SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	RUST FLASH
Registration number	-
Synonyms	None.
Product code	BDS000204AE
Issue date	10-March-2021
Version number	01

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

Identified uses	Lubricants
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Company name	CRC Industries UK Ltd.
Address	Wylds Road Castlefield Industrial Estate TA6 4DD Bridgwater Somerset United Kingdom
Telephone	+44 1278 727200
Fax	+44 1278 425644
E-mail	hse.uk@crcind.com
Website	www.crcind.com

1.4. Emergency telephone number Tel.:(+44)(0)1278 72 7200 (office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards		
Aerosols	Category 1	H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated.
Health hazards		
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Environmental hazards		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

Hazard summary Aerosol CONTENTS UNDER PRESSURE.
Pressurised container may explode when exposed to heat or flame. Causes skin irritation. Dangerous for the environment if discharged into watercourses. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms

Signal word Danger

Hazard statements

H222 Extremely flammable aerosol.

H229	Pressurized container: May burst if heated.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.

Response .

Storage

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

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

Supplemental label information None.

2.3. Other hazards This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane	0 - 25	EC921-024-6 -	01-2119475514-35	-	
Classification: Flam. Liq. 2;H225, Skin Irrit. 2;H315, STOT SE 3;H336, Asp. Tox. 1;H304, Aquatic Chronic 2;H411					
Hydrocarbons, C13-15, n-alkanes, isoalkanes, cyclics, < 2% aromatics	5 - 10	EC920-107-4 -	01-2119453414-43	-	
Classification: Asp. Tox. 1;H304					
Dipropylene glycol monomethyl ether	0 - 2.5	34590-94-8 252-104-2	01-2119450011-60	-	#
Classification: -					

List of abbreviations and symbols that may be used above

#: This substance has been assigned Community workplace exposure limit(s).
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	In the unlikely event of swallowing contact a physician or poison control centre. Rinse mouth. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed Skin irritation. May cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Extremely flammable aerosol.

5.1. Extinguishing media

Suitable extinguishing media Foam. Carbon dioxide (CO2). Dry powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

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

Special fire fighting procedures Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapour pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. Use water spray to cool unopened containers. In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear appropriate personal protective equipment.

For emergency responders Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. The product is immiscible with water and will spread on the water surface. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Pressurised 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. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. 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 SDS). Storage class (TRGS 510): 2B (Aerosol dispensers and lighters)

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
		50 ppm

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Components	Type	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
		50 ppm

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

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General Population

Components	Value	Assessment factor	Notes
Dipropylene glycol monomethyl ether (CAS 34590-94-8)			
Long-term, Systemic, Dermal	121 mg/kg bw/day	16.8	Repeated dose toxicity
Long-term, Systemic, Inhalation	37.2 mg/m3		Repeated dose toxicity
Long-term, Systemic, Oral	0.33 mg/kg bw/day	600	Repeated dose toxicity
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane (CAS EC921-024-6)			
Long-term, Systemic, Dermal	699 mg/kg bw/day		
Long-term, Systemic, Inhalation	608 mg/m3		
Long-term, Systemic, Oral	699 mg/kg bw/day		

Workers

Components	Value	Assessment factor	Notes
Dipropylene glycol monomethyl ether (CAS 34590-94-8)			
Long-term, Systemic, Dermal	283 mg/kg bw/day	10.08	Repeated dose toxicity
Long-term, Systemic, Inhalation	308 mg/m3		Repeated dose toxicity
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane (CAS EC921-024-6)			
Long-term, Systemic, Dermal	773 mg/kg bw/day		
Long-term, Systemic, Inhalation	2035 mg/m3		

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Dipropylene glycol monomethyl ether (CAS 34590-94-8)			
Freshwater	19.2 mg/l	100	
Intermittent releases	192 mg/l	10	
Marine water	1.92 mg/l	1000	
Sediment (freshwater)	70.2 mg/kg		
Soil	2.74 mg/kg		

Exposure guidelines

UK EH40 WEL: Skin designation

Dipropylene glycol monomethyl ether (CAS 34590-94-8) Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation 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.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Use eye protection conforming to EN 166.

Skin protection

- Hand protection When handling the product wear chemical-resistant gloves (standard EN 374). The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through. Full contact: Glove material: nitrile. Use gloves with breakthrough time of 480 minutes. Minimum glove thickness 0.38 mm.

- Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapour cartridge. (Filter type A)

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures	Handle in accordance with good industrial hygiene and safety practices. 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. When using do not smoke.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases. Contain spills and prevent releases and observe national regulations on emissions. Avoid release to the aquatic environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Form	Aerosol
Colour	Amber.
Odour	Characteristic odor.
Melting point/freezing point	-182 °C (-295.6 °F) estimated
Boiling point or initial boiling point and boiling range	65 - 270 °C (149 - 518 °F)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Flash point	-45.0 °C (-49.0 °F) Closed cup
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	Not applicable.
Solubility(ies)	
Solubility (water)	Insoluble in water
Partition coefficient (n-octanol/water)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	0.74 g/cm3
Relative density temperature	20 °C (68 °F)
Particle characteristics	Not available.

9.2 Other safety characteristics

Chemical family	Lubricant
Evaporation rate	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
VOC	563 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid high temperatures.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	Carbon oxides.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.

Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	Skin irritation. May cause redness and pain.

11.1. Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Components	Species	Test Results
Dipropylene glycol monomethyl ether (CAS 34590-94-8)		
Acute		
Dermal		
LD50	Rabbit	9510 mg/kg
Oral		
LD50	Rat	5000 mg/kg
Hydrocarbons, C13-15, n-alkanes, isoalkanes, cyclics, < 2% aromatics		
Acute		
Dermal		
LD50	Rabbit	5000 mg/kg
Inhalation		
Vapour		
LC50	Rat	5000 mg/kg, 4 h
Oral		
LD50	Rat	5000 mg/kg
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane		
Acute		
Dermal		
LD50	Rat	2920 mg/kg bw/day, 24 h
Inhalation		
LC50	Rat	25200 mg/m³, 4 h
Oral		
LD50	Rat	5840 mg/kg bw/day

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
Skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Not likely, due to the form of the product.
Mixture versus substance information	Not available.

11.2. Information on other hazards

Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
Dipropylene glycol monomethyl ether (CAS 34590-94-8)			
Aquatic			
Acute			
Algae	EC50	Algae	969 mg/l, 96 h
Crustacea	EC50	Daphnia	1919 mg/l, 48 h
Fish	LC50	Fish	10000 mg/l, 96 h
Chronic			
Crustacea	NOEC	Daphnia	0.5 mg/l, 22 d
Hydrocarbons, C13-15, n-alkanes, isoalkanes, cyclics, < 2% aromatics			
Acute			
Other	IC50	Pseudokirchnerella subcapitata	1000 mg/l, 72 h
	NOEL	Pseudokirchnerella subcapitata	1000 mg/l, 72 h
Aquatic			
Acute			
Fish	IC50	Oncorhynchus mykiss	1000 mg/l, 96 h
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane			
Aquatic			
Acute			
Algae	EC50	Algae	30 - 100 mg/l, 72 h
Crustacea	EC50	Daphnia	3 mg/l, 48 h
Fish	LC50	Fish	11.4 mg/l, 96 h

12.2. Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential No data available.

Partition coefficient n-octanol/water (log Kow)

Dipropylene glycol monomethyl ether 0.004

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting properties None known

12.7. Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.
GWP: 2

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste 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. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information 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.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN1950

14.2. UN proper shipping name AEROSOLS

14.3. Transport hazard class(es)

Class	2.1
Subsidiary risk	-
Hazard No. (ADR)	Not available.
Tunnel restriction code	(D)
ADR/RID - Classification code:	5F

14.4. Packing group Not applicable

14.5. Environmental hazards No

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

IATA

14.1. UN number UN1950

14.2. UN proper shipping name AEROSOLS

14.3. Transport hazard class(es)

Class	2.1
Subsidiary risk	-

14.4. Packing group Not applicable

14.5. Environmental hazards No

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

IMDG

14.1. UN number UN1950

14.2. UN proper shipping name AEROSOLS

14.3. Transport hazard class(es)

Class	2.1
Subsidiary risk	-

14.4. Packing group Not applicable

14.5. Environmental hazards

Marine pollutant	No
EmS	F-D, S-U

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

14.7. Maritime transport in bulk according to IMO instruments Not applicable.

ADR; IATA; IMDG

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).
CAS: Chemical Abstract Service.
Ceiling: Short Term Exposure Limit Ceiling value.
CEN: European Committee for Standardization.
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
GWP: Global Warming Potential.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).
MARPOL: International Convention for the Prevention of Pollution from Ships.
PBT: Persistent, bioaccumulative and toxic.
REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).
RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TLV: Threshold Limit Value.
TWA: Time Weighted Average.
VOC: Volatile organic compounds.
vPvB: Very persistent and very bioaccumulative.
STEL: Short-term Exposure Limit.

References	Not available.
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Revision information None.

Training information Follow training instructions when handling this material.

Disclaimer CRC Industries Europe UK Limited cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.