

SAFETY DATA SHEET AL 217

According to EC Regulation 1907/2006/EC - revision 2015/830

Revision No. 3.2

Print Date 29/01/2019

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SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product Name AL 217
Product Code 11000665B3 (CLP)

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

Recommended use

Protective Coating.

1.3. Details of the supplier of the safety data sheet

NCH UK & Ireland, NCH House, Springvale Avenue, Bilston, WV14 0QL Tel (UK): 01902 510200, Tel (Ireland): 042 939 5502
E-mail address technical_uk@nch.com
Website address www.ncheurope.com

1.4. Emergency telephone number

UK - 01902 510200 (available during Office Hours)
In Republic of Ireland (available from 8am to 10pm daily): 01 809 2166

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Aerosols: Category 1
Eye irritation: Category 2
STOT- single exposure: Category 3
H222 - Extremely flammable aerosol
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H229 - Pressurised container: May burst if heated
EUH066 - Repeated exposure may cause skin dryness or cracking.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Contains ACETONE.

Hazard pictograms



Signal word DANGER

Hazard Statements

H222 - Extremely flammable aerosol
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H229 - Pressurised container: May burst if heated

EU classification for GHS template

EUH066 - Repeated exposure may cause skin dryness or cracking.

Precautionary Statements

P337 + P313 - If eye irritation persists: Get medical advice/attention
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
P271 - Use only outdoors or in a well-ventilated area
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P260 - Do not breathe mist/spray.
P280 - Wear protective clothing and eye protection.
Keep out of reach of children.
For industrial and institutional use only.

2.3. Other hazards

No additional hazards identified.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS**3.2 Mixture**

Chemical Name	CAS-No.	EC No.	EU - REACH reg number	Weight-%	EU - GHS/CLP Classification	Notes
ACETONE	67-64-1	200-662-2	01-2119471330-49	25 - < 50	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225) (EUH066)	
PROPANE	74-98-6	200-827-9	01-2119486944-21	10 - < 20	Press. Gas Flam. Gas 1 (H220)	
BUTANE	106-97-8	203-448-7	01-2119474691-32	10 - < 20	Press. Gas Flam. Gas 1 (H220)	K
ALUMINIUM POWDER (STABILISED)	7429-90-5	231-072-3	01-2119529243-45	1 - < 3	Pyr. Sol. 1 (H250)- Water-react. 2 (H261) Flam. Sol. 1 (H228)	

For any H statements mentioned in this section, see the full text in section 16.

EU Notes

Note K - The classification as a carcinogen or mutagen does not apply as the substance contains less than 0.1% w/w 1,3-butadiene

SECTION 4. FIRST AID MEASURES**4.1. Description of first aid measures**General advice

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth with water. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

Inhalation

If exposed to high concentrations of the aerosol vapours, move to fresh air. If symptoms persist, call a physician.

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

No information available.

Eye contact

May cause irritation as itching and redness.

Skin contact

May cause irritation as itching or redness.

Inhalation

Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

4.3. Indication of any immediate medical attention and special treatment neededNotes to physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES**5.1. Extinguishing media**Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Dry powder. Alcohol-resistant foam. Carbon dioxide (CO₂). Water spray.

Extinguishing media which must not be used for safety reasons

Water jet.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours.

Material can create slippery conditions. Pressurized container. Extremely flammable. Keep product and empty container away from heat and sources of ignition.

5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear. Cool fire-exposed containers with water spray to prevent bursting.

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes, and clothing. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Ventilate the area. Due to the nature of the aerosol packaging, a large spill is unlikely. For a small spill, wear appropriate protective clothing, ventilate the area, absorb with an inert material and transfer all material into a properly labeled container for disposal. Use care as spills may be slippery.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning upMethods for Containment

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning up

For the non volatile residues: Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

Refer to sections 7, 8 and 13.

SECTION 7. HANDLING AND STORAGE**7.1. Precautions for safe handling**

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Keep away from open flames, hot surfaces and sources of ignition. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

For safety reasons in case of fire, cans should be stored separately in closed containments. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

7.3. Specific end use(s)

No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**Exposure limits

If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level. For substances.

Chemical Name	European Union	The United Kingdom	France	Germany	Austria
ACETONE		STEL: 1500 ppm STEL: 3620 mg/m ³ TWA: 500 ppm TWA: 1210 mg/m ³	TWA: 500 ppm TWA: 1210 mg/m ³ STEL: 1000 ppm STEL: 2420 mg/m ³	AGW: 500ppm AGW: 1200mg/m ³ Peak: 1000ppm Peak: 2400mg/m ³ TWA: 500ppm TWA: 1200mg/m ³ BGW: 80mg/L	STEL: 2000 ppm STEL: 4800 mg/m ³ TWA: 500 ppm TWA: 1200 mg/m ³
PROPANE				AGW: 1000ppm AGW: 1800mg/m ³ Peak: 4000ppm Peak: 7200mg/m ³ TWA: 1000ppm TWA: 1800mg/m ³	STEL: 2000 ppm STEL: 3600 mg/m ³ TWA: 1000 ppm TWA: 1800 mg/m ³
BUTANE		STEL: 750 ppm STEL: 1810 mg/m ³ TWA: 600 ppm TWA: 1450 mg/m ³	TWA: 800 ppm TWA: 1900 mg/m ³	AGW: 1000ppm AGW: 2400mg/m ³ Peak: 4000ppm Peak: 9600mg/m ³ TWA: 1000ppm	STEL: 1600 ppm STEL: 3800 mg/m ³ TWA: 800 ppm TWA: 1900 mg/m ³

				TWA: 2400mg/m ³	
ALUMINIUM POWDER (STABILISED)		STEL: 30 mg/m ³ STEL: 12 mg/m ³ TWA: 10 mg/m ³ TWA: 4 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 4mg/m ³ TWA: 1.5mg/m ³	STEL: 20 mg/m ³ TWA: 10 mg/m ³

Chemical Name	Spain	Portugal	Italy	The Netherlands	Switzerland
ACETONE	TVA: 500 ppm TWA: 1210 mg/m ³	STEL: 750 ppm TWA: 500 ppm TWA: 1210 mg/m ³	TWA: 500 ppm TWA: 1210 mg/m ³	STEL: 2420 mg/m ³ TWA: 1210 mg/m ³	STEL: 1000 ppm STEL: 2400 mg/m ³ TWA: 500 ppm TWA: 1200 mg/m ³
PROPANE	TVA: 1000 ppm	TWA: 1000 ppm			STEL: 4000 ppm STEL: 7200 mg/m ³ TWA: 1000 ppm TWA: 1800 mg/m ³
BUTANE	TVA: 1000 ppm	TWA: 1000 ppm			STEL: 3200 ppm STEL: 7200 mg/m ³ TWA: 800 ppm TWA: 1900 mg/m ³ TWA: 1000 ppm
ALUMINIUM POWDER (STABILISED)	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³		TWA: 0.05 mg/m ³	TWA: 3 mg/m ³

Chemical Name	Denmark	Finland	Norway	Sweden	Czech
ACETONE	TWA: 250 ppm TWA: 600 mg/m ³	TWA: 500 ppm TWA: 1200 mg/m ³ STEL: 630 ppm STEL: 1500 mg/m ³	TWA: 125 ppm TWA: 295 mg/m ³	250 ppm 600 mg/m ³ 500 ppm 1200 mg/m ³	PEL: 800mg/m ³ NPK-P: 1500mg/m ³
PROPANE	TWA: 1000 ppm TWA: 1800 mg/m ³	TWA: 800 ppm TWA: 1500 mg/m ³ STEL: 1100 ppm STEL: 2000 mg/m ³	TWA: 500 ppm TWA: 900 mg/m ³ TWA: 40 ppm TWA: 275 mg/m ³		
BUTANE	TWA: 500 ppm TWA: 1200 mg/m ³	TWA: 800 ppm STEL: 1000 ppm	TWA: 250 ppm TWA: 600 mg/m ³ TWA: 40 ppm TWA: 275 mg/m ³		
ALUMINIUM POWDER (STABILISED)	TWA: 5 mg/m ³ TWA: 2 mg/m ³		TWA: 5 mg/m ³	5 mg/m ³ total dust 2 mg/m ³ respirable dust	PEL: 10.0mg/m ³

Chemical Name	Poland	Ireland
ACETONE	NDSch: 1800 mg/m ³ NDS: 600 mg/m ³	TWA: 500 ppm TWA: 1210 mg/m ³
PROPANE	NDS: 1800 mg/m ³	TWA: 1000 ppm STEL: 3000 ppm
BUTANE	NDSch: 3000 mg/m ³ NDS: 1900 mg/m ³	TWA: 1000 ppm STEL: 3000 ppm
ALUMINIUM POWDER (STABILISED)	NDS: 2.5 mg/m ³ NDS: 1.2 mg/m ³	TWA: 1 mg/m ³ STEL: 3 mg/m ³

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Use personal protection equipment as per Directive 89/686/EEC.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Conforming to EN 14387 (organic vapours).

Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested :. Polyvinyl alcohol. Nitrile rubber (0.4 mm). Butyl rubber (0.7 mm). For break through times, refer to glove manufacturers recommendations.

Eye Protection

Safety glasses if the method of use presents the likelihood of eye contact. Approved to EN 166.

General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Information below relates to typical values and does not constitute a specification.

Appearance	Silver	Specific Gravity	0.7
Physical State	Liquid	Solubility	Insoluble in water
Odour	Acetone	Autoignition Temperature	No information available.
pH	Not applicable.	Viscosity	No information available
Melting Point/Range	No information available.	Explosive properties	No information available
Boiling Point/Range	-10 °C	Oxidizing Properties	No information available.
Flash Point	< -50 °C	VOC Content (%)	84.5 %
Evaporation Rate	No information available.		
Flammability Limits in Air %	No information available.		
Vapor Pressure	No information available.		
Vapor Density	No information available.		

9.2. Other information

No other information available

SECTION 10. STABILITY AND REACTIVITY**10.1. Reactivity**

Not considered as highly reactive. See further information below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

10.4. Conditions to avoid

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from open flames, hot surfaces, and sources of ignition.

10.5. Incompatible materials

No materials to be specially mentioned.

10.6. Hazardous decomposition products

None under normal storage conditions and use.

Thermal decomposition can lead to release of irritating gases and vapours.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**Product Information

The product itself has not been tested.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ACETONE			= 50100 mg/m ³ (Rat) 8 h
PROPANE			= 658 mg/L (Rat) 4 h
BUTANE			= 658 g/m ³ (Rat) 4 h

Sensitisation

No information available.

Skin contact

May cause irritation as itching or redness.

Inhalation

Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

Eye contact

May cause irritation as itching and redness.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

SECTION 12. ECOLOGICAL INFORMATION**12.1. Toxicity**Product Information

The product itself has not been tested.

Ecotoxicity effects

Contains substance(s) known to be hazardous to the aquatic environment.

Chemical Name	Toxicity to Fish	Water Flea	Toxicity to Algae
ACETONE	LC50 4.74 - 6.33 mL/L Oncorhynchus mykiss 96 h LC50 6210 - 8120 mg/L Pimephales promelas 96 h LC50 = 8300 mg/L Lepomis macrochirus 96 h	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50	

12.2. Persistence and degradability

Ecotoxicological properties are substance specific, i.e. bioaccumulation, persistence and degradability. The information is given, where available and appropriate, for substance(s) of the mixture.

12.3. Bioaccumulative potential

Bioaccumulation unlikely due to the high volatility of the product. Component information below.

Chemical Name	log Pow
ACETONE	-0.24
PROPANE	2.3
BUTANE	2.89

12.4. Mobility in soil

The product is insoluble and floats on water. This preparation is volatile and will readily evaporate to the air if released into the environment.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Do not expose to heat, flames, sparks or other sources of ignition. Do not pierce or burn, even after use. Empty containers should be taken for local recycling, recovery or waste disposal.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable:

16 05 04* gases in pressure containers (including halons) containing dangerous substances

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

IMDG/IMO

UN Number	UN1950
UN proper shipping name	Aerosols, Flammable
Hazard Class	2.1
EmS	F-D, S-U

ADR / RID

UN-No	UN1950
Hazard Class	2.1
Classification Code	5F
Limited Quantity	1 L
Transport Cat. (Tunnel Restriction Code)	2 (D)

IATA/ICAO

UN-No	UN1950
Hazard Class	2.1
ERG Code	10P

14.5. Environmental hazards

The mixture is not environmentally hazardous for transport

14.6. Special precautions for user

No special precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Packaged product, not typically transported in IBC's.

Additional information

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION

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

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

SECTION 16. OTHER INFORMATION**Text of H statements mentioned in Section 3**

H220 - Extremely flammable gas. H225 - Highly flammable liquid and vapour. H228 - Flammable solid. H250 - Catches fire spontaneously if exposed to air. H261 - In contact with water releases flammable gas. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. EUH066 - Repeated exposure may cause skin dryness or cracking.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

On the basis of test data. H222 - Extremely flammable aerosol. Calculation method. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.

Prepared By Austen Pimm

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Revision summary

CLP update. SDS sections updated 2 15 3 16

Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service

PBT: Persistent Bioaccumulative Toxic

vPvB: very Persistent very Bioaccumulative

LC50: Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefährdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical

w/w: weight for weight

DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

Further Information

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet