

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : FORMULA 60
Product code : 6000

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

1.3. Details of the supplier of the safety data sheet

Brody Chemical
6125 W. Double Eagle Cr.
Salt Lake City, UT 84118 - USA
T (801) 963-2436

1.4. Emergency telephone number

Emergency number : 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corr. 1A H314
Eye Dam. 1 H318

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
Precautionary statements (GHS-US) : P260 - Do not breathe fume, mist
P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear eye protection, protective gloves
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/container to in accordance with all regulations

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	GHS-US classification
tetrasodium ethylenediaminetetracetate	(CAS No) 64-02-8	10-15	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
sodium xylenesulfonate	(CAS No) 1300-72-7	5-10	Skin Irrit. 2, H315 STOT SE 3, H335
disodium metasilicate, pentahydrate	(CAS No) 10213-79-3	5-10	Skin Corr. 1B, H314 STOT SE 3, H335
Neodol 91-6	(CAS No) 68439-46-3	1-5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a physician immediately.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : Burns.
- Symptoms/injuries after eye contact : Serious damage to eyes.
- Symptoms/injuries after ingestion : Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Non combustible.
- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe fume, mist.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe fume, mist. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
- Incompatible products : Oxidizing agent. Strong acids.
- Storage area : Keep container in a well-ventilated place. Store away from heat.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

FORMULA 60	
ACGIH	Not applicable
OSHA	Not applicable
Neodol 91-6 (68439-46-3)	
ACGIH	Not applicable
OSHA	Not applicable
tetrasodium ethylenediaminetetracetate (64-02-8)	
ACGIH	Not applicable
OSHA	Not applicable
sodium xylenesulfonate (1300-72-7)	
ACGIH	Not applicable
OSHA	Not applicable
disodium metasilicate, pentahydrate (10213-79-3)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Hand protection : Protective gloves.
- Eye protection : Safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid.
- Color : Blue
- Odor : lemon-like
- Odor threshold : No data available
- pH : 13
- Melting point : Not applicable
- Freezing point : 32 °F
- Boiling point : 212 °F
- Flash point : Non-Combustible

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Relative evaporation rate (butyl acetate=1)	: 1 - 2
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 19.7 mm Hg at 70 F.
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1 kg/l
Solubility	: Water: 100 %
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact

Acute toxicity : Not classified

Neodol 91-6 (68439-46-3)	
LD50 oral rat	1378 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
ATE US (oral)	1378.000 mg/kg body weight
tetrasodium ethylenediaminetetracetate (64-02-8)	
LD50 oral rat	> 2000 mg/kg (Rat)
ATE US (oral)	500.000 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 13

Serious eye damage/irritation : Causes serious eye damage.
pH: 13

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

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Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Burns.
Symptoms/injuries after eye contact	: Serious damage to eyes.
Symptoms/injuries after ingestion	: Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

tetrasodium ethylenediaminetetracetate (64-02-8)	
LC50 fish 1	121 mg/l (96 h; Lepomis macrochirus; Soft water)
EC50 Daphnia 1	625 mg/l (24 h; Daphnia magna)
LC50 fish 2	374 - 792 mg/l (96 h; Lepomis macrochirus; pH > 7)
Threshold limit algae 1	> 100 mg/l (72 h; Scenedesmus subspicatus; Growth)

disodium metasilicate, pentahydrate (10213-79-3)	
LC50 fish 1	210 mg/l (96 h; Brachydanio rerio; Anhydrous form)
EC50 Daphnia 1	216 mg/l (96 h; Daphnia magna; Anhydrous form)
LC50 fish 2	2320 mg/l (96 h; Gambusia affinis; Anhydrous form)
EC50 Daphnia 2	632 mg/l (96 h; Lymnaea sp.; Anhydrous form)

12.2. Persistence and degradability

Neodol 91-6 (68439-46-3)	
Persistence and degradability	Readily biodegradable in water.

tetrasodium ethylenediaminetetracetate (64-02-8)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	< 0.002 g O ₂ /g substance
Chemical oxygen demand (COD)	0.54 - 0.58 g O ₂ /g substance

sodium xylenesulfonate (1300-72-7)	
Persistence and degradability	Biodegradability in water: no data available.

disodium metasilicate, pentahydrate (10213-79-3)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Neodol 91-6 (68439-46-3)	
Bioaccumulative potential	No bioaccumulation data available.

tetrasodium ethylenediaminetetracetate (64-02-8)	
Log Pow	-2.6
Bioaccumulative potential	Bioaccumulation: not applicable.

sodium xylenesulfonate (1300-72-7)	
Bioaccumulative potential	No bioaccumulation data available.

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disodium metasilicate, pentahydrate (10213-79-3)

Bioaccumulative potential	No bioaccumulation data available.
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Neodol 91-6 (68439-46-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

tetrasodium ethylenediaminetetracetate (64-02-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

sodium xylenesulfonate (1300-72-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

disodium metasilicate, pentahydrate (10213-79-3)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

National regulations

No additional information available

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15.3. US State regulations

No additional information available

SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation

NFPA health hazard

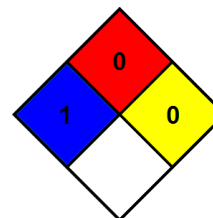
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

: 0 Minimal Hazard - Materials that will not burn

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal Protection

: B

B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product