powder (stabilised) (Zinc compounds)
69012-64-2 TALC
7429-90-5 Aluminium powder (stabilised)
(Aluminum compounds, Aluminum dust)
141-78-6 ETHYL ACETATE

Minnesota:

74-98-6 PROPANE (Alkanes, Alkanes
(aliphatic hydrocarbon alkanes, C1-C4))
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
106-97-8 BUTANE (Alkanes)
69012-64-2 TALC
7429-90-5 Aluminium powder (stabilised)
(Aluminum compounds, Aluminum dust)
141-78-6 ETHYL ACETATE

New Jersey:

616-38-6 Dimethyl carbonate
74-98-6 PROPANE (Alkanes, Alkanes
(aliphatic hydrocarbon alkanes, C1-C4))
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
106-97-8 BUTANE (Alkanes)
7440-66-6 Zinc powder (stabilised) (Zinc compounds)
69012-64-2 TALC

| | |
|----------------------|--|
| 7429-90-5 | Aluminium powder (stabilised) (Aluminum compounds, Aluminun dust) |
| 141-78-6 | ETHYL ACETATE |
| <u>New York:</u> | |
| 1330-20-7 | XYLENE (MIXTURE OF ISOMERS) |
| 7440-66-6 | Zinc powder (stabilised) (Zinc compounds) |
| 141-78-6 | ETHYL ACETATE |
| <u>Pennsylvania:</u> | |
| 616-38-6 | Dimethyl carbonate |
| 74-98-6 | PROPANE (Alkanes, Alkanes (aliphatic hydrocarbon alkanes, C1-C4)) |
| 1330-20-7 | XYLENE (MIXTURE OF ISOMERS) |
| 106-97-8 | BUTANE (Alkanes) |
| 7440-66-6 | Zinc powder (stabilised) (Zinc compounds) |
| 7429-90-5 | Aluminium powder (stabilised) (Aluminum compounds, Aluminun dust) |
| 141-78-6 | ETHYL ACETATE |

California:

| | |
|-----------|--|
| 1330-20-7 | XYLENE (MIXTURE OF ISOMERS) |
| 106-97-8 | BUTANE (Alkanes) |
| 7440-66-6 | Zinc powder (stabilised) (Zinc compounds) |
| 7429-90-5 | Aluminium powder (stabilised) (Aluminum compounds, Aluminun dust) |
| 141-78-6 | ETHYL ACETATE |

Proposition 65:

International Regulations

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Canadian WHMIS

Information not available

16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|-------------|---|
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H228 | Flammable solid. |
| H261 | In contact with water releases flammable gases. |
| H280 | Contains gas under pressure; may burst if heated. |
| H312 | Harmful in contact with skin. |
| H332 | Harmful if inhaled. |
| H304 | May be fatal if swallowed and enters airways. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |

LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112 @ RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112®)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

GENERAL BIBLIOGRAPHY:

- GHS rev. 3

- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Communication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachusetts 105 CMR Department of public health 670.000: "Right to Know"
- Minnesota Chapter 5206 Department Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.