



SAFETY DATA SHEET

Issuing Date 12-Aug-2013

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Revision Number 13

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name **ACETONOX 22**

Other means of identification

Product Code 3602900
CAS Number MIXTURE
Formula MIXTURE
Synonyms MIXTURE
UN-No UN2811

Recommended use of the chemical and restrictions on use

Recommended Use Coatings
Uses advised against Avoid contact with food. Avoid prolonged contact with eyes, skin, and clothing.

Details of the supplier of the safety data sheet

Supplier	ACETO CORPORATION	Manufacturer	ACETO CORPORATION
Address	4 Tri Harbor Court Port Washington, NY 11050-4661 Phone: (516) 627-6000 Fax: (516) 627-6093 Email: aceto@aceto.com	Address	4 Tri Harbor Court Port Washington, NY 11050-4661 Phone: (516) 627-6000 Fax: (516) 627-6093 Email: aceto@aceto.com

Emergency Telephone Number(s)

ChemTrec: 1-800-424-9300 Outside of the United States: 1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 2
Skin Corrosion/Irritation	Category 3
Serious eye damage/eye irritation	Category 2A
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

Label elements**Emergency Overview****Signal Word****DANGER****Hazard statements**

Toxic if swallowed
 Fatal in contact with skin
 Causes serious eye irritation
 May cause an allergic skin reaction
 Suspected of causing genetic defects
 Suspected of causing cancer
 Suspected of damaging fertility or the unborn child
 Causes damage to organs through prolonged or repeated exposure
 Toxic to aquatic life with long lasting effects Avoid release to the environment

**Appearance**

Pale Yellow

Physical State

Solid

Odor

Characteristic

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not get in eyes, on skin, or on clothing
 Contaminated work clothing should not be allowed out of the workplace
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see supplemental first aid instructions on this label)
 IF exposed: Call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 Immediately call a POISON CENTER or doctor/physician
 IF ON SKIN: Gently wash with plenty of soap and water
 Remove/Take off immediately all contaminated clothing
 Wash contaminated clothing before reuse
 If skin irritation or rash occurs: Get medical advice/attention
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None known

Other Information

40 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS**Synonyms** MIXTURE**Formula** MIXTURE

Chemical name	CAS No.	Weight-%	North American Hazard Indicator
4,4'- Diaminodiphenyl Methane	101-77-9	55-60	1 0.1 ppm TWA
Polyphenyl polyamines methane	Proprietary	45-40	False

4. FIRST AID MEASURES**First Aid Measures****General Advice** Show this safety data sheet to the doctor in attendance.**Eye Contact** Immediate medical attention is required. Call a physician immediately. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.**Skin Contact** Immediate medical attention is required. Call a physician immediately. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse.**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician or poison control center immediately.**Ingestion** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.**Self-Protection of the First Aider** Use personal protective equipment as required. Avoid contact with eyes, skin and clothing.**Most important symptoms and effects, both acute and delayed****Signs and Symptoms** No information available.**Indication of any immediate medical attention and special treatment needed****Notes to Physician** Treat symptomatically.**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media** Water spray. Alcohol-resistant foam. Dry chemical. Carbon dioxide (CO₂).**Unsuitable Extinguishing Media** No information available.**Hazardous Combustion Products** Nitrogen oxides. Carbon monoxide. Carbon dioxide (CO₂). Aniline.

Explosion Data

Not available

Sensitivity to mechanical impact Not available.**Sensitivity to static discharge** Not available.**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

Protective Equipment and Precautions for Firefighters

In the event of fire, wear self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. Wear disposable coveralls and discard after use. In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental Precautions

Local authorities should be advised if significant spillages cannot be contained. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment.

Methods and material for containment and cleaning up**Methods for Clean-up**

Evacuate personnel to safe areas. Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE**Precautions for safe handling****Handling**

Use only in an area equipped with a safety shower. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation. Use only in well-ventilated areas. Do not breathe vapors/dust. Avoid contact with eyes, skin and clothing. Avoid repeated exposure.

Conditions for safe storage, including any incompatibilities**Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Protect from light.

Incompatible Materials

Incompatible with strong oxidizing agents. Acids. Diazotization Agents. Alkali metals. Alkyl metal. Lewis Acid. Acylating Agents. Alkyl Halides. Carbon disulfide. Isocyanates. Isothiocyanates.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines****Appropriate engineering controls****Engineering Controls**

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tight sealing safety goggles.
Skin and body protection	Impervious gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.
Respiratory Protection	In case of insufficient ventilation, wear suitable respiratory equipment.
General Hygiene Considerations	General industrial hygiene practice. When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Pale Yellow
Physical State	Solid
Odor	Characteristic
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	10	
Melting point / Freezing point	88 - 92 °C	Literary Reference
Boiling point / boiling range	398 - 399 deg C at 760 mmHg	
Flash Point	221 °C	CC (closed cup)
Evaporation Rate		
Flammability (solid, gas)		
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	Not available	
Vapor Pressure	Approximately Zero	
Vapor Density	6.8	
Specific Gravity	No information available	
Water Solubility	1.25 g/l @ 20 Deg. C	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	Not available	
Autoignition temperature °C	No Data Available	Estimated
Decomposition temperature	No Data Available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	Not available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC content	This Product Contains the following VOCs
Liquid Density	No information available
Bulk density	No information available
Corrosion characteristics	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not applicable.
Chemical Stability	Stable under normal temperatures and storage conditions
Conditions to Avoid	Avoid dust formation. Excessive Heat. Exposure to air or moisture over prolonged periods.

Incompatible Materials

Incompatible with strong oxidizing agents. Acids. Diazotization Agents. Alkali metals. Alkyl metal. Lewis Acid. Acylating Agents. Alkyl Halides. Carbon disulfide. Isocyanates. Isothiocyanates.

Hazardous Decomposition Products

Nitrogen oxides (NOx). Carbon monoxide. Carbon dioxide (CO2). Aniline.

Possibility of Hazardous Reactions

None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
4,4'- Diaminodiphenyl Methane	= 335 mg/kg (Rat)	= 200 mg/kg (Rabbit) = 750 mg/kg (Rat)	> 0.85 mg/L (Rat) 4 h
Polyphenyl polyamines methane	-	-	-

The following values are calculated based on chapter 3.1 of the GHS document .

Information on likely routes of exposure

Eyes	Risk of serious damage to eyes. Irritating to eyes. Avoid contact with eyes.
Skin	May be fatal if absorbed through skin. Harmful: danger of serious damage to health by prolonged exposure in contact with skin. Irritating to skin. Avoid contact with skin.
Inhalation	Harmful: danger of serious damage to health by prolonged exposure through inhalation. Irritating to mucous membranes. Irritating to respiratory system. Avoid breathing dust.
Ingestion	Toxic if swallowed. Harmful: danger of serious damage to health by prolonged exposure if swallowed. May cause irritation of the digestive tract. Do not take internally.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

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

Carcinogenicity May cause cancer. California Proposition 65. OSHA - Specifically Regulated Carcinogens (29 CFR 1910.1050) Cancer suspect agent, Liver toxin. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
4,4'- Diaminodiphenyl Methane 101-77-9	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	Group 2B	Reasonably Anticipated To Be A Human Carcinogen	Present

Serious eye damage/irritation No information available.

Skin Corrosion/Irritation No information available.

Sensitization No information available.

Reproductive Effects No information available.

Mutagenic Effects No information available.

Developmental Effects	No information available.
STOT - single exposure	No information available.
STOT - Repeated Exposure	No information available.
Chronic Toxicity	Avoid repeated exposure. Possible risks of irreversible effects. Contains a known or suspected mutagen. May cause heritable genetic damage. May cause cancer. California Proposition 65. OSHA Regulated Substances - see 29CFR 1910.1050. Target Organ Effects.
Target Organ Effects	Eyes, Liver, Central Vascular System (CVS), Spleen, Kidney, Blood, Bladder.
Aspiration Hazard	No information available.

Numerical measures of toxicity - Product Information

Acute Toxicity	40 % of the mixture consists of ingredient(s) of unknown toxicity
ATEmix (inhalation-gas)	700 mg/L
ATEmix (inhalation-dust/mist)	0.5 mg/L
ATEmix (inhalation-vapor)	3 mg/L

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

Toxic to aquatic life with long lasting effects Avoid release to the environment

40 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence/Degradability	No information available.
Bioaccumulation/Accumulation	No information available.
Mobility in Soil	No information available.

Chemical name	log Pow =
4,4'- Diaminodiphenyl Methane 101-77-9	1.46

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods	Contact waste disposal services. Dispose of in accordance with local regulations.
Contaminated Packaging	Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT

UN-No UN2811
Proper Shipping Name TOXIC SOLIDS, ORGANIC, N.O.S.
Hazard class 6.1
Packing Group III
Reportable Quantity (RQ) (4,4'- Diaminodiphenyl Methane: RQ (kg)= 4.54)
Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to DOT.
Description UN2811, TOXIC SOLIDS, ORGANIC, N.O.S. (4,4'- Diaminodiphenyl Methane), 6.1, III, Marine pollutant
Emergency Response Guide Number 154

