

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 3/11/2024 Revision date: 2/3/2025 Supersedes: 9/18/2023 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form Product name : Mixture ZC-029

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture

: Corrosion inhibitors, Coating

1.4. Supplier's details

Manufacturer

Zip-Chem Products 400 Jarvis Drive

Morgan Hill, CA, Santa Clara, 95037

United States

T 408-782-2335 - F 408-782-6304

zipchem@addevmaterials.com - www.zipchem.com

1.5. Emergency phone number

Emergency number

: 1-800-424-9300

Country/Area	Organization/Company	Address	Emergency number	Comment
US	Chemtrec		1-800-424-9300	

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 3

H226

Flammable

liquid and

vapor.

On basis of test data

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)

Signal word (GHS US)

Hazard statements (GHS US)

: Warning

: H226 - Flammable liquid and vapor

Precautionary statements (GHS US)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

P233 - Keep container tightly closed.

P240 - Ground/Bond container and receiving equipment.

P241 - Use explosion-proof equipment.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P242 - Use non-sparking tools.

P243 - Take action to prevent static discharges.

P280 - Wear protective gloves, eye and face protection.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 - In case of fire: Use ABC-powder, alcohol resistant foam, an extinguishing blanket, BC-powder, carbon dioxide (CO2), dry extinguishing powder, extinguishing powder, foam,

nitrogen to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of a hazardous or special waste collection point to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Distillates (petroleum), hydrotreated light	CAS-No.: 64742-47-8	10.425	Flam. Liq. 4, H227 Asp. Tox. 1, H304
Kwik Dry 66	-	8.34	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

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.

First-aid measures after eye contact

: Rinse eyes with water as a precaution.

First-aid measures after ingestion

: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

No additional information available

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

Other medical advice or treatment

: Treat symptomatically.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

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

For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe

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

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".

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal

protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls

: Ensure good ventilation of the work station.

Environmental exposure controls

: Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

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

Personal protective equipment symbol(s):







SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liqui

Color : Mixture contains one or more component(s) which have the following colour(s):

Colourless clear Colorless

Odor : There may be no odour warning properties, odour is subjective and inadequate to warn of

overexposure.

Mixture contains one or more component(s) which have the following odour:

Sweet odour Paraffin odour

Odor threshold : No data available

pH : No data available
Melting point : Not applicable
Freezing point : No data available

Boiling point : $175 \,^{\circ}\text{C}$ Flash point : $47 \,^{\circ}\text{C}$

Flammability (solid, gas) : Not applicable.

Vapor pressure : No data available
Relative vapor density at 20°C : No data available
Relative density : No data available
Density : 0.88 g/ml

Solubility : Insoluble in water.
Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temporature

Auto-ignition temperature : No data available
Decomposition temperature : No data available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Viscosity, kinematic	: 54 - 65 mm²/s
Viscosity, dynamic	: 80 - 120 cP
Explosion limits	: No data available
Explosive properties	: Not explosive.
Oxidizing properties	: Not oxidising.
Particle characteristics	: No data available

Distillates (petroleum)	. h	ydrotreated light	
Distillatos	Deti Oleum)		y an our cure a night	٠.

Particle characteristics No data available

Kwik Dry 66	
Particle characteristics	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

VOC content : 309 g/l (VOC Less Water and Exempt Solvents)

SECTION 10 Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Distillates (petroleum), hydrotre	ated light (64742-47-8)
LD50 oral rat	> 5000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	≥ 3160 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 6.1 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin corrosion/irritation : Not classified

Distillates (petroleum). h	ydrotreated lie	aht	(64742-47-8)

pH No data available in the literature

Serious eye damage/irritation : Not classified

Distillates (petroleum), hydrotreated light (64742-47-8)

pH No data available in the literature

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified STOT-single exposure : Not classified

Kwik Dry 66

STOT-single exposure May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

ZC-029

10-029		
Viscosity, kinematic	54 – 65 mm²/s	
Hydrocarbon	Yes	

Distillates (petroleum), hydrotreated light (64742-47-8)

Viscosity, kinematic 2.4 mm²/s (20 °C, ASTM D7042: Dynamic viscosity and density of liquids)

Kwik Dry 66

Viscosity, kinematic 0.9 mm²/s @ 40 Degrees Celcius (104 Degrees Fahrenheit)

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Harmful to aquatic life.

