

RHODIACID AA - ADIPIC ACID (BR)

Revision Date 05/05/2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Trade name RHODIACID AA - ADIPIC ACID (BR)

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance / Mixture**

- Industrial Manufacturing (all)
- Manufacture of textiles, leather, fur
- Manufacture of bulk, large scale chemicals (including petroleum products)
- Manufacture of fine chemicals
- Formulation [mixing] of preparations and/ or re-packaging (excluding alloys)
- Manufacture of plastics products, including compounding and conversion
- Consumer uses: Private households (= general public = consumers)
- Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Electricity, steam, gas water supply and sewage treatment
- Use as intermediate or monomer
- Preparation and use of the formulations
- Use in the production of dish washing machine tablets
- Use in flue gas desulphurisation
- Laboratory activities

Uses advised against

- Food additive
- Animal feedstuff

1.3 Details of the supplier of the safety data sheet**Company**

Solvay USA Inc.,
COATIS
504 Carnegie Center
Princeton NJ 08540, USA
Telephone number: 855-454-9921

Initial Supplier Identifier
Données relatives au fournisseur
Univar Solutions Canada Ltd.
64 Arrow Road
North York, ON M9M 2L9
Telephone: 1-866-686-4827

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CONTACT CHEMTREC (24-Hour Number): +1-800-424-9300 within the United States and Canada, or +1-703-527-3887 for international collect calls.

SECTION 2: Hazards identification

Although OSHA has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects.

2.1 Classification of the substance or mixture**HCS 2012 (29 CFR 1910.1200)**

Serious eye damage, Category 1

H318: Causes serious eye damage.

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2.2 Label elements

HCS 2012 (29 CFR 1910.1200)**Pictogram****Signal Word**

- Danger

Hazard Statements

- H318 Causes serious eye damage.

Precautionary StatementsPrevention

- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P273 Avoid release to the environment.

Response

- P309 + P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
- P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
- P337 + P313 If eye irritation persists: Get medical attention.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- P391 Collect spillage.

Storage

- P410 + P403 Protect from sunlight. Store in a well-ventilated place.

Disposal

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

2.3 Other hazards which do not result in classification

- H402: Harmful to aquatic life.
- Slightly irritating to the skin.
- Combustible solid.
- Divided solid.
- May form explosive dust-air mixture.

SECTION 3: Composition/information on ingredients

3.1 Substance

Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [%]
Adipic Acid	124-04-9	>= 99 - <= 100

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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3.2 Mixture

- Not applicable, this product is a substance.

SECTION 4: First aid measures**4.1 Description of first-aid measures****In case of inhalation**

- Quickly move the person away from the contaminated area. Make the affected person rest.
- Obtain medical attention.
- Show this sheet to the doctor.
- Be prepared to provide first aid or medical support if necessary.

In case of skin contact

- Wash off immediately with plenty of water for at least 15 minutes.
- Use appropriate protective equipment when treating a contaminated person.
- In case of inflammation (redness, irritation, ...) obtain medical attention.
- Show this sheet to the doctor.
- Be prepared to provide first aid or medical support if necessary.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- Keep eye wide open while rinsing.
- Show this sheet to the doctor.
- Always obtain medical advice, even if there are no symptoms.
- Be prepared to provide first aid or medical support if necessary.

In case of ingestion

- Do NOT induce vomiting.
- Immediate medical attention is required.
- Show this sheet to the doctor.
- Do not give anything to drink.
- Be prepared to provide first aid or medical support if necessary.

4.2 Most important symptoms and effects, both acute and delayed**Effects**

- Chronic exposure may cause dermatitis.
- May cause irreversible eye damage.
- Loss of the eye

Symptoms

- Redness
- Swelling of tissue
- Causes skin burns.
- Lachrymation
- Conjunctivitis
- Causes eye burns.

4.3 Indication of any immediate medical attention and special treatment needed

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Notes to physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
- Take victim to hospital if symptoms persist.
- Get medical advice/ attention.
- Consult with an ophthalmologist immediately in all cases.
- Burns must be treated by a physician.
- Keep under medical follow up for at least 48 hours.

SECTION 5: Firefighting measures

Flash point	385 °F (196 °C) closed cup
	410 °F (210 °C) open cup
Autoignition temperature	>752 °F (400 °C)
Flammability / Explosive limit	No data available

5.1 Extinguishing media**Suitable extinguishing media**

- Water spray
- Foam
- Carbon dioxide (CO2)
- Multipurpose powders

Unsuitable extinguishing media

- High volume water jet

5.2 Special hazards arising from the substance or mixture**Specific hazards during fire fighting**

- Combustible.
- Fine dust dispersed in air may ignite.
- Under fire conditions:
- Will burn
- On combustion, toxic gases are released.

Hazardous combustion products:

- Carbon oxides

5.3 Advice for firefighters**Special protective equipment for fire-fighters**

- Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.
- In the event of fire, wear self-contained breathing apparatus.
- Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
- For further information refer to section 8 "Exposure controls / personal protection."

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Specific fire fighting methods

- Do not use a solid water stream as it may scatter and spread fire.

Further information

- Standard procedure for chemical fires.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Avoid contact with the skin and the eyes.
- Remove all sources of ignition.
- Personal protective equipment
- Wear suitable gloves.
- Safety glasses
- Boots
- Where exposure level is not known, wear approved, positive pressure, self-contained respirator.
- Where exposure level is known, wear approved respirator suitable for level of exposure.
- For further information refer to section 8 "Exposure controls / personal protection."

6.2 Environmental precautions

- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by diking.
- Do not let product enter drains.
- Do not allow uncontrolled discharge of product into the environment.
- Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies

6.3 Methods and materials for containment and cleaning up

- Stop leak if safe to do so.
- Avoid dust formation.
- Sweep up and shovel into suitable containers for disposal.
- Keep in properly labeled containers.
- Keep in suitable, closed containers for disposal.
- After cleaning, flush away traces with water.
- Recover the cleaning water for subsequent disposal.
- Decontaminate tools, equipment and personal protective equipment in a segregated area.
- Dispose of in accordance with local regulations.
- Never return spills in original containers for re-use.

6.4 Reference to other sections

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

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- Ground the equipment.
- Inert atmosphere for pneumatic apparatus.
- Use explosion-proof equipment.
- This powder should not be flowed through non-conductive ducts or pipes
- Use only appropriately classed electrical equipment.
- Avoid dust formation.
- Provide adequate ventilation.
- Ensure all equipment is electrically grounded before beginning transfer operations.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Take measures to prevent the build up of electrostatic charge.
- THIS PRODUCT PRESENTS A MODERATE TO SEVERE DUST EXPLOSION HAZARD.

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.
- Handle in accordance with good industrial hygiene and safety practice.
- Wash hands before breaks and at the end of workday.
- When using do not eat, drink or smoke.
- Eye wash bottles or eye wash stations in compliance with applicable standards.
- Ensure that eyewash stations and safety showers are close to the workstation location.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

- Electrical installations / working materials must comply with the technological safety standards.
- Protect from moisture.
- Keep in a well-ventilated place.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer
- Keep away from: Oxidizing materials.

Packaging material**Suitable material**

- Polyethylene
- Polypropylene
- Stainless steel

Unsuitable material

- Steel
- Aluminum and its alloys.

Remarks

- Intermediate Bulk Container (IBC)
- Paper bags
- Stainless steel road-tanker.
- Stainless steel rail-tankers.
- Store in original container.

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7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

Components with workplace occupational exposure limits

Components	Value type	Value	Basis
Adipic Acid	TWA	5 mg/m ³	American Conference of Governmental Industrial Hygienists

8.2 Exposure controls

Control measures**Engineering measures**

- Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures :
- Dust must be extracted directly at the point of origin.
- Provide appropriate exhaust ventilation at places where dust is formed.
- Apply technical measures to comply with the occupational exposure limits.

