

SAFETY DATA SHEET



FlexaTrac™-IDA-200

Section 1. Identification

GHS product identifier : FlexaTrac™-IDA-200

Other means of identification : Not available.

Product type : Liquid.

Intended use : Not available.

Supplier's details : Ascend Performance Materials Inc.
1010 Travis Street, Suite 900
Houston, TX 77002 USA
1-713-315-5700

e-mail address of person responsible for this SDS : stewardship@ascendmaterials.com

Emergency telephone number (with hours of operation) : Emergency phone: CHEMTREC Toll Free Within USA: 800-424-9300 or +1-703-527-3887 (USA) or +(44)-870-8200418 (UK) or 800-101-2201/ +(65)-31581349 (Singapore) or +(61)-290372994 (Australia)

The information on this SDS represents the product and the hazards of this product as manufactured by various North American facilities operating in the US, Canada, and Mexico under the parent company Ascend Performance Materials Inc.

Section 2. Hazards identification

OSHA/HCS and WHMIS/ HPR Status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), and WHMIS 2015 amended HPA and HPR.

Classification of the substance or mixture : CORROSIVE TO METALS - Category 1
SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Hazards not otherwise classified : None known.

GHS label elements

Hazard pictograms :



Signal word : Danger

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Section 2. Hazards identification

- Hazard statements** : May be corrosive to metals.
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
Suspected of causing cancer if swallowed.
- Precautionary statements**
- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear protective clothing. Wear eye or face protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling.
- Response** : IF exposed or concerned: Get medical attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
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 or doctor.
- Storage** : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep only in original container. Absorb spillage to prevent material damage. Store in a corrosion resistant container with a resistant inner liner.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- CAS number** : Not applicable.
- Other means of identification** : Not available.

Ingredient name	%	CAS number
disodium iminodi(acetate)	≥25 - ≤50	928-72-3
sodium hydroxide	≤3	1310-73-2
trisodium nitrilotriacetate	≤1	5064-31-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Section 4. First aid measures

Ingestion : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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Section 6. Accidental release measures

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Bulk : Not available.

Non-bulk : Not available.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits- US

Ingredient name	Exposure limits
sodium hydroxide	ACGIH TLV (United States, 1/2022). C: 2 mg/m ³ OSHA PEL 1989 (United States, 3/1989). CEIL: 2 mg/m ³ NIOSH REL (United States, 10/2020). CEIL: 2 mg/m ³ OSHA PEL (United States, 5/2018). TWA: 2 mg/m ³ 8 hours.

Occupational exposure limits- CA

Ingredient name	Exposure limits
Sodium hydroxide	CA Alberta Provincial (Canada, 6/2018). C: 2 mg/m ³ CA British Columbia Provincial (Canada, 3/2022). C: 2 mg/m ³ CA Ontario Provincial (Canada, 6/2019). Ceiling Limit: 2 mg/m ³ CA Quebec Provincial (Canada, 6/2021). STEV: 2 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). CEIL: 2 mg/m ³

Biological exposure indices- US

No exposure indices known.

Biological exposure indices- CA

No exposure indices known.

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Personal protective equipment (Pictograms)



Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid. [Two phase mixture at ambient temperature; Homogeneous solution when molten (> 65°C)]
- Color** : Colorless to light yellow.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 11.5 to 13.5
- Melting point** : Not applicable.
- Boiling point** : Not applicable
- Flash point** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Density** : Not available.

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Section 9. Physical and chemical properties

Solubility in water	: DSIDA is soluble at 13.2% in water at room temperature. Solubility increases with increasing temperature.
Partition coefficient (LogKow)	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: acids Corrosive to the following materials: Aluminum
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
disodium iminodi(acetate)	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Oral	Rat	3160 mg/kg	-
sodium hydroxide	LD50 Oral	Rabbit	325 mg/kg	-
	LDLo Oral	Rabbit	500 mg/kg	-
trisodium nitrilotriacetate	LC50 Inhalation Dusts and mists	Rat - Male	>5 mg/l	4 hours
	LD50 Dermal	Rabbit - Male, Female	>10000 mg/kg 24 hours per day 25% (aqueous)	-
	LD50 Oral	Rat - Female	1300 mg/kg Single dose	-
	LD50 Oral	Rat - Male	1600 mg/kg Single dose	-

Irritation/Corrosion

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Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
FlexaTrac™-IDA-200	Eyes - Visible necrosis	Rabbit	-	24 hours	14 days
disodium iminodi(acetate)	Skin - Mild irritant	Rabbit	-	4 hours	14 days
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
sodium hydroxide	Eyes - Mild irritant	Rabbit	-	400 ug	-
	Eyes - Severe irritant	Monkey	-	24 hours 1 %	-
	Eyes - Severe irritant	Rabbit	-	1 %	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes 1 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 50 ug	-
	Skin - Mild irritant	Human	-	24 hours 2 %	-
	Skin - Severe irritant	Rabbit	-	24 hours 500 mg	-
trisodium nitrilotriacetate	Eyes - Irritant	Rabbit	-	24 hours 38% Pure Product (As Is)	8 days
	Eyes - Moderate irritant	Rabbit	-	24 hours	8 days
	Respiratory - Mild irritant	Rat	-	30 minutes	30 minutes
	Skin - Erythema/Eschar	Rabbit	1.5	24 hours 25% Pure Product (As Is)	5 days
	Skin - Erythema/Eschar	Rabbit	0		-

Conclusion/Summary

Skin : Moderate irritant
Eyes : Corrosive to eyes.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
disodium iminodi(acetate)	skin	Guinea pig	Not sensitizing
sodium hydroxide	skin	Guinea pig	Not sensitizing
trisodium nitrilotriacetate	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin : Non-sensitizer to skin.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
trisodium nitrilotriacetate	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476 <i>In vitro</i> Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal	Negative

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

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Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
trisodium nitrilotriacetate	Positive - Oral - TD	Mouse - Male, Female	752 mg/kg LOAEL	18 months; 24 hours per day ad libitum
	Positive - Oral - TD	Rat - Male, Female	526 mg/kg LOAEL	18 months; 24 hours per day ad libitum
	Positive - Oral - TD	Rat - Male	100 mg/kg 0.1% (aqueous) - LOAEL	2 years; 24 hours per day ad libitum
	Positive - Oral - TD	Rat - Male, Female	92 mg/kg LOAEL	2 years; 24 hours per day ad libitum
	Positive - Oral - TD	Rat - Male, Female	9.2 mg/kg NOAEL	2 years; 24 hours per day ad libitum

Classification

Product/ingredient name	OSHA	IARC	NTP
trisodium nitrilotriacetate	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
trisodium nitrilotriacetate	Negative	Negative	Negative	Rat - Male, Female	Oral: 450 mg/kg NOAEL	9 days During Pregnancy; 24 hours per day ad libitum

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
trisodium nitrilotriacetate	Negative - Oral	Rabbit - Female	250 mg/kg NOAEL	9 days During Pregnancy; 24 hours per day ad libitum

Conclusion/Summary : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
disodium iminodi(acetate)	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

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Section 11. Toxicological information

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : May cause respiratory irritation.
Skin contact : Causes skin irritation.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 pain
 watering
 redness
Inhalation : Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
Skin contact : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
Ingestion : Adverse symptoms may include the following:
 stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
trisodium nitrilotriacetate	Chronic LOAEL Oral	Mouse - Male, Female	752 mg/kg	2 years; 24 hours per day ad libitum
	Sub-chronic NOAEC Inhalation Dusts and mists	Rat - Male, Female	0.21 mg/l	14 days; 6 hours per day 5 workdays/week.
	Sub-chronic NOAEL Dermal	Rabbit - Male, Female	50 mg/kg	91 days; 5 days per week
	Chronic NOAEL Oral	Rat - Male	9 mg/kg	4 weeks; 24 hours per day ad libitum

General : No known significant effects or critical hazards.
Carcinogenicity : Suspected of causing cancer if swallowed. Risk of cancer depends on duration and level of exposure.

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Section 11. Toxicological information

Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
disodium iminodi(acetate)	Acute LC50 750 mg/l Fresh water	Daphnia - Bluegill Sunfish	48 hours
	Acute LC50 75 mg/l Fresh water	Fish - Bluegill Sunfish	96 hours
	Acute LC50 75 mg/l Fresh water	Fish - Rainbow trout	96 hours
sodium hydroxide	Acute EC50 40.38 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 125 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
	Acute LC50 189 mg/l Fresh water	Fish - Leuciscus idus	48 hours
trisodium nitrilotriacetate	NOEC 270 mg/l	Micro-organism - Activated sludge	90 days
	Acute LC50 185000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute LC50 80 mg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus	96 hours
	Acute LC50 560000 to 1000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 98000 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 103 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 22.8 mg/l (biomass) Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic EC10 74.8 mg/l (growth rate) Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic EC50 91.5 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic LC50 90.5 mg/l Fresh water	Fish - Oncorhynchus mykiss - Embryo	27 days
	Chronic NOEC 1.43 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 9.3 mg/l Fresh water	Crustaceans - Gammarus psuedolimnaeus	21 weeks
	Chronic NOEC 18.7 mg/l Fresh water	Crustaceans - Gammarus psuedolimnaeus	21 weeks
	Chronic NOEC 100000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 54 mg/l Fresh water	Fish - Pimephales promelas	229 days

Persistence and degradability

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Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
trisodium nitrilotriacetate	301E Ready Biodegradability - Modified OECD Screening Test	100 % - Readily - 28 days	-	-

Conclusion/Summary : Based on structurally similar materials (Trisodium NTA, NTA Acid) DSIDA is expected to readily biodegradable.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
FlexaTrac™-IDA-200	-	-	Readily
disodium iminodi(acetate)	-	-	Readily
trisodium nitrilotriacetate	-	-	Readily

Bioaccumulative potential

Product/ingredient name	Partition coefficient (LogKow)	BCF	Potential
trisodium nitrilotriacetate	-2.62	-	Low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. For more detailed information, please refer to the regulation. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Packaging materials : Not available.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN3267	UN3267	UN3267	UN3267	UN3267
UN proper shipping name	Corrosive liquid, basic, organic, n.o.s. (disodium iminodi(acetate), sodium hydroxide)	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (disodium iminodi(acetate), sodium hydroxide)	LIQUIDO CORROSIVO, BASICO, ORGANICO, N.E. P. (disodium iminodi(acetate), sodium hydroxide)	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (disodium iminodi(acetate), sodium hydroxide)	Corrosive liquid, basic, organic, n.o.s. (disodium iminodi(acetate), sodium hydroxide)

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Section 14. Transport information

Transport hazard class(es)	8 	8 	8 	8 	8 
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.

Additional information

- DOT Classification** : **Limited quantity** Yes.
Packaging instruction Exceptions: 154. Non-bulk: 202. Bulk: 242.
Quantity limitation Passenger aircraft/rail: 1 L. Cargo aircraft: 30 L.
Special provisions B2, IB2, T11, TP2, TP27
- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8).
Explosive Limit and Limited Quantity Index 1
Passenger Carrying Road or Rail Index 1
Special provisions 16
- Mexico Classification** : **Special provisions** 274
- IMDG** : **Emergency schedules** F-A, S-B
Special provisions 274
- IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840.
Special provisions A3, A803
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

- U.S. Federal regulations** : **TSCA 4(a) proposed test rules:** disodium iminodi(acetate)
TSCA 8(a) PAIR: disodium iminodi(acetate)
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
Clean Water Act (CWA) 311: sodium hydroxide
- United States inventory (TSCA 8b)** : All components are active or exempted.
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed
- Clean Air Act Section 602 Class I Substances** : Not listed

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Section 15. Regulatory information

Clean Air Act Section 602 : Not listed

Class II Substances

**DEA List I Chemicals
(Precursor Chemicals)** : Not listed

**DEA List II Chemicals
(Essential Chemicals)** : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : CORROSIVE TO METALS - Category 1
SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Composition/information on ingredients

Name	%	Classification
disodium iminodi(acetate)	≥25 - ≤50	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
sodium hydroxide	≤3	CORROSIVE TO METALS - Category 1 SKIN CORROSION - Category 1A SERIOUS EYE DAMAGE - Category 1
trisodium nitrilotriacetate	≤1	ACUTE TOXICITY (oral) - Category 4 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2

State regulations

Massachusetts : The following components are listed: SODIUM HYDROXIDE
New York : The following components are listed: Sodium hydroxide
New Jersey : The following components are listed: SODIUM HYDROXIDE
Pennsylvania : The following components are listed: SODIUM HYDROXIDE
California Prop. 65 :  **WARNING:** This product can expose you to Nitrilotriacetic acid, trisodium salt monohydrate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Nitrilotriacetic acid, trisodium salt monohydrate	Yes.	-

International regulations

Canadian lists

Date Format: Month / Day / Year

Date of issue/Date of revision : 6/5/2023

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Section 15. Regulatory information

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada inventory : All components are listed or exempted.

China : All components are listed or exempted.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.

Malaysia : Not applicable.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : Not determined.

Switzerland : The manufacturer has not registered the chemical substance or mixture with the regulatory authorities of Switzerland. The registration of this product for use in Switzerland is the responsibility of the importer.

Taiwan : All components are listed or exempted.

Thailand : All components are listed or exempted.

Turkey : Not determined.

Viet Nam : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)

Product as-supplied

Health 3

Flammability 0

Instability/Reactivity 0

Special

Section 16. Other information

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

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Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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