Hazardous to the aquatic environment, short-term : Not classified

acute)

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

12.2. Persistence and degradability

Persistence and degradability Not rapidly degradable Distillates (petroleum), hydrotreated light (64742-47-8)

Persistence and degradability Readily biodegradable in water.

Kwik Dry 66

Persistence and degradability

Not rapidly degradable

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated light (64742-47-8)
BCF - Fish [1] 144.3 l/kg (BCFBAF v3.00, Pisces, Calculated value)	
Partition coefficient n-octanol/water (Log Pow)	1.99 – 7.71 (QSAR, KOWWIN, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Distillates (petroleum), hydrotreated light (6	4742-47-8)
Surface tension 26.4 mN/m (25 °C, 100 %, Wilhelmy plate method: surface tension)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.16 (log Koc, Read-across)
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

. : No

Fluorinated greenhouse gases

SECTION 13 Disposal considerations

Waste treatment methods

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

Additional information

: Flammable vapors may accumulate in the container.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		-
1993	1993	1993
14.2. Proper Shipping Name		
Flammable liquids, n.o.s. (Stright run kerosine-solvent naphtha (petroleum), medium aliph.)	FLAMMABLE LIQUID, N.O.S. (Stright run kerosine- solvent naphtha (petroleum), medium aliph.)	Flammable liquid, n.o.s. (Stright run kerosine- solvent naphtha (petroleum), medium aliph.)
Transport document description		
UN 1993 Flammable liquids, n.o.s. (Stright run kerosine-solvent naphtha (petroleum), medium aliph.), 3, III	UN 1993 FLAMMABLE LIQUID, N.O.S. (Stright run kerosine- solvent naphtha (petroleum), medium aliph.), 3, III	UN 1993 Flammable liquid, n.o.s. (Stright run kerosine-solvent naphtha (petroleum), medium aliph.), 3, III
14.3. Transport hazard class(es)		
3	3	3
HAMAGAR CITYLED	3	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT	IMDG	IATA
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

UN-No.(DOT)

: UN 1993

DOT Special Provisions (49 CFR 172.102)

: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HD2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178,275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) 150 DOT Packaging Non Bulk (49 CFR 173.xxx) 203 DOT Packaging Bulk (49 CFR 173.xxx) 242 DOT Quantity Limitations Passenger aircraft/rail (49 : 60 L

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

. 2201

CFR 175.75)

DOT Vessel Stowage Location

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

IMDG

Special provision (IMDG) : 223, 274, 955

Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) : LP01, P001 IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS EmS-No. (Spillage) : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER

Stowage category (IMDG) : A

2/3/2025 (Revision date) US - en 8/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

IATA

Special provision (IATA) : A3 : E1 PCA Excepted quantities (IATA) PCA Limited quantities (IATA) : Y344 PCA limited quantity max net quantity (IATA) : 10L PCA packing instructions (IATA) : 355 PCA max net quantity (IATA) : 60L CAO packing instructions (IATA) : 366 : 220L CAO max net quantity (IATA) ERG code (IATA) : 3L

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Kwik Dry 66 CAS-No. 8.34%

15.2. International regulations

CANADA

Distillates (petroleum), hydrotreated light (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

ZC-029

Unlisted introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Distillates (petroleum), hydrotreated light (64742-47-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 2/3/2025 Issue date : 3/11/2024

Full text of hazard classes and H-statements	
H226	Flammable liquid and vapor
H227	Combustible liquid
H304	May be fatal if swallowed and enters airways

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of h	hazard classes and H-statements	
H336	May cause drowsiness or dizziness	

Safety Data Sheet (SDS), USA

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.