Individual protection measures**Respiratory protection**

- Use a respirator with an approved filter if a risk assessment indicates this is necessary.
- When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.
- Keep in a well-ventilated place.
- Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

Hand protection

- 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).
- Impervious gloves

Eye protection

- Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.
- Eye contact should be prevented through the use of:
 - Dust proof goggles, if dusty.
 - Tightly fitting safety goggles
 - Eye wash bottles or eye wash stations in compliance with applicable standards.

Skin and body protection

- Dust impervious protective suit

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
 - 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
 - 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
 - 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

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- Handle in accordance with good industrial hygiene and safety practice.
- Wash hands before breaks and at the end of workday.
- When using do not eat, drink or smoke.
- Eye wash bottles or eye wash stations in compliance with applicable standards.
- Ensure that eyewash stations and safety showers are close to the workstation location.

Protective measures

- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

<u>Physical state</u>	solid
<u>Form</u>	Crystalline powder
<u>Color</u>	white
<u>Odor</u>	very faint
<u>Odor Threshold</u>	No data available
<u>Melting point/freezing point</u>	<u>Melting point/range</u> : 303.53 °F (150.85 °C) Method: EU Test Guideline A1
<u>Initial boiling point and boiling range</u>	<u>Boiling point/boiling range</u> : 639.5 °F (337.5 °C) (759.81 mmHg (1,013 hPa)) Thermal decomposition: yes
<u>Flammability (solid, gas)</u>	The product is not flammable. Method: test Directive 92/69/EEC - Annex V Part A10
<u>Flammability (liquids)</u>	Method: test Directive 92/69/EEC - Annex V Part A10
<u>Flammability / Explosive limit</u>	No data available
<u>Flash point</u>	385 °F (196 °C) closed cup 410 °F (210 °C) open cup
<u>Autoignition temperature</u>	No data available
<u>Decomposition temperature</u>	639.5 °F (337.5 °C)
<u>pH</u>	3.2 (1 % (m/v)) Aqueous solution
<u>Viscosity</u>	<u>Viscosity, dynamic</u> : Not applicable <u>Viscosity, kinematic</u> : Not applicable
<u>Solubility</u>	<u>Water solubility</u> : 15 g/l (68 °F (20 °C)) 23 g/l (77 °F (25 °C)) 52 g/l (104 °F (40 °C)) 1,600 g/l (212 °F (100 °C))

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Solubility in other solvents:Methanol: 340 g/l (86 °F (30 °C))
soluble

Benzene: insoluble

Partition coefficient: n-octanol/water

log Pow: 0.093

Vapor pressure0.07 mmHg (0.097 hPa) (65.3 °F (18.5 °C))
1.50 mmHg (2 hPa) (329 °F (165 °C))Density1.36 g/cm³ (68 °F (20 °C))Bulk density: 630 - 650 kg/m³ (68 °F (20 °C))
looseRelative density

No data available

Relative vapor density

No data available

Particle characteristicsParticle size:
298.6 - 331.6 µm (50 %)Evaporation rate (Butylacetate = 1)

No data available

9.2 Other information

Oxidizing properties

Not considered as oxidizing., Structure-activity relationship (SAR)

Self-ignition> 752 °F (400 °C) Relative self-ignition temperature for solids
Method: EU Test Guideline A16Impact sensitivitynegative
Method : EU Test Guideline A14
Mechanical sensitivity (friction)negative
Method : EU Test Guideline A14
Mechanical sensitivity (shock)negative
Method : EU Test Guideline A14
Thermal sensitivityDust deflagration index (Kst)Minimum ignition concentration30 g/m³Minimum ignition energy30 - 100 mJ
Method: modified Hartmann tube - MIKE 3
Particle size < 63µmMolecular weight

146.14 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity

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- no data available

10.2 Chemical stability

- Stable at room temperature.

10.3 Possibility of hazardous reactions

- no data available

10.4 Conditions to avoid

- Dust
- Heat, flames and sparks.

10.5 Incompatible materials

- Strong oxidizing agents
- Strong acids
- Reacts with the following substances:
- Bases

10.6 Hazardous decomposition products**Hazardous decomposition products**

- On thermal decomposition (pyrolysis) releases:
- Carbon oxides

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity**

Adipic Acid

LD50 : 5,560 mg/kg - Rat , male and female
 Method: OECD Test Guideline 401
 Unpublished reports

Acute inhalation toxicity

Adipic Acid

No mortality observed at this dose.
 LC50 - 4 h (dust/mist) : > 7.7 mg/l - Rat
 Method: OECD Test Guideline 403
 Not classified as hazardous for acute inhalation toxicity according to GHS.
 Unpublished reports
 Dust

Acute dermal toxicity

Adipic Acid

No mortality observed at this dose.
 LD50 : > 7,940 mg/kg - Rat
 Unpublished reports

Acute toxicity (other routes of administration)

No data available

Skin corrosion/irritation

Adipic Acid

Rabbit
 Mild skin irritation
 Method: OECD Test Guideline 404
 Unpublished reports

Serious eye damage/eye irritation

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Adipic Acid	Rabbit Risk of serious damage to eyes. Method: OECD Test Guideline 405 Unpublished reports
<u>Respiratory or skin sensitization</u>	
Adipic Acid	Maximization Test - Guinea pig Responding animals in GPMT < 30% Unpublished reports
<u>Mutagenicity</u>	
Genotoxicity in vitro	
Adipic Acid	Ames test with and without metabolic activation negative Method: OECD Test Guideline 471 Unpublished reports Chromosome aberration test in vitro Strain: human diploid fibroblasts with and without metabolic activation negative Unpublished reports Gene mutation assays in mammalian cells. Strain: Chinese hamster lung cells with and without metabolic activation negative Method: OECD Test Guideline 476 Unpublished reports Gene mutation assays in mammalian cells. Strain: Chinese hamster fibroblasts with and without metabolic activation negative Method: OECD Test Guideline 476 Unpublished reports
Genotoxicity in vivo	
Adipic Acid	Chromosome aberration test in vivo - Rat male Oral negative Gavage Unpublished reports
<u>Carcinogenicity</u>	
Adipic Acid	Rat Oral studies did not reveal any carcinogenic potential Published data

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

NTP
IARC
OSHA
NTP
IARC

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OSHA

Toxicity for reproduction and development**Toxicity to reproduction / fertility**

Adipic Acid

No toxicity to reproduction, Published data, internal evaluation

Developmental Toxicity/Teratogenicity

Adipic Acid

Rat, Oral

General Toxicity Maternal NOAEL: ≥ 288 mg/kgTeratogenicity NOAEL: ≥ 288 mg/kg

Gavage, Did not show teratogenic effects in animal experiments., Published data

Rabbit, Oral

General Toxicity Maternal NOAEL: ≥ 250 mg/kgTeratogenicity NOAEL: ≥ 250 mg/kg

Gavage, Did not show teratogenic effects in animal experiments., Published data

STOT**STOT-single exposure**

Adipic Acid

The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.

STOT-repeated exposure

Adipic Acid

The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.

Adipic Acid

Oral 28-day - Rat , male and female

NOAEL: 750 mg/kg bw/day

in food

Unpublished reports

Experience with human exposure

No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment****Acute toxicity to fish**

Adipic Acid

LC50 - 96 h : $> 1,000$ mg/l - Danio rerio (zebra fish)

static test

Analytical monitoring: yes

Method: according to a standardized method

Not harmful to fish (LC/LL50 > 100 mg/L)

Unpublished reports

Acute toxicity to daphnia and other aquatic invertebrates

Adipic Acid

EC50 - 48 h : 46 mg/l - Daphnia magna (Water flea)

Method: OECD Test Guideline 202

Harmful to aquatic invertebrates.

Unpublished reports

Toxicity to aquatic plants

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Adipic Acid

ErC50 - 72 h : 59 mg/l - Pseudokirchneriella subcapitata (microalgae)
static test
Endpoint: Growth rate
Method: OECD Test Guideline 201
Published data
Harmful to algae.

NOErC - 72 h : 41 mg/l - Pseudokirchneriella subcapitata (microalgae)
static test
Endpoint: Growth rate
Method: OECD Test Guideline 201
Published data
No adverse chronic effect observed up to and including the threshold of 1 mg / L.

Toxicity to microorganisms

Adipic Acid

EC50 - 3 h : 4,747 mg/l - activated sludge
static test
Analytical monitoring: no
Endpoint: Respiration inhibition
Method: OECD Test Guideline 209
Published data

IC50 - 40 h : 591.02 mg/l - Tetrahymena pyriformis
static test
Analytical monitoring: no
Endpoint: Growth inhibition
Method: according to a standardized method
Published data

Chronic toxicity to fish

No data available

Chronic toxicity to daphnia and other aquatic invertebrates

Adipic Acid

NOEC: 6.3 mg/l - 21 Days - Daphnia magna (Water flea)
Reproduction Test
Method: OECD Test Guideline 211
Published data
No adverse chronic effect observed up to and including the threshold of 1 mg / L.

12.2 Persistence and degradability**Abiotic degradation****Stability in water**

Adipic Acid

Not applicable

Photodegradation

Adipic Acid

Sensitizer: OH
Concentration sensitizer in molecule/cm³: 500,000 1/cm³
Rate constant in cm³ / molecule*s: 5.5893E-12 cm³/s
Half-life indirect photolysis: 2.9 Days
Method: Structure-activity relationship (SAR)

Physical- and photo-chemical elimination

No data available

Biodegradation**Biodegradability**

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Adipic Acid

Ready biodegradability study:

Method: OECD Test Guideline 301 D

83 % - 30 Days

The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability

O2 consumption

Inoculum: Sewage effluent

Published data

Inherent biodegradability study

Method: Zahn-Wellens Test

> 90 % - 5 Days

The substance fulfills the criteria for inherent ultimate biodegradability

Dissolved organic carbon (DOC)

Inoculum: Sewage effluent

Published data

Simulation study

Method: OECD Test Guideline 303

99 % - 1 Days

Dissolved organic carbon (DOC)

Inoculum: activated sludge

Published data

Soil

Method: according to a standardized method

84 % - 30 Days

CO2 evolution test

Published data

Degradability assessment

Adipic Acid

The product is considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential**Partition coefficient: n-octanol/water**

Adipic Acid

Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Bioconcentration factor (BCF)

No data available

12.4 Mobility in soil**Adsorption potential (Koc)**

Adipic Acid

Koc: 2.4

Structure-activity relationship (SAR)

Koc: 5.3

Structure-activity relationship (SAR)

Koc: 21.5

Structure-activity relationship (SAR)

Mobile in soils

Known distribution to environmental compartments

Adipic Acid

Ultimate destination of the product: Water

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12.5 Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects**Ecotoxicity assessment****Short-term (acute) aquatic hazard**

Adipic Acid

Harmful to aquatic organisms.

Long-term (chronic) aquatic hazard

Adipic Acid

No adverse chronic effect observed up to and including the threshold of 1 mg / L.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product Disposal*****Prohibition***

- Avoid release to the environment.
- Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.
- The Company encourages the recycle, recovery and reuse of materials, where permitted. If disposal is necessary, The Company recommends that organic materials, especially when classified as hazardous waste, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

Waste Code

- RCRA Hazardous Waste (40 CFR 302)
- Hazardous Waste – NO

Advice on cleaning and disposal of packaging

- Wash out general purpose tankers (railroad) with water.
- Incinerate bags and flexible containers.
- Dispose of as hazardous waste in compliance with local and national regulations.

