

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

SynaTek Solutions, Inc.
737 HAGEY CENTER DRIVE ~ UNIT A,
SOUDERTON, PA 18964

PRODUCT NAME: Volution Affect
CHEMICAL NAME: Monocarbamide dihydrogen sulfate

Date of Issue: 08/08/17

2. HAZARDS IDENTIFICATION SUMMARY

2.1 Classification of the substance or mixture according to 29 CFR 1910.1200

Eye irritation:	Category 1	H318
Skin Corrosion / Irritation	Category 1B	H314
Acute Toxicity (Oral)	Category 5	H335

2.2 Label Elements

Signal Word: **DANGER**

Hazard Statements:

H318: Causes serious eye damage
H314: Causes severe skin burns and eye damage
H335: May cause respiratory irritation
H333: May be harmful if inhaled
H303: May be harmful if swallowed



Precautionary Statements: **PREVENTION**

P260: Do not breathe mist/vapors/spray
P264: Wash thoroughly after handling
P271: Use only outdoors in a well-ventilated area
P273: Avoid release to the environment
P280: Wear protective gloves / eye protection / face protection

Precautionary Statements: **RESPONSE**

P31+P330+P331: IF SWALLOWED: Rinse Mouth. DO NOT INDUCE VOMITING.
P303+P361+P353: IF ON SKIN: Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P304+P312: IF INHALED: Call a POISON CENTER or doctor / physician.
P305+P351+P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and possible to do and continue rinsing.
P310: Immediately call a POISON CENTER or doctor / physician.
P340: Remove victim to fresh air and keep at rest in a position suitable for regular breathing.
P363: Wash contaminated clothing before reuse.
P391: Collect spillage.

Precautionary Statements: **STORAGE**

P403+P233-Store in a well-ventilated place. Keep container tightly closed.
P405-Store locked up

2.3 Other Hazards

None known

KEEP OUT OF REACH OF CHILDREN

Appearance and odor: clear liquid with slight green tint or light red liquid. No odor.

DANGER

Potential Health Effects

Routes of Exposure: Eye contact, skin contact, inhalation. Avoid breathing spray mist.

Eyes: Causes serious eye damage

Skin: Causes severe skin burns

Inhalation:	May be harmful if inhaled
Ingestion:	May be harmful if swallowed
Target Organs:	Skin, eyes, respiratory tract
Potential Environmental Effects:	This product is not classified as environmentally hazardous. However, in the event of frequent or large spillages, it may have a harmful effect on the environment.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage of Weight:</u>	<u>CAS No.</u>	<u>Classification</u>
Monocarbamide dihydrogen sulfate	100%	21351-39-3	Skin Corr 1B, H314 Eye Damage 1; H318 STOT SE; H335

4. FIRST AID MEASURES

4.1 Description of First Aid

If in eyes: Flush with clean running water for at least 15 minutes. If irritation persists, get medical attention. If wearing contact lenses, remove after 5 minutes of flushing and then continue to flush with clean water. Call poison control center or doctor for treatment and advice.

If on skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation persists, or if a rash develops, get medical attention. Call poison control center or doctor for treatment and advice.

If swallowed: If conscious, drink 1 or 2 glasses of water and get medical attention. Do not induce vomiting or give anything by mouth to an unconscious person. Call poison control center or doctor for treatment and advice.

If inhaled: Remove to fresh air. If irritation persists, get medical attention. If person is not breathing call 911 and give artificial respiration. Call poison control center or doctor for treatment and advice.

4.2 Most Important Symptoms, Effects, Acute and Delayed

Symptoms: Inhalation: May cause respiratory irritation.
Eyes: Causes severe eye damage.
Skin: Causes severe skin burns and eye damage.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat Symptomatically.
For emergency, medical attention dial 911. Take container and label when seeking medical attention.

Physician Note: Treatment of the exposure should be directed at the control of the symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Does not flash

FLAMMABLE LIMITS (LFL & UFL): Not established

EXTINGUISHING MEDIA: Considered non-combustible. Use foam, CO₂, dry chemical, or water. Do not use water jet.

HAZARDOUS COMBUSTION PRODUCTS: During a fire, hazardous by-products can be released.

SPECIAL FIRE FIGHTING PROCEDURES: Heating to dryness may cause the release of carbon dioxide gas.
Cool containers with water spray. Self-contained breathing equipment and full protective gear should be worn whenever fighting large chemical fires. Isolate fire from all traffic other than firefighters.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Ventilate area. Stop leak, contain spill and absorb with soil or natural absorbents. Liquid is corrosive. Ensure pumping equipment is 316 stainless steel. Sweep up waste and place in container for disposal. Keep spills and rinsate out of municipal sewers and open bodies of water. Uncontaminated spilled material may be reused.

7. HANDLING AND STORAGE

HANDLING: Avoid inhalation of mists, vapors/spray, and contact with eyes, skin and clothing. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Wash before eating, drinking, or smoking.

STORAGE: Store in the original labeled container in a cool place away from direct sunlight. Keep separate from food and feed products and out of reach of children and animals. Avoid storage at temperatures of 110F or higher. Corrosive to steel, aluminum, brass. Use with 316 stainless steel or PVC fittings.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

US Workplace Exposure Level TLV's: No data available

US Workplace Exposure Level PEL's: No data available

Biological Limit Values: No listings

Exposure Controls:

Provide local and general exhaust ventilation. Follow Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash and safety shower.

Individual Protection Measures

Eye / Face Protection: Goggles or shielded safety glasses recommended.

Skin Protection: Coveralls worn over long pants and long-sleeved shirts. Chemical resistant gloves. Chemical resistant footwear plus socks.

Respiratory Protection: In case of inadequate ventilation of mists or vapors, use suitable respiratory equipment such as MSHA/NISHO TC-21C or NIOSH approved respirator with N, R, P or HE filter. Wear respiratory protection during operations where spraying or misting occurs. IF respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear liquid with slight green tint or light red liquid. No discernable smell

SOLUBILITY: Soluble

pH: 1 at 10% solution

BULK DENSITY: 12.6 lbs./gal

SPECIFIC GRAVITY (Water = 1): 1.51

BOILING POINT: 212°F

VAPOR PRESSURE: Not established

EVAPORATION RATE: Not established

PERCENT VOLATILE (by volume): 19% w/w

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable for at least 2 years under normal conditions.

INCOMPATIBILITY: Avoid contact with hypochlorites, sulfides, or alkaline materials. Avoid storage, piping, or handling systems made of copper, zinc, or their alloys. Corrosive to 304 stainless steel. Slightly corrosive to 316 stainless steel. Incompatible with nylon and nylon beads.

HAZARDOUS DECOMPOSITION PRODUCTS: Heating to dryness may cause the release of carbon dioxide gas.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:

Eye contact: Skin contact.

LC50 (rat): No data available.

LD50 Oral (rat): 350 mg/kg

LD50 Dermal (rat): >2,000 mg/kg

Acute Toxicity Estimates: No data available.

Skin Irritation (rabbit): May be corrosive to skin.

Eye Irritation (rabbit): Corrosive

Specific Target Organ Toxicity: Single exposure. No data available.

Aspiration: No data available.

Skin Sensitization (guinea pig): not established
Carcinogenic Potential: None listed in OSHA, NTP, IARC, or ACGIH

12. ECOLOGICAL INFORMATION

Ecotoxicology: A toxic hazard to fish. Avoid spills or releases to watercourses. The product is not classified as environmentally hazardous. However this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. This product is not for use in aquatic settings.

Ecotoxicological Data: No Data Available.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers. Rinse container thoroughly, adding rinsate to tank mix. Offer for recycling at an ACRC site or dispose of in a sanitary landfill. Avoid contaminating water by disposal of equipment wash waters or other product wastes.

14. TRANSPORT INFORMATION

Land Transport:

DOT Shipping Description: UN1760, CORROSIVE LIQUIDS, N.O.S. (Monocarbamide dihydrogen sulfate), 8, III ERG GUIDE 154

NOTE: DOT CORROSIVE TO ALUMINUM AND STEEL. NOT REGULATED BY DOT IF TRANSPORTED BY MOTOR VEHICLE OR RAILCAR IN PACKAGING THAT WILL NOT REACT DANGEROUSLY OR BE DEGRADED BY THIS MATERIAL, 49 CFR 173.154(D).

Freight Classification: Fertilizing Compounds, NOI, Liquid, NMFC 68140, sub 6, class 70)

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	3 Health	0 Least	3 Health
	0 Flammability	1 Slight	0 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	B PPE
	4 Severe		

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
Delayed N Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: Not listed

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: WARNING: This product contains chemicals known to State of California to cause cancer or birth defects or other reproductive harm.

16. OTHER

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