PERMA FLUX

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1. Identification

1.1. Product identifier

Product Identity PERMA FLUX

Alternate Names 15-115, 15-117, Blended Formula, PERMA FLUX

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

Intended useSee Technical Data Sheet.Application MethodSee 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 Irrit. 2;H315 Cause skin irritation

2.2. Label elements

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



[Prevention]:

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

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[Response]:

P312: Call a POISON CENTER or doctor / physician if you feel unwell.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

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
ZINC CHLORIDE CAS#: 7646-85-7	<5	Acute toxicity, 4 Skin corrosion 1B Serious eye damage 1 Acute aquatic toxicity 1 Chronic aquatic toxicity 1	[1][2]
WAX CAS#: N/A	>50	Not Classified	[1]
HEAVY PARAFFINIC PETROLEUM DISTILLATES CAS#: 64742-65-0	>20	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 Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give

artificial respiration. If unconscious place in the recovery position and obtain immediate

medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and

seek medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a

recognized skin cleanser.

Ingestion If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

^[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.

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Overview No specific symptom data available.

See section 2 for further details.

Inhalation Harmful if inhaled.

5. Fire-fighting measures

5.1. Extinguishing media

Water fog, C02, dry chemical, universal foams

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

Wear self-contained breathing apparatus and protective clothing.

ERG Guide No. ---

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

Avoid contact with eyes and skin. Wash thoroughly after handling. Do not breathe vapors or fumes.

Preventation of Fire and Explosion: Keep from contact with oxidizing materials, alkalis and acids. Store away from heat, sunlight and moisture.

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

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Oxidizing agents, alkali metals

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

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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
7646-85-7 ZINC CHLORIDE	ZINC CHLORIDE	OSHA	350 mg/kg
		ACGIH	350 mg/kg
		NIOSH	No Established Limit
		Supplier	No Established Limit
N/A	WAX	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
	Supplier	No Established Limit	
64742-65-0	HEAVY PARAFFINIC PETROLEUM	OSHA	5 mg/m3
DISTILLATES	DISTILLATES	ACGIH	5 mg/m3
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value		
7646-85-7 ZINC CHLORIDE		OSHA	Select Carcinogen: No		
	NTP	Known: No; Suspected: No			
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
N/A WAX	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;			
64742-65-0 HEAVY PARAFFINIC		OSHA	Select Carcinogen: No		
PETROLEUM DISTILLATES	NTP	Known: No; Suspected: No			
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		

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8.2. Exposure controls

Respiratory If engineering controls do not maintain airborne concentrations to an acceptable level, a

NIOSH approved respirator must be worn.

Respirator Type: Organic vapor. If respirators are used, a program should be instituted to

assure Compliance with OSHA Standard 29 CFR 1910.134.

Eyes Safety glasses with side shields, goggles or face shield are recommended.

Skin Wear overalls to keep skin contact to a minimum.

Engineering Controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation

rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances such as poorly ventilated spaces, evaporation from large surfaces, spraying, heating, etc.

Recommended Decontamination Facilities: Eye bath, washing facilities.

using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

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

9. Physical and chemical properties

Appearance Brownish paste

Odor Slight

Odor threshold

pH

Not Measured

Not Measured

Melting point / freezing point

Not Measured

Not Measured

Not Measured

Not Measured

Not F/188 C

Flash Point None

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

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

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

Vapor pressure (Pa)6 mmHg (at 70 F)Vapor DensityNot MeasuredSpecific Gravity> 2 (H20 = 1)Solubility in WaterCompletePartition coefficient n-octanol/water (Log Kow)Not MeasuredAuto-ignition temperature(ASTM D 2155): NA

Decomposition temperatureNot MeasuredViscosity (cSt)25C/77F: NA

Volatiles (% by weight) NA

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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

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Strong Oxidizers

10.6. Hazardous decomposition products

No hazardous decomposition data available.

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
ZINC CHLORIDE (7646-85-7)	350 mg/kg (rat)	No data available	No data available	No data available	No data available
WAX (N/A)	No data available	No data available	No data available	No data available	No data available
HEAVY PARAFFINIC PETROLEUM DISTILLATES (64742-65-0)	> 5000 mg/kg , Rat	> 5000 mg/kg , Rabbit	>5 mg/l Rat	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
Acute toxicity (inhalation)		Not Applicable
Skin corrosion/irritation		Not Applicable

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Serious eye damage/irritation	 Not Applicable
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

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
ZINC CHLORIDE (7646-85-7)	0.4 - 2.2 mg/l	0.2 mg/l	Not Available
WAX (N/A)	Not Available	Not Available	Not Available
HEAVY PARAFFINIC PETROLEUM DISTILLATES (64742-65-0)	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.

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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

Not Applicable Not Regulated Not Regulated
Not Regulated

Not Regulated Not Regulated

name

14.3. Transport hazard

14.2. UN proper shipping

DOT Hazard Class: Not

IMDG: Not Applicable

Air Class: Not Applicable

class(es)

Applicable

Not Applicable

Sub Class: Not Applicable Not Applicable

Not Applicable

14.4. Packing group N14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

No further information

15. Regulatory information

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

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

Not Regulated

US EPA Tier II Hazards

Sudden Release of Pressure: No

Sudden Release of Pressure: NO

Reactive: No

Fire: No

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

EPCRA 311/312 Chemicals and RQs:

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

EPCRA 302 Extremely Hazardous:

ZINC CHLORIDE

EPCRA 313 Extremely Hazardous:

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

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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%):

Zinc chloride

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.

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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