Measure for waste avoidance or recovery

- Do not dispose of the product at a dump.

SECTION 14: Transport information

Transportation status: IMPORTANT! Statements below provide additional data on listed transport classification. The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or

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other regulatory descriptors.

DOT

14.1 UN number	UN 3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Adipic acid)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	III
Packing group	171
ERG No	
14.5 Environmental hazards	NO
Marine pollutant	

14.6 Special precautions for user

Remarks : The classification shown may not be applicable to all package sizes. It applies to those package sizes where the RQ has been met or exceeded in one package and is therefore regulated for transport.

This product contains one or more ingredients identified as a hazardous substance in Appendix A of 49 CFR 172.101.

Reportable quantities : RQ substance: Adipic acid
RQ limit for substance: 5,000 lb
RQ limit for product: 5,003 lb

TDG

not regulated

NOM

not regulated

IMDG

not regulated

IATA

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Notification status**

Inventory Information	Status
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United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australian Inventory of Industrial Chemicals	- Listed on Inventory; we have not determined if this product contains substances with regulatory obligations and/or restrictions
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIoC inventory. Additional HSNO obligations may apply. Please refer to Section 15 of SDS for New Zealand.
EU. European Registration, Evaluation, Authorization and Restriction of Chemical (REACH)	- When purchased from a Solvay legal entity based in the EEA ("European Economic Area"), this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.

15.2 Federal Regulations

US. EPA EPCRA SARA Title III**SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370)**

Serious eye damage or eye irritation	Yes
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The categories not mentioned are not relevant for the product.

Section 313 Toxic Chemicals (40 CFR 372.65)

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Section 302 Emergency Planning Extremely Hazardous Substance Threshold Planning Quantity (40 CFR 355)

This material does not contain any components with a section 302 EHS TPQ.

Section 302 Emergency Planning Extremely Hazardous Substance Reportable Quantity (40 CFR 355)

This material does not contain any components with a SARA 302 RQ.

Section 304 Emergency Release Notification Reportable Quantity (40 CFR 355)

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This material does not contain any components with a section 304 EHS RQ.

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

Components	CAS-No.	Reportable quantity
Adipic Acid	124-04-9	5000 lb

15.3 State Regulations**US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16: Other information**NFPA (National Fire Protection Association) - Classification**

Health	2 moderate
Flammability	1 slight
Instability or Reactivity	0 minimal

HMIS (Hazardous Materials Identification System (Paint & Coating)) - Classification

Health	2 moderate
Flammability	1 slight
Reactivity	0 minimal
PPE	Determined by User; dependent on local conditions

Further information

- Distribute new edition to clients

Date Prepared: 05/05/2021

Key or legend to abbreviations and acronyms used in the safety data sheet

- TWA: 8-hour, time-weighted average
- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NTP: National Toxicology Program
- IARC: International Agency for Research on Cancer
- NIOSH: National Institute for Occupational Safety and Health
- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland
- Waterways:
 - RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 - IATA: International Air Transport Association.
 - ICAO-TI: Technical Specification for Safe Transport of Dangerous Goods by Air.
 - IMDG: International Maritime Dangerous Goods.
 - TWA: Time weighted average
 - ATE: Estimated value of acute toxicity
 - EC: European Community number
 - CAS: Chemical Abstracts Service.
 - LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
 - LC50: Substance concentration causing 50% (half) death in the test animals group.
 - EC50: Effective Concentration of the substance causing the maximum of 50%.
 - PBT: Persistent, Bioaccumulative and Toxic substance.
 - vPvB: Very Persistent and Very Bioaccumulative.
 - SEA: Classification, labeling, packaging regulation

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- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- STOT: Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.