SAFETY DATA SHEET

1. Identification

Product number ID14A

Product identifier METAL PARTS PROTECTOR

Revision date 03-21-2014

Company information K-CHEM INC.
P. O. Box 530632

Birmingham, AL 35253 United States

Company phone General Assistance 1-205-592-0844

Emergency telephone US 1-800-255-3924 Emergency telephone outside 1-813-248-0585

US

Version # 03

Supersedes date 10-28-2013

Recommended use Protective Coating

Recommended restrictions None known.

2. Hazard(s) identification

Physical hazardsFlammable aerosolsCategory 1Health hazardsAspiration hazardCategory 1

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Extremely flammable aerosol. May be fatal if swallowed and enters airways.

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open

flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Response If swallowed: Immediately call a poison center/doctor. If exposed or concerned: Get medical

advice/attention. Do NOT induce vomiting.

Storage Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Not classified.

Supplemental information

Not applicable.

3. Composition/information on ingredients

Mixtures

Hazardous components

Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	20 - 40
Mineral Spirits		8052-41-3	20 - 40
Propane		74-98-6	10 - 20
Synthetic Isoparaffinic Hydrocarbon		64741-66-8	10 - 20
Other components below reportable	levels		20 - 40

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

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Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Call a physician or poison control center immediately. Do not induce vomiting. If vomiting occurs, Ingestion

keep head low so that stomach content doesn't get into the lungs. Aspiration may cause

pulmonary edema and pneumonitis.

Most important

General information

symptoms/effects, acute and

delayed

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special

treatment needed

Provide general supportive measures and treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

Powder. Water. Foam. Carbon dioxide (CO2). None known.

media Specific hazards arising from

the chemical Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire-fighting

equipment/instructions

Specific methods

Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not,

Contents under pressure. Pressurized container may explode when exposed to heat or flame.

withdraw and let fire burn out.

Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the MSDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Observe good industrial hygiene practices. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the MSDS). Level 3 Aerosol.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Mineral Spirits (CAS 8052-41-3)	PEL	2900 mg/m3	
		500 ppm	
Propane (CAS 74-98-6)	PEL	1800 mg/m3	

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US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
		1000 ppm	
US. ACGIH Threshold Limit Valu	es		
Components	Туре	Value	
Mineral Spirits (CAS 8052-41-3)	TWA	100 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Components	Туре	Value	
Butane (CAS 106-97-8)	TWA	1900 mg/m3	
,		800 ppm	
Mineral Spirits (CAS 8052-41-3)	Ceiling	1800 mg/m3	
	TWA	350 mg/m3	
Propane (CAS 74-98-6)	TWA	1800 mg/m3	
		1000 ppm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

V-1...

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear protective gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an

air-supplied respirator.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid.

Color Dark brown.

Form Aerosol.

Physical state Gas.

Flash point -156.00 °F (-104.44 °C) Propellant estimated

Melting point/freezing pointNot available.OdorsolventpHNot available.Solubility(ies)Not available.Vapor densityNot available.

Vapor pressure 46 psig @70F estimated

Viscosity Not available.

Other information

Specific gravity 0.426 estimated

10. Stability and reactivity

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

Chemical stabilityMaterial is stable under normal conditions.Possibility of hazardousHazardous polymerization does not occur.

reactions

Conditions to avoid Avoid temperatures exceeding the flash point.

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Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion May be fatal if swallowed and enters airways. Inhalation May be fatal if swallowed and enters airways.

Skin contact Not available.

Direct contact with eyes may cause temporary irritation. Eye contact

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components **Species Test Results** Butane (CAS 106-97-8) Acute Inhalation LC50 680 mg/l, 2 Hours Mouse 658 mg/l, 4 Hours Rat Propane (CAS 74-98-6) Acute Inhalation LC50 Rat > 1442.847 mg/l, 15 Minutes

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

12. Ecological information

Ecotoxicity 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.

658 mg/l/4h

Components **Species Test Results** Synthetic Isoparaffinic Hydrocarbon (CAS 64741-66-8)

Algae IC50 Algae 30000 mg/L, 72 Hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available. Partition coefficient n-octanol / water (log Kow)

Propane 2.36 Butane 2.89 3.16 - 7.15Mineral Spirits

Mobility in soil No data available.

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^{*} Estimates for product may be based on additional component data not shown.

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No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN1950 **UN number**

UN proper shipping name Aerosols, flammable

Transport hazard class(es)

Subsidiary class(es) Not available. Packing group Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Labels required None Special provisions N82 **Packaging exceptions** 306 Packaging non bulk None Packaging bulk None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable

Transport hazard class(es) 2.1 Subsidiary class(es)

Packaging group Not available.

Environmental hazards Nο Labels required 21

ERG Code Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging Exceptions LTD QTY

IMDG

UN number UN1950 **UN proper shipping name AEROSOLS**

Transport hazard class(es) Subsidiary class(es)

Not available. **Packaging group**

Environmental hazards

Marine pollutant No Labels required None **EmS** Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging Exceptions LTD QTY Not applicable.

Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

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IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Hazard categories Immediate Hazard - Yes

> Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No

SARA 302 Extremely

hazardous substance

SARA 311/312 Hazardous Nο

chemical

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8) Propane (CAS 74-98-6)

Safe Drinking Water Act

Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and **Chemical Code Number**

Not listed.

Food and Drug

Not regulated.

Administration (FDA)

US state regulations

US. New Jersey Worker and Community Right-to-Know Act

Butane (CAS 106-97-8) 500 lbs 500 lbs Propane (CAS 74-98-6)

US. Pennsylvania RTK - Hazardous Substances

Butane (CAS 106-97-8)

Mineral Spirits (CAS 8052-41-3)

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Propane (CAS 74-98-6)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

 Issue date
 10-28-2013

 Revision date
 03-21-2014

Version # 03

Further information Not available.

DisclaimerThe information in the sheet was written based on the best knowledge and experience currently

available. The information provided in this Safety Data Sheet is correct to the best of our

knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with

any other materials or in any process, unless specified in the text.

Revision Information Product and Company Identification: Product Review

Composition / Information on Ingredients: Component Summary

Toxicological Information: Toxicological Data

GHS: Classification

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A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).