TDG

UN-No UN2811
Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.
Hazard class 6.1
Packing Group III
Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to TDG.
Description UN2811, TOXIC SOLID, ORGANIC, N.O.S. (4,4'- Diaminodiphenyl Methane), 6.1, III

MEX

UN-No UN2811
Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.
Hazard class 6.1
Packing Group III
Description UN2811, TOXIC SOLID, ORGANIC, N.O.S. (4,4'- Diaminodiphenyl Methane), 6.1, III

ICAO

UN-No UN2811
Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.
Hazard class 6.1
Packing Group III
Description UN2811, TOXIC SOLID, ORGANIC, N.O.S. (4,4'- Diaminodiphenyl Methane), 6.1, III

IATA

UN number UN2811
Proper Shipping Name Toxic solid, organic, n.o.s.
Transport hazard class(es) 6.1
Packing Group III
Description UN2811, Toxic solid, organic, n.o.s. (4,4'- Diaminodiphenyl Methane), 6.1, III

IMDG

UN number UN2811
Proper Shipping Name Toxic solid, organic, n.o.s.
Transport hazard class(es) 6.1
Packing Group III
EmS No. F-A, S-A
Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
Description UN2811, Toxic solid, organic, n.o.s. (4,4'- Diaminodiphenyl Methane), 6.1, III, Marine pollutant

RID

UN-No UN2811
Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.
Transport hazard class(es) 6.1
Packing Group III
Classification Code T2
Description UN2811, TOXIC SOLID, ORGANIC, N.O.S. (4,4'- Diaminodiphenyl Methane), 6.1, III, ENVIRONMENTALLY HAZARDOUS
ADR/RID-Labels 6.1

ADR

UN-No UN2811
Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.
Hazard Class 6.1
Packing Group III
Classification Code T2
Tunnel Restriction Code (E)
Description UN2811, TOXIC SOLID, ORGANIC, N.O.S. (4,4'- Diaminodiphenyl Methane), 6.1, III, ENVIRONMENTALLY HAZARDOUS
Labels 6.1

ADN

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.
Transport hazard class(es) 6.1
Packing Group III
Classification Code T2
Special Provisions 274, 614, 802
Description UN2811, TOXIC SOLID, ORGANIC, N.O.S. (4,4'- Diaminodiphenyl Methane), 6.1, III
Hazard label(s) 6.1
Limited Quantity 5 kg
Equipment Requirements PP, EP

15. REGULATORY INFORMATION*International Inventories*

TSCA Does not comply
Canada (DSL) Complies
EU (EINECS) Complies
EU (ELINCS) Does not comply
Japan (ENCS) Complies
China (IECSC) Complies
Korea (KECL) Complies
Philippines (PICCS) Complies
Australia (AICS) Complies
Mexico INV Does not comply
Taiwan INV Does not comply

Chemical name	U.S.A. (TSCA)	Canada (DSL)	EU (EINECS)	EU (ELINCS)	
4,4'- Diaminodiphenyl Methane	Present	Present	X	-	
Polyphenyl polyamines methane	Present	Present	Present	Present	
Component	Japan (ENCS)	China (IECSC)	Korea (KECL)	Philippines (PICCS)	Australia (AICS)
	Present (4)-40	Present	Present	Present	Present
	Present	Present	Present	Present	Present
Chemical name	Mexico INV		Taiwan INV		
4,4'- Diaminodiphenyl Methane 101-77-9	Present		Present		
Polyphenyl polyamines methane	-		-		

*Federal Regulations***SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Component	SARA 313 - Threshold Values
4,4'- Diaminodiphenyl Methane 101-77-9 (55-60)	0.1 % de minimis concentration

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical name	CAS No.	HAPS data
4,4'- Diaminodiphenyl Methane	101-77-9	Present (listed under 4,4-Methylenedianiline)

VOC content

This Product Contains the following VOCs

Chemical name	CAS No.	VOCs
4,4'- Diaminodiphenyl Methane	101-77-9	Present

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	CERCLA/SARA Hazardous Substances	CERCLA/SARA RQ	RQ
4,4'- Diaminodiphenyl Methane 101-77-9	10 lb final RQ; 4.54 kg final RQ		10 lb final RQ; 4.54 kg final RQ

*State Regulations***California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	CAS No.	California Proposition 65	Type
4,4'- Diaminodiphenyl Methane	101-77-9	Carcinogen 0.4 µg/day NSRL	carcinogen, initial date 1/1/88

State Right-to-Know

This product contains the following State Right-to-Know chemicals:

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Canada

WHMIS Statement

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

NFPA**Health 4****Flammability 1****Instability 0****Physical Hazard 0****Issuing Date**

12-Aug-2013

Revision Date

21-Mar-2019

Revision Summary

Not available

Disclaimer

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet