COIL KING

SDS Revision Date:

03/23/2015



1. Identification

1.1. Product identifier

COIL KING Product Identity

Alternate Names 90-099, 90-100, 90-101, 90-102, 90-103, Blended

Formula, COIL KING

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

Intended use See Technical Data Sheet. **Application Method** See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name ComStar International Inc.

20-45 128th Street,

College Point, NY 11356

Telephone No. 718-445-7900

800-328-0142 Fax: 718-353-5998

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Corr 1A;H314 Causes severe skin burns and eye damage.

Eve Dam. 1;H318 Causes serious eye damage.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Warning

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

[Prevention]:

P260 Do not breathe mist / vapors / spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+361 +353 IF ON SKIN (or hair): Remove I Take off immediately all contaminated clothing. Rinse skin with

COIL KING

SDS Revision Date:

03/23/2015



water / shower.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351 +338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
SODIUM GLUCONATE CAS#: 527-07-1	>10	Not Classified	[1]
SODIUM HYDROXIDE CAS #: 1310-72-2	<50	C; R35 Skin Corr. 1A; H314	[1][2]
SURFACTANT PACKAGE CAS#: N/A	>10	Not Classified	[1]
WATER CAS#: N/A	Balance	Not Classified	[1]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give

Cardiopulmonary Resuscitation (CPR) if there is no breathing AND no pulse. Obtain

medical attention IMMEDIATELY.

Eyes Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open

during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY. Do not transport victim until the recommended flushing period is

completed unless flushing can be continued during transport.

Skin Flush skin with running water for a minimum of 20 minutes. Start flushing while removing

contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention

^[1] Substance classified with a health or environmental hazard.

^[2] Substance with a workplace exposure limit.

^[3] PBT-substance or vPvB-substance.

^{*}The full texts of the phrases are shown in Section 16.

COIL KING
SDS Revision Date:

03/23/2015



IMMEDIATELY. Do not transport victim unless the recommended flushing period is completed or flushing can be continued during transport.

While the patient is being transported to a medical facility, apply compresses of iced water. If medical treatment must be delayed, immerse the affected area in iced water. If immersion is not practical, compresses of iced water can be applied. Avoid freezing tissues.

Ingestion

If victim is alert and not convulsing, rinse mouth and give % to 1 glass of water to dilute material. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. IMMEDIATELY contact local poison control center. Vomiting may need to be induced but should be directed by a physician or a poison control center. IMMEDIATELY transport victim to an emergency facility.

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

Overview IMMEDIATE CONCERNS: CAUTION: May cause eye or skin burns. Avoid vapor.

POTENTIAL SIDE EFFECTS

EYES: Tissue destruction and permanent eye damage may occur if not treated

immediately.

SKIN: May be corrosive and cause severe burns.

INGESTION: Corrosive to mucous membranes of the mouth, esophagus, stomach & throat.

INHALATION: Avoid mist, can be a severe irritant.

ACUTE TOXICITY: Eye, skin, lung burning may be caused with exposure to mist. Avoid

mist.

TARGET ORGAN STATEMENT: Contains material which may cause damage to gastrointestinal tract and respiratory tract.

Note to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Medical conditions that may be aggravated by exposure include asthma, bronchitis, emphysema and other lung diseases and chronic nose, sinus or throat conditions. Severity of the burn is generally determined by the concentration of the solution and the duration of exposure. In the event of skin or eye contact, immediate and thorough flushing is essential. Continued washing of the effected area with cold or iced water will be helpful in removing the last traces of sulfuric acid. Cream or ointments should not be applied before or during the washing phase of the treatment. See section 2 for further details.

Eyes Causes serious eye damage.
Inhalation Causes serious eye damage.

5. Fire-fighting measures

5.1. Extinguishing media

For small fires, use dry chemical or carbon dioxide. For large fires, flood fire area with water from a distance. Expect violent reaction with water. Do not get solid stream of water on spilled material.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of sulfur at high temperatures. Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

COIL KING
SDS Revision Date:





Do not breathe mist / vapors / spray.

5.3. Advice for fire-fighters

Wear self-contained breathing apparatus and protective clothing.

ERG Guide No. ---137

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

For Large Spills: Flush spill area with water spray. Prevent run-off from entering drains, sewers, or streams, collect run-off.

7. Handling and storage

7.1. Precautions for safe handling

Wear appropriate Personal Protection Equipment. Do not breathe sprays or mists. Do not ingest. Do not get in eyes, on skin or on clothing. Keep ignition sources away from sulfuric acid storage, handling and transportation equipment.

Handling Procedures and Equipment: Carbon steel or stainless steel materials are suitable for use for acid concentrations equal to or greater than 93%. However, the effect of lower concentrations on the materials of construction can be very complex. Contact product supplier for specific recommendations when handling sulfuric acid at strengths less than 77%.

Sulfuric acid will attack some forms of plastics and coatings. Always add acid to water - not water to acid. If kept in upper floors of building, floors should be acid proof with drains to a recovery tank.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store between -5C and 40C.

Incompatible materials: Acids react with most metals to release hydrogen gas which can form explosive mixtures in air. Water, alkaline solutions, metals, metal powder, carbides, chlorates, fuminates, nitrates, picrates, strong oxidizers, reducers, or combustible organics.

Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

Storage Temperature: Store above freezing point. Elevated temperatures will increase the corrosion rate of most metals.

COIL KING
SDS Revision Date:

03/23/2015



Storage Requirements: Store packaged acid in a dry, well, ventilated location away from combustibles, oxidizers, bases, or metallic powders. Storage tanks should be protected from water ingress, be well ventilated, and maintained structurally in a safe and reliable condition.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters Exposure

CAS No.	Ingredient	Source	Value
527-07-1 SODII	SODIUM GLUCONATE	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
1310-72-2 SODIUM HYDROXIDE	SODIUM HYDROXIDE	OSHA	2 mg/m3
		ACGIH	2 mg/m3
	NIOSH	No Established Limit	
	Supplier	No Established Limit	
N/A SURFACTANT PACKAGE	OSHA	No Established Limit	
	ACGIH	No Established Limit	
		NIOSH	No Established Limit
		Supplier	No Established Limit
N/A WATER	WATER	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
527-07-01 SODIUM GLUCONATE		OSHA	Select Carcinogen: No
	NTP	Known: No; Suspected: No	
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
1310-72-2 SODIUM HYDROXIDE	OSHA	Select Carcinogen: No	
	NTP	Known: No; Suspected: No	
	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	
N/A SURFACTANT OSHA		OSHA	Select Carcinogen: No
PACKAGE	NTP	Known: No; Suspected: No	
	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	
N/A WATER OSH		OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No

COIL KING

SDS Revision Date:



IARC

Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

03/23/2015

8.2. Exposure controls

Respiratory A NIOSH/MSHA approved air-purifying respirator equipped with acid gas/fume, dust, and

mist cartridges for concentrations up to 10 mg 1m3. An air-supplied respirator if

concentrations are higher or unknown.

Eyes Tight-fitting chemical goggles and face shield.

Skin Impervious (Le., neoprene, PVC) gloves, coveralls, boots and/or other acid resistant

protective clothing.

Engineering Controls Local exhaust ventilation required.

Other Work Practices Where there is a danger of spilling or splashing, acid resistant aprons or suits should be

> worn. Trouser legs should be worn outside (not tucked in) rubber boots. Safety showers and eyewash fountains should be installed in storage and handling areas. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet.

Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance Clear or Colored Liquid

Sharp Odor

Odor threshold Not Measured pН Not Measured

77.67%: -11.2° C (+11.6° F); 93.19%: -29.5° C (-21.1° F); Melting point / freezing point

98%: -1.1° C (30° F)

77.67%: 193° C (380° F); 93.19%: 276° C (529° F); 98%: Initial boiling point and boiling range

330° C (626° F)

Flash Point None

Evaporation rate (Ether = 1) Not Measured Flammability (solid, gas) Not Applicable

Lower Explosive Limit: 135C(275F): NA Upper/lower flammability or explosive limits

Upper Explosive Limit: 199C(390F): NA

77.67%: 1.2 mmhg; 93.19%: 0.0016 mmhg; 98%: 0.002 Vapor pressure (Pa)

mmhg (at 40 *C/102* F)

Vapor Density 3.4, sulfuric acid component (Air = 1)

77.67%: 1.7059; 93.19%: 1.8354; 98%: 1.8437 (at 15 **Specific Gravity**

C/60 F)

Solubility in Water Insoluble Partition coefficient n-octanol/water (Log Kow) Not Measured

Auto-ignition temperature (ASTM D 2155): Not combustible

Not Measured **Decomposition temperature**

COIL KING
SDS Revision Date:





Viscosity (cSt) Not Measured

Volatiles (% by weight)

Octanol/Water Partition Coefficient

NA

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

Reacts with some bases.

10.4. Conditions to avoid

Keep away from extreme heat and extreme cold.

10.5. Incompatible materials

Acids react with most metals to release hydrogen gas which can form explosive mixtures in air. Water, alkaline solutions, metals, metal powder, carbides, chlorates, fuminates, nitrates, picrates, strong oxidizers, reducers, or combustible organics.

Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

10.6. Hazardous decomposition products

Oxides of sulfur at high temperatures. Hazardous gases may evolve on contact with chemicals such as cyanides, sulfides, and carbides.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
SODIUM GLUCONATE (527-07-01)	No data available	No data available	No data available	No data available	No data available
SODIUM HYDROXIDE (1310-72-2)	500 mg/kg (rabbit)	No data available	No data available	No data available	No data available
SURFACTANT PACKAGE (N/A)	No data available	No data available	No data available	No data available	No data available
Water (N/A)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)		Not Applicable
Acute toxicity (dermal)		Not Applicable

COIL KING SDS Revision Date:



03/23/2015

Acute toxicity (inhalation)		Not Applicable	
Skin corrosion/irritation	1A	Causes severe skin bums and eye damage.	
Serious eye damage/irritation	1	Causes serious eye damage.	
Respiratory sensitization		Not Applicable	
Skin sensitization		Not Applicable	
Germ cell mutagenicity		Not Applicable	
Carcinogenicity		Not Applicable	
Reproductive toxicity		Not Applicable	
STOT-single exposure		Not Applicable	
STOT-repeated exposure		Not Applicable	
Aspiration hazard		Not Applicable	

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
SODIUM GLUCONATE (527-07-01)	Not Available	Not Available	Not Available
SODIUM HYDROXIDE (1310-72-2)	Not Available	Not Available	Not Available
SURFACTANT PACKAGE (N/A)	Not Available	Not Available	Not Available
Water (N/A)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

COIL KING

SDS Revision Date:

03/23/2015



13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

DOT (Domestic Surface

Transportation)

IMO / IMDG (Ocean **Transportation**)

ICAO/IATA

14.1. UN number UN 1824 UN 1824

UN1824

14.2. UN proper shipping name

UN 1824, Sodium hydroxide Solution,

Corrosive UN 1824 Sodium hydroxide Solution,

Corrosive UN 1824 Sodium

hydroxide Solution,

14.3. Transport

DOT Hazard Class: 8

IMDG: 8

Air Class: 8

hazard class(es)

Sub Class: Not Applicable

14.4. Packing group

Ш

14.5. Environmental hazards

IMDG Marine Pollutant: No

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14.6. Special precautions for user

No further information

15. Regulatory information

The regulatory data in Section 15 is not intended to be all-inclusive, only selected **Regulatory Overview**

regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA

Inventory.

WHMIS Classification

D2B E

US EPA Tier II Hazards

Fire: No Sudden Release of Pressure: No

Reactive: Yes

Immediate (Acute): Yes Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs: (lbs)

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

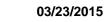
EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

COIL KING
SDS Revision Date:





Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Pennsylvania RTK Substances (>1%):

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H314 Causes severe skin burns and eye damage.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

The opinions expressed are those of qualified experts within ComStar International Inc. We believe that the information contained is current as of the date of the Safety Data Sheet. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of ComStar International Inc., it is the user's obligation to determine the conditions of safe use of the